*Willamette National Forest*

# Integrated Weed Management Plan
# And Non-Significant Forest Plan Amendment #42

**Willamette National Forest**
**1999**

An Environmental Assessment (EA) that discusses alternative ways of managing noxious weeds through an Integrated Weed Management (IWM) Program for the Willamette National Forest (NF) is available for public review in the Supervisor's Office and on the Willamette NF website: www.fs.fed.us/r6/willamette under "Forest Management Information" within "planning documents". The Willamette NF is located in Lane, Linn, Marion, Clackamas, Jefferson, and Douglas counties in Oregon.

This Decision Notice addresses the question of whether to continue to treat noxious weeds on the Willamette NF, and if so, by use of what control methods.

## Summary of the Decision

It is my decision to implement Alternative 2 of the Integrated Weed Management Environmental Assessment. This alternative best meets the intent of the Region 6 Environmental Impact Statement for Managing Competing and Unwanted Vegetation while minimizing environmental impacts. This decision includes an amendment to the Willamette NF Land and Resource Management Plan.

This alternative will allow the Willamette NF to continue a program of noxious weed treatment based on the type of infestation. The primary focus of the Integrated Weed Management (IWM) program is prevention of infestations by new invaders, and control of invading and established noxious weed populations. For new invaders, the Forest will be able, with the aid of interested publics, to choose control methods that will effectively eradicate the species. For established invaders, the Forest will choose control methods and strategies depending on whether population levels are high or low.

Alternative 2 will allow all tools available for control: no action, manual, mechanical, chemical, prescribed fire, and competitive plantings. Mechanical control projects will need further analysis of the effects on Heritage Resources prior to use of this method. Chemical control will only be used on new invader weed species that cannot be eradicated with other control methods. Chemical control will occur outside a 50 foot riparian buffer, but can occur within a Northwest Forest Plan Riparian Reserve. Rodeo will be used in all chemical applications except where Garlon 3A is appropriate (where a competing stand of grass vegetation exists), outside of Riparian Reserves. No chemical control will be allowed in Wilderness. Threatened, Endangered or Sensitive plant, animal and fish sites as well as relocatable survey and manage sites will be

buffered from chemical treatment. If prescribed fire is chosen as a control method, a further site-specific environmental analysis tiered to this forestwide analysis will be necessary.

In response a comment from the public (Wroncy 6/6/99), I have decided to change the type of surfactant to be used with Rodeo from LI700 to Hasten. The concern raised was that LI700 contains nonyl phenol, a chemical that has been documented to have adverse effects on aquatic species. Hasten does not contain nonyl phenol. It is composed of vegetable oil and isopropyl amine. Isopropylamine is on the EPA s List 3 for Classification of inert chemicals; toxicity is unknown.

Control methods will be chosen depending on site-specific analyses of noxious weed infestations (form Appendix A). Sites will be categorized by management history, soil and vegetation characteristics and landform, closeness to Threatened, Endangered and Sensitive (TES) plant and animal sites or survey and manage populations, nearness to flowing water or wetlands and available control methods for the site type will be chosen (Table 4).

The following amendments to the Forest Plan are part of the preferred alternative:

FW-259a: Every effort should be made to integrate prevention of noxious weed establishment and spread into all ground-disturbing projects. This shall include projects such as road construction and decommissioning, timber harvest, and proposed and active quarry sites. Specific actions should include but not be limited to:

- The Forest shall use certified weed-free seed and mulch for all revegetation projects, roadside seeding and fire rehabilitation seeding. The preferred mix shall be comprised of weed-resistant native and non-invasive non-native species.
- The Forest shall initiate an education program for users and employees which state the detrimental effects of noxious weeds on ecosystems and how people are responsible for spreading weeds from place to place. This should include all contractors involved in ground-disturbing activities, wilderness users, hunters, dispersed campers, hikers and other groups identified as aiding movement of weeds.
- The Forest should use machine-cleaning provisions for ground-disturbing projects that use equipment that may be moved from infested areas onto the Forest (where the Regional Office accepts provisions).
- The forest should use designated weed-free rock sources for any additional gravel needed for road construction and reconstruction.
- The Forest shall take every opportunity to close unnecessary roads in project areas to reduce weed travel corridors and revegetate the corridor once closed if needed.

FW 259b: Implementation of the Integrated Weed Management (IWM) program shall allow for manual control (pulling and/or digging) of any noxious weed population within disturbed areas such as road prisms, trailheads, or landings on the National Forest at any time.

FW 259c- Implementation of the IWM program shall allow for release of biological control agents

wherever established weed populations would support them. Agents released must be tested and sanctioned by the U.S. Department of Agriculture. Other control methods that can serve as alternatives to herbicides such as grazing or mechanical control may be conducted on established weed infestations if site-specific analysis of effects of those control methods is analyzed in an environmental document.

FW 259d- The following table shall be used to determine the appropriate action for new invader weed species in each site type:

Table 4: FW259d: Available Weed Control Methods for New Invaders Under Alternative 2 By Site Type

| Site Type | Site Description | Available Control Method<br><br>Non-Riparian | Available Control Method<br><br>Riparian |
|---|---|---|---|
| 1 | Roadside, quarry, roadside waste disposal, cutbank; little to no competing vegetation | No Action, Manual, Biological, Mechanical, Mulch, Chemical-Rodeo, Garlon 3A | No Action, Manual, Mechanical, Mulch, Chemical-Rodeo in backpack outside 50 foot buffer only |
| 2 | Roadside, disturbed, with competing vegetation; disturbed meadows; skid roads and landings | No Action, Manual, Biological, Mechanical, Mulch, Competitive Planting, Prescribed Burning, Chemical-Rodeo | No Action, Manual, Mechanical, Mulch, Chemical-Rodeo in backpack outside 50 foot buffer only |
| 3 | Wilderness, Threatened, Endangered or Sensitive Plant or Animal Site; Heritage Site | No action, Manual, Biological, Mulch, Competitive Planting, Prescribed Burning, Chemical-Rodeo in Heritage sites only | Same as non-riparian |
| 4 | Administrative Sites with high human use: campground, trail, trailhead, District compound | No action, Manual, Biological, Mulch, Competitive Planting, Chemical-Rodeo in backpack on District compounds only | No Action, Manual, Mechanical, Mulch, Chemical-Rodeo in backpack outside 50 foot buffer only |

| | | | |
|---|---|---|---|
| 5 | Administrative Sites with little human use: powerline corridor, ski areas in summer | No Action, Mulch, Competitive Planting, Chemical- Rodeo, Garlon 3A | No Action, Manual, Mechanical, Mulch, Chemical-Rodeo in backpack outside 50 foot buffer only |

I have determined the addition of the proposed Standard and Guidelines is a nonsignificant amendment to the Forest Plan since it will not alter the multiple-use goals and objectives for long-term land resource management.

## Rationale for Decision

Alternative 1 was not selected because of the following reasons. The additional 156 sites located since the 1993 EA would not be treated. New standards and guidelines will not be added to the Willamette Forest Plan. New weed species will not be addressed. Specific mitigation measures for three out of four T&E fish would not be implemented because these species were listed by USFWS after 1993. The survey and manage standards and guidelines from the Northwest Forest Plan did not exist in 1993; these species are not addressed. Riparian Reserve allocations from the Northwest Forest Plan were not in existence; in the 1993 analysis they were not considered. Heritage sites were not treated in detail in the previous analysis. During scoping, significant issues included the proximity of herbicide use to sites with high human use (trailheads, campgrounds, dispersed recreation sites) and proximity of herbicide use to water. These issues were not taken into consideration in the 1993 analysis. And finally, new information on the environmental effects of Tordon 22K was not available in the previous analysis. The current analysis shows that this chemical has significant negative effects on the environment and is not appropriate for use on this National Forest.

Alternative 3 would include the additional 156 sites located since the 1993 EA, would adopt the new standards and guidelines for the Willamette Forest Plan, would include new weed species, would mitigate for T&E fish, would implement survey and manage standards and guidelines from the Northwest Forest Plan and would use the Northwest Forest Plan definitions for Riparian Reserves. However, like Alternative 1, new information on the environmental effects of Tordon 22K was not available in the previous analysis. The current analysis shows that this chemical has significant negative effects on the environment and is not appropriate for use on this National Forest. Additionally, this alternative would allow for treatment of weeds within the 50 foot riparian buffer prescribed by the Region 6 EIS for Competing and Managing Unwanted Vegetation. Significant issues as outlined by the public as well as the enclosed analysis (both in the Wildlife report which details concern for amphibian species such as the red-legged frog and in the Fisheries report which details concern for all aquatic species) concerning use of chemicals in proximity to water resources show that there could be adverse environmental effects of using herbicides within the 50

foot riparian buffer, even if stringent mitigation measures are followed.

Alternative 4 was not selected because it would not allow the Forest to comply with its own program that states that the Forest will eradicate all new infestations of noxious weeds. This alternative would not allow use of chemicals to treat these new invaders. Several weeds, knapweed , giant knotweed, false brome, houndstongue and toadflax, have only been eradicated using chemical methods. The additional costs associated with using only manual and mechanical control would drive up costs by approximately 5 times (Table 8). This would mean that approximately 1/5 of the total number of sites would be treated/year. This would result in unacceptable resource damage.

## Aquatic Conservation Strategy Consistency Findings

The Aquatic Conservation Strategy (ACS) of the Northwest Forest Plan is comprised of four components: 1) establishment of Riparian Reserves where special standards and guidelines direct land use; 2) establishment of a system of Key Watersheds; 3) a procedure for conducting Watershed Analysis (which provides the basis for monitoring and restoration); and 4) a long term program of watershed restoration.

*The Environmental Assessment for Integrated Weed Management* utilizes all four components of the ACS while considering the biology, classification (e.g. new invader or established species), population size, location, and potential for spread of noxious weeds, along with the need to protect other Forest resources (e. g. water quality, TES species, and Survey and Manage species). Results of Watershed Analyses and the need to use the best available methods for noxious weed control have been integrated into the Environmental Assessment.

The key concept in the ACS is to improve and restore biological and physical processes within their range of natural variability. Noxious weeds have the potential for impacting biological and physical processes that lead to improved conditions in watersheds. Implementation of Alternative 2 as described in the EA, by not allowing any use of picloram (Tordon 22K), restricting triclopyr (Garlon 3A) to outside Riparian Reserves in Site Types 2 and 5, not allowing chemical treatment in Site Type 4 (except on Ranger District compounds away from entrances and parking lots), and allowing glyphosate (Rodeo) only with backpack application outside of a 50 foot streamside buffer, greatly reduces risk to aquatic resources from chemicals. The other preferred methods of noxious weed treatment (competitive planting, prescribed burning, manual control, biological control, mulching, and mechanical control) allow for reducing noxious weeds so that the integrity of biological and physical processes which support healthy aquatic systems are maintained at a watershed scale.

All methods of control allowed under Alternative 2 will lead to management that implements the nine ACS objectives. Specifically at the watershed scale the protection of native plant and animal species and communities uniquely adapted to the Willamette National Forest's land base will be achieved by reducing established weed populations and preventing or controlling new invaders. Implementation of Alternative 2 leads to maintenance and restoration of chemically and physically unobstructed routes essential to temporal

and spatial connectivity for aquatic and riparian dependent species to fulfill life history requirements within and between watersheds. The implementation of Alternative 2 directly supports the maintenance of species composition and structural diversity of plant communities in riparian areas, and leads to the maintenance of well-distributed populations of native plants along with the invertebrate and vertebrate species dependent on them.

Based on the information and analysis in the EA I find that none of the control methods identified, or the additional forestwide standards and guidelines to be implemented for updating the integrated noxious weed program will retard or prevent attainment of the Aquatic Conservation Strategy objectives.

## Other Alternatives Considered

**Alternative 1**
This alternative (no action) would result maintaining the methodology outlined in the 1993 Environmental Assessment. Approximately 50 sites, most along the major highway corridors, would be treated. Control methods available include no action, manual, biological, mechanical and chemical. Tordon 22K is available for use in this alternative where competing grass vegetation exists. Rodeo is available for use in all sites but Wilderness, TES plant and animal sites and established weed infestations.

**Alternative 3**
This alternative is meant to respond to issues 2, 4 and 5: economics and concerns about loss of wildlife forage and plant communities due to encroachment and competition from noxious weed species. Two hundred-five sites are analyzed for treatment. Control methods available include no action, manual, biological, mechanical and chemical. Sites within 50 feet of water (within Riparian Reserves) may have chemical control (Rodeo) in the form of weed wiping Outside riparian buffers, Rodeo could be used anywhere but in Wilderness or TES plant and animal sites. Garlon 3A and Tordon 22K are available for use in this alternative where competing grass vegetation exists.

**Alternative 4**
This alternative would result in an IWM Program that would stress prevention. Two hundred-five sites are analyzed for treatment. Control methods would include all tools but chemicals.

## Public Involvement

An initial scoping letter went out to all persons who responded to the 1993 EA for Integrated Weed Management, Tribal Councils of the Warm Springs, Klamath, Siletz and Grand Ronde, adjacent landowners and recipients of the quarterly Schedule of Proposed Actions (SOPA) on the Forest. Ten comments were received on the scoping letter. These respondents were invited to a meeting in June 1998 to help develop and discuss preliminary alternatives. The Environmental Assessment was completed in April

1999, sent out to all persons who attended the alternative development meeting. Other respondents and recipients of the SOPA received a letter with the Internet address from which the document can be downloaded. One comment was received concerning the EA. Responses to comments within the letter are in the attached Appendix.

## Finding of No Significant Impact and Consistency with Other Laws and Regulations

Based on the analysis documented in the Environmental Assessment, I have determined that this is not a major Federal action that would significantly affect the quality of the human environment; therefore, an Environmental Impact Statement (EIS) is not needed. Beneficial and adverse direct, indirect, and cumulative environmental impacts discussed in the Environmental Assessment have been disclosed within the appropriate context. These impacts are expected to be of low intensity. No significant effects to the human environment have been identified. This determination is based on the mitigation measures designed into the selected alternative and the following factors:

**Context**
The IWM EA covers weed sites and proposes non-significant amendments which will affect lands throughout the Forest. The gross acreage of sites being analyzed is 157 acres (EA, Table 2, p. 7-12), within a 1.7 million acre Forest. One hundred thirty of these acres are within powerline corridors. The majority of the remaining 27 acres are along Forest roads. The percentage of the Forest that will be affected by this analysis is very small.

**Intensity**

1. *Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effect will be beneficial.*

   The proposed action will not be significantly beneficial or adverse. The implementation of Alternative 2 will have a combination of beneficial and adverse impacts but individually or cumulatively they will not be significant. Proposed chemical treatments may have a negative effect on some plants adjacent to weeds because of spray drift. This effect is expected to be very small in scope and localized to weedy species along roadsides. Beneficial impacts include the eradication of some new invader species resulting in intact natural wildlife and plant habitats and control of established infestations through biocontrol methods.
2. *The degree to which the proposed action affects public health or safety.*

   No impacts to public health or safety are anticipated. There should be no adverse effects to air quality from the proposed action. Air quality could be affected if prescribed burning were used as a tool, but this would require further NEPA analysis (EA, p. 14). Water quality will not be significantly affected because no treatment except manual control will be allowed within 50 feet of water in Alternative 2 (EA, p. 17). The only chemical proposed for use within Riparian Reserves is

Rodeo, which is approved for aquatic use.

All chemical treatment sites will be signed 1 week prior to treatment and 1 week after treatment to advise Forest users of this management activity (EA, Table 7, p. 20). Worker health and safety standards must follow guidelines set up by the Region 6 EIS for Competing and Managing Unwanted Vegetation (EA, Table 7, p. 21).

3. *Unique characteristics of geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas.*

   There are no known prime farmlands within or adjacent to the project area.

   One State Park, Mongold, is adjacent to DE1. Mongold is treated for spotted knapweed by the Oregon Department of Agriculture.

   Historic properties and cultural resource sites that overlap with weed treatment corridors are listed as site type 3 in Table 2. (EA, p.11). These sites will receive special mitigation if mechanical treatments are to take place (EA, p. 22). This is the only control method identified as having the potential to adversely affect cultural sites by large-scale disturbance.

   Wetlands and Wild and Scenic Rivers will be treated similarly under the EA because both are treated as Riparian Reserves under the Northwest Forest Plan. There are few wetlands that overlap with weed sites (mostly stream crossings at roads). One weed site, MC5, runs along the upper McKenzie River, designated as Wild and Scenic. No herbicide treatments will occur within 50 feet of flowing streams, lakes, ponds or wetlands (EA, p. 17).

4. *The degree to which the effects on the quality of the human environment are likely to be highly controversial.*

   There is one controversial issue that relates to weed control and that is use of herbicides as a control method. Alternative 2 is very specific about where, when and how herbicides may be used. It is one tool in the box and only to be used when all other tools have failed. Numerous mitigation measures (EA Table 7, pp 20-21) are built in to the program to avoid adverse effects on the environment.

   During scoping, over three hundred fifty people were presented with the proposed action. Less than 10 responded to the scoping letter. Two members of the public responded to the EA; one was in full support of Alternative 2.

5. *The degree to which the possible effects on the human environment is highly uncertain or involves unknown risks.*

   The use of herbicides does present some uncertainty of effects and unknown risk because many chemical manufacturers will not fully disclose constituents of their brand names. This is not the case

with Rodeo, which is composed of glyphosate and water (EA, Appendix F, Herbicide Information Profile, Glyphosate). This is the case for Garlon, the second herbicide proposed for use under Alternative 2. According to the Herbicide Information Profile for Triclopyr (EA, Appendix F), Garlon is composed 44% triethylamine salt and 56% inerts that include water, unidentified surfactants and ethanol. The Region 6 EIS for Competing and Managing Unwanted Vegetation, to which this EA is tiered, has completed a risk assessment. Health risk to the public is low given backpack as the primary method of herbicide application for both Rodeo and Garlon. Risks to workers are low for Rodeo and moderate for Garlon (Appendix F).

6. *The degree to which the action may establish a precedent for future actions with significant effects or represent a decision of principle about a future consideration.*

   The Forest has been managing noxious weed populations since 1988 and has been applying very small amounts of herbicide since 1994 (EA, p. 1-2). Treatment of sites will not establish a precedent for future actions.

   The non-significant amendments to the Willamette Forest Plan will be guidelines by which the Forest manage sits weed program, so this Decision does represent a decision about future considerations. The amendments will be added to help the Forest focus on prevention activities and to allow immediate manual treatment of new invaders and to provide guidance for treating larger populations of new invaders and established infestations. Each new weed site will go through a rigorous site-specific analysis (Appendix A: treatment form). A list of proposed treatments is in the amendments; no action is an alternative every time. New sites will go through a public comment process (EA, p. 12) prior to treatment and will be subject to all the same mitigation measures as those sites identified within this analysis.
7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts*

   The analysis in Chapter 4 of the EA constitutes an evaluation of cumulative impacts of weed management as proposed under Alternative 2. No direct, indirect or cumulative impacts to soil, water, fisheries, wildlife, botanical, cultural or other components of the human environment are anticipated.
8. *The degree to which the action may adversely affect districts, sites, travelways, structures or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historical resources.*

   Some weed sites are located adjacent to significant property(s) that may be eligible for inclusion in the National Register of Historic Places. Recommended treatments for such weed populations are designed to have no effect on cultural resource values. Cultural resources will be protected via mitigation measures as explained under item 3.
9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.*

   The Biological Evaluations for proposed treatment sites address effects on threatened and endangered species and their habitats. Effects are also addressed in Chapter 4 of the EA under the Wildlife (EA, p. 38-40) and Fish and Water (EA, p. 40-41) sections. Formal consultation with the

US Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) as required under Section 7 of the Endangered Species Act was completed for northern spotted owls, Oregon chub, bull trout and anadromous salmon. The Level 1 Teams all stated that noxious weed treatment as outlined in this analysis are "not likely to adversely affect" these species or their habitats. The reviewing agencies (both FWS and NMFS) concur with this finding.

All populations of listed species which overlap weed sites are treated as site type 3. No chemicals will be used within 200 feet of any listed animal or fish (EA, p. 22). Specific mitigation measures identify further restrictions on weed management to avoid disturbance to bald eagles, spotted owls and peregrine falcons when the birds are nesting (EA, p. 21).

10. *Whether the action threatens a violation of Federal, State or local law or requirements imposed for the protection of the environment.*

    All federal, state and local laws protecting the environment will be followed. The proposed action complies with the Noxious Weed Act (EA, p. 1), National Environmental Policy Act and the National Forest Management Act. The Northwest Forest Plan Aquatic Conservation Strategy objectives, along with EA mitigation measures (p 20-21), should ensure Federal and state water quality standards are met. This EA complies with the Mediated Agreement for the EIS for Competing and Managing Unwanted Vegetation.

## Administrative Review and Appeal Rights

This decision is subject to appeal pursuant to 36 CFR 215.7. Any written Notice of Appeal of this decision must be fully consistent with 36 CFR 215.14 (Content of Appeal) including providing sufficient written evidence and rationale to show why the decision should be remanded or reversed. A written Notice of Appeal must be filed with the Appeal Deciding Officer within forty-five (45) days after the legal notice of this decision appears in the Eugene Register-Guard. Submit Appeals to:

**Regional Forester**
**Attn.: 1570 Appeals**
**P.O. Box 3623**
**Portland, Oregon 97208-3623**

## Implementation

If no appeal is filed, implementation may begin 5 business days from the close of the appeal period. If an appeal is filed, implementation of this decision shall not occur for 15 days following the date of the appeal disposition.

For further information, contact Jennifer Lippert, Forest Botanist, at the Willamette NF Supervisor's Office, Post Office Box 10607, Eugene, Oregon 97440; Telephone (503) 465-6321.

APPROVED BY:

DARREL L. KENOPS _____Date: 8/30/99
Forest Supervisor
Willamette National Forest

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R*evised: 9/2/99*