

ENVIRONMENTAL ASSESSMENT

EA Number: OR-080-04-12

BLM Office: Walter H. Horning Tree Seed Orchard, Salem District Office, 1717 Fabry Road SE, Salem, Oregon, 97306

Proposed Action Title: Quack Grass (*Agropyron repens*) Herbicide Treatment

Type of Project: Herbicide Application

Location of Proposed Action: Township 4 South, Range 3 East, Section 13, Willamette Meridian, located approximately 23 miles southeast of the City of Portland, Oregon.

Conformance with Applicable Land Use Plan: The proposed action is in conformance with the following documents: *RMP (Salem District Record of Decision and Resource Management Plan)*, dated May 1995 which stated that seed orchards are to be maintained and managed to produce seed as needed for ecosystem management projects (Appendix E-2). Beyond this direction, the RMP does not apply to the orchard as it has been administratively withdrawn (RMP, p. 58).

Purpose of and Need for Action:

The Orchard was established in 1964 to produce improved conifer seed for BLM's western Oregon Districts. The seed produced is genetically diverse, and well adapted for reforesting a wide range of sites in western Oregon. During the last 3-4 years, the orchard has been developing a native plant materials program designed to support a broad range of revegetation activities with locally adapted plants. This program also includes an interagency study plot of *Bromus carinatus* in cooperation with three National Forests and two BLM Districts.

¹ Pursuant to BLM Handbook 1790-1, Rel. 1-1547, 10/25/88, page IV-11, it is appropriate to use this optional form when all the following conditions are met: 1/ Only a few elements of the human environment are affected by the proposed action; 2/ Only a few simple and straightforward mitigation measures, if any, are needed to avoid or reduce impacts; 3/ There are no program-specific documentation requirements associated with the action under consideration; 4/ The proposed action does not involve unresolved conflicts concerning alternative uses of available resources and, therefore, alternatives do not need to be considered; 5/ The environmental assessment is not likely to generate wide public interest and is not being distributed for public review and comment; and 6/ The proposed action is located in an area covered by an existing land use plan and conforms with that plan.

A moderate population of quack grass has been observed growing in the tilled areas designated for native plant seed beds. Quack grass is an invasive grass species that the desired native plant species can not compete with for water and nutrients. When quack grass is rototilled, each piece of the rhizomatous root generates a new plant eventually forming an impenetrable mat. Consequently the ability of quack grass to easily regenerate makes it a difficult pest.

In addition, Quack grass is a formally designated noxious weed by the Oregon State Department of Agriculture, and qualifies for the applicable noxious weed protocols regarding treatment planning, project implementation, and including the use of chemical pesticides (herbicides). Quack grass seed is not permitted to contaminate any seed that is used for revegetation or restoration that calls for certified native seed. (ORS 570.505, Oregon Department of Agriculture Noxious Weed Handbook.)

The purpose of this project is to eradicate quack grass growing in the tilled areas designated for native plant seed beds.

Description of the Proposed Action:

Herbicide treatment using Glyphosate (Roundup) is an effective control method for this noxious weed. (Pacific Northwest Weed Management Handbook, 2004, a publication revised annually by the Extension Services of Oregon State University, Washington State University, and the University of Idaho).

This action proposes one or two applications of herbicide using a tractor mounted boom sprayer during September of 2004 within the Native Plant grow out beds in section 13. This plot covers less than 10.0 acres, and is within the fenced portion of the native plant beds.

The treatment process involves mixing and applying the herbicide Roundup in accordance with label instructions, all applicable protocols, and the design features described below. It will be applied using a tractor mounted boom sprayer. The employees involved have been specially trained in this technique and with this chemical.

Design Features:

The standard design features which apply to all orchard uses of chemical pesticides would be used during the implementation of this project. They address worker and environmental protections, are in compliance with all applicable law and regulations, and are shown in Appendix I.

Consultation and Public Involvement:

ESA consultation: The Proposed Action is expected to have No Effect on any ESA-listed fish or wildlife species or their designated critical habitat. Since there will be no effects, no consultation is required with either U.S Fish and Wildlife Service or NOAA Fisheries. The Proposed Action

will have No Adverse Effect on Essential Fish Habitat (EFH) for Coho salmon and Chinook salmon in either the Clackamas River or Molalla River sub-basins, therefore no EFH consultation with NOAA Fisheries is required.

Public Involvement: A scoping letter was made available on the internet for 7 days beginning July 17, 2004.

Affected Environment: The Orchard has been intensively managed, resulting in ecosystems comparable to agricultural landscapes. The affected environment is described in detail in the Draft EIS for IPM at Walter Horning Tree Seed Orchard (USDI Bureau of Land Management 2003), Ch 3-1, p3-27 which is incorporated here by reference. The target plant is the noxious weed quack grass and it will be controlled as a result of this treatment.

The Orchard has an extensive network of natural and marked buffers within the boundaries. These buffers are at least 200 feet in width and are designed to protect riparian areas, adjacent private lands, and other sensitive lands from any impacts of Orchard management activities. The treatment described in this document will not be implemented in or near the buffer areas. The project area is at least 500 feet from the nearest wetland, and at least 760 feet from the nearest running stream channel.

There are no threatened, endangered or other Special Status wildlife species within the Orchard boundaries and therefore there are no effects to these species from the proposed treatment.

The proposed action will occur in the Clackamas River basin. Lower Columbia River steelhead are found in Clear Creek, approximately 1.5 miles downstream from the treatment area.

Environmental Impacts: The interdisciplinary team reviewed the elements of the human environment, required by law, regulation, Executive Order and policy, to determine if they would be affected by the proposed action. Table 1 (Critical Elements of the Human Environment from BLM H-1790-1, Appendix 5) and Table 2 (Other Elements of the Environment) summarize the results of that review. Affected elements are **bold**. Unless otherwise noted, the effects apply to the proposed action; and the No Action Alternative is not expected to have adverse effects to these elements.

Table 1: Environmental Review for the Critical Elements of the Human Environment (BLM H-1790-1, Appendix 5)

<i>Critical Elements Of The Human Environment</i>	<i>Status: (i.e., Not Present, Not Affected, or Affected)</i>	<i>Does this project contribute to cumulative effects? Yes/No</i>	<i>Remarks</i>
Adverse Impacts on the National Energy Policy	Not Affected	No	There are no known energy resources located in the project area. The proposed action will have no effect on energy development, production, supply and/or distribution.

<i>Table 1: Environmental Review for the Critical Elements of the Human Environment (BLM H-1790-1, Appendix 5)</i>				
<i>Critical Elements Of The Human Environment</i>	<i>Status: (i.e., Not Present, Not Affected, or Affected)</i>	<i>Does this project contribute to cumulative effects? Yes/No</i>	<i>Remarks</i>	
Air Quality	Not Affected	No	This project involves spraying, but at a very close distance from the target vegetation.	
Areas of Critical Environmental Concern	Not Present	No		
Cultural Resources	Not Affected	No	This is not a ground disturbing activity.	
Environmental Justice (Executive Order 12898)	Not Affected	No	The proposed action is not anticipated to have disproportionately high and adverse human health or environmental effects on minority populations and low-income populations.	
Prime or Unique Farm Lands	Not Present	No		
Flood Plains	Not Present	No	The proposed action does not involve occupancy and modification of floodplains, and will not increase the risk of flood loss.	
Hazardous or Solid Wastes	Not Affected	No	This project will not generate waste which will require special treatment.	
Invasive, Nonnative Species (plants) (Executive Order 13112)	Affected	No	The target plant species is an officially recognized noxious weed and will be controlled by the proposed action.	
Native American Religious Concerns	Not Affected	No	All activities take place within the Horning Seed Orchard. Past notification for projects within this area have not resulted in tribal identification of concerns	
Threatened or Endangered (T/E) Species or Habitat	Fish	Not Affected	No	This project will involve localized activities which are well outside of areas established for buffer purposes and well away from any habitat. Because the treatment area is flat and over 760 feet from the nearest running stream channel, no Roundup is expected to enter surface water. For these reasons, the proposed action will have no effect on Lower Columbia River steelhead. No treatment will occur in the Milk Creek drainage, therefore there will be no effects on Upper Willamette River steelhead.
	Plants	Not Present	No	
	Wildlife	Not Present	No	
Water Quality (Surface and Ground)	Not Affected	No	This project will not introduce chemical pesticide product into either surface or ground waters.	
Wetlands/Riparian Zones	Not Affected	No	This project is not located in Wetland or Riparian areas.	
Wild and Scenic Rivers	Not Present	No		
Wilderness	Not Present	No		

Table 2: Environmental Review for the Other Elements of the Environment

<i>Other Elements Of The Environment</i>	<i>Status: (i.e., Not Present, Not Affected, or Affected)</i>	<i>Does this project contribute to cumulative effects? Yes/No</i>	<i>Remarks</i>
Coastal zone	Not Present	No	
Fire Hazard/Risk	Not Affected	No	This project will not increase fuel loading or fire risk
other Fish Species with Bureau Status and Essential Fish Habitat	Not Present	No	
Land Uses (right-of-ways, permits, etc)	Not Present	No	
Late successional and old growth	Not Present	No	
Mineral Resources	Not Present	No	
Recreation	Not Affected	No	Recreational uses are authorized by permit only and will not be allowed in the project areas.
Rural Interface Areas	Not Present	No	
Soils	Not Affected	No	This is not a ground disturbing activity.
Special Areas outside ACECs (Within or Adjacent) (RMP pp. 33-35)	Not Present	No	
other Special Status Species/Habitat	Not Present	No	
Plants			
Wildlife			
Visual Resources	Not Affected	No	This project will not change any visual attributes of the orchard.
other Water Resources (303d listed streams, DEQ 319 assessment, Downstream Beneficial Uses; water quantity, Municipal /Domestic Water Use)	Not Affected	No	The project involves highly localized areas and is well outside buffers established to protect water resources. Sensitive habitat for fish does not exist, but is at least one mile downstream from the Orchard boundary.
other Wildlife Structural or Habitat Components (Snags /CWD / Special Habitats, road densities)	Not Present	No	

Aquatic Conservation Strategy Review: Table 3 shows the project's effect on the 4 components of the Aquatic Conservation Strategy (1/ Riparian Reserves, 2/ Key Watersheds, 3/ Watershed Analysis and 4/ Watershed Restoration).

Table 3: Aquatic Conservation Strategy Summary (RMP pages 5-6)		
Components	Effect	Remarks /References
Riparian Reserves	None	
Key Watershed	None	Not in a key watershed
Watershed Analysis	None	
Watershed Restoration	None	

Interdisciplinary Team:

Resource	Name	Initial	Date
Cultural Resources	Frances Philipek	FMP	8/12/04
Hydrology/ Water Quality and Soils	Chester Novak	CN	8/12/04
Botany TES and Special Attention (including Survey and Manage) Plant Species	Claire Hibler	CH	8/12/04
Wildlife TES Species	Roy Price	RP	8/12/04
Special Attention (including Survey and Manage) Animal Species	Roy Price	RP	8/12/04
Fisheries	Bob Ruediger	BR	8/12/04
Wild and Scenic Rivers/Wilderness/Recreation Sites/ Visual Resources Management / Rural Interface	Laura Dowlan	LD	8/12/04

EA Prepared By: [Signature]

Date: 8/12/04

EA Reviewed By: Carolyn Sands
NEPA / Plans

Date: 8/16/04

FINDING OF NO SIGNIFICANT IMPACT and DECISION RECORD

Based upon my review of this EA (Environmental Assessment Number OR-080-04-12), I have determined that the proposed action is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. No environmental effects meet the definition of significance in context or intensity as defined in 40 CFR 1508.27. Therefore, an environmental impact statement is not needed. I have also determined that the proposed action is in conformance with the approved land use plan. It is my decision to implement the proposed action, as described in the EA.

Right to Appeal: This decision may be appealed to the Interior Board of Land Appeals (Board), Office of the Secretary, in accordance with the regulations contained in 43 Code of Federal Regulations (CFR), Part 4 and the Form 1842-1. If an appeal is taken, your notice of appeal must be filed in this office within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR 4.21 (58 FR 4939, January 19, 1993) or 43 CFR 2804.1 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Board and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay: Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

- (1) The relative harm to the parties if the stay is granted or denied,
- (2) The likelihood of the appellant's success on the merits,
- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

Implementation Date: Implementation of this decision may begin 30 calendar days after the public notice of the Decision Record appears in the Molalla Pioneer.

Contact Person: For additional information concerning this decision or the appeal process, contact Greg Tyler at (503) 630-8406 or Carolyn Sands at (503) 315-5973, Cascades Resource Area, Salem District, 1717 Fabry Road, Salem, Oregon 97306.

Authorized Official:  Date: Aug. 16, 2004
Denis Williamson, District Manager
Salem District

APPENDIX I: Project Design Features.

Worker protection measures

- A Job Hazard Analysis for pesticide applications will be developed, providing a detailed description of the jobs and associated risks involved with pesticide use and application, and identifying requirements for personal safety equipment, training, and certification to perform certain specific tasks.
- The Orchard would utilize its Pesticide Safety Plan.
- Pesticide applications would be conducted in compliance with all aspects of EPA's Worker Protection Standard under FIFRA, including protection during applications, restricted entry intervals, personal protective equipment, notification of workers, decontamination supplies, emergency assistance, pesticide safety training and safety posters, and access to labeling and site-specific information.
- Material safety data sheets would be posted at storage facilities and made available to workers.
- Appropriate protective clothing would be worn by all workers, as required by the pesticide's label.
- All applicators would be trained and this training would be confirmed by the seed orchard manager.
- For all application methods using spraying equipment, treated areas would not be re-entered until sprays have dried and the stated label re-entry period has been met, unless protective clothing is worn and early re-entry is permitted by the label.

General Protection Measures

- Prior to pesticide application, the Orchard will notify downstream water users and adjacent landowners within one half mile of the project area.
- Warning signs would be posted to discourage entry into treated areas.
- Pesticides would be applied within the parameters of the prescribed environmental conditions stated on the label.
- Temperatures would be monitored carefully.
- If possible, spraying would be conducted during the early morning or late evening, to allow foliage to dry before pollinators become active.
- The monitoring would be implemented as described for pesticide applications.

Runoff

- Applications would be timed, to the extent predictable by weather forecasts, to not coincide with or closely precede a large storm event that could result in substantial runoff. Specifically, there will be no application of pesticides when rainfall is expected to exceed 0.5 inches per hour within three days following application. This is the most reliable forecast window and will minimize the likelihood of exceeding the infiltration rates of the dominate orchard soil. Application will not occur on days that rainfall is likely to occur.
- If rainfall has preceded an intended application window, the plot will be checked for

infiltration capacity, avoiding application when standing water is visible on the soil surface.

- At a minimum, stream course and wetland buffers would be established within guidelines prescribed by the pesticide label.
- No chemical pesticides would be applied to road or ditch surfaces that directly contribute to stream channel flow, or within 50 feet on either side of stream channels.

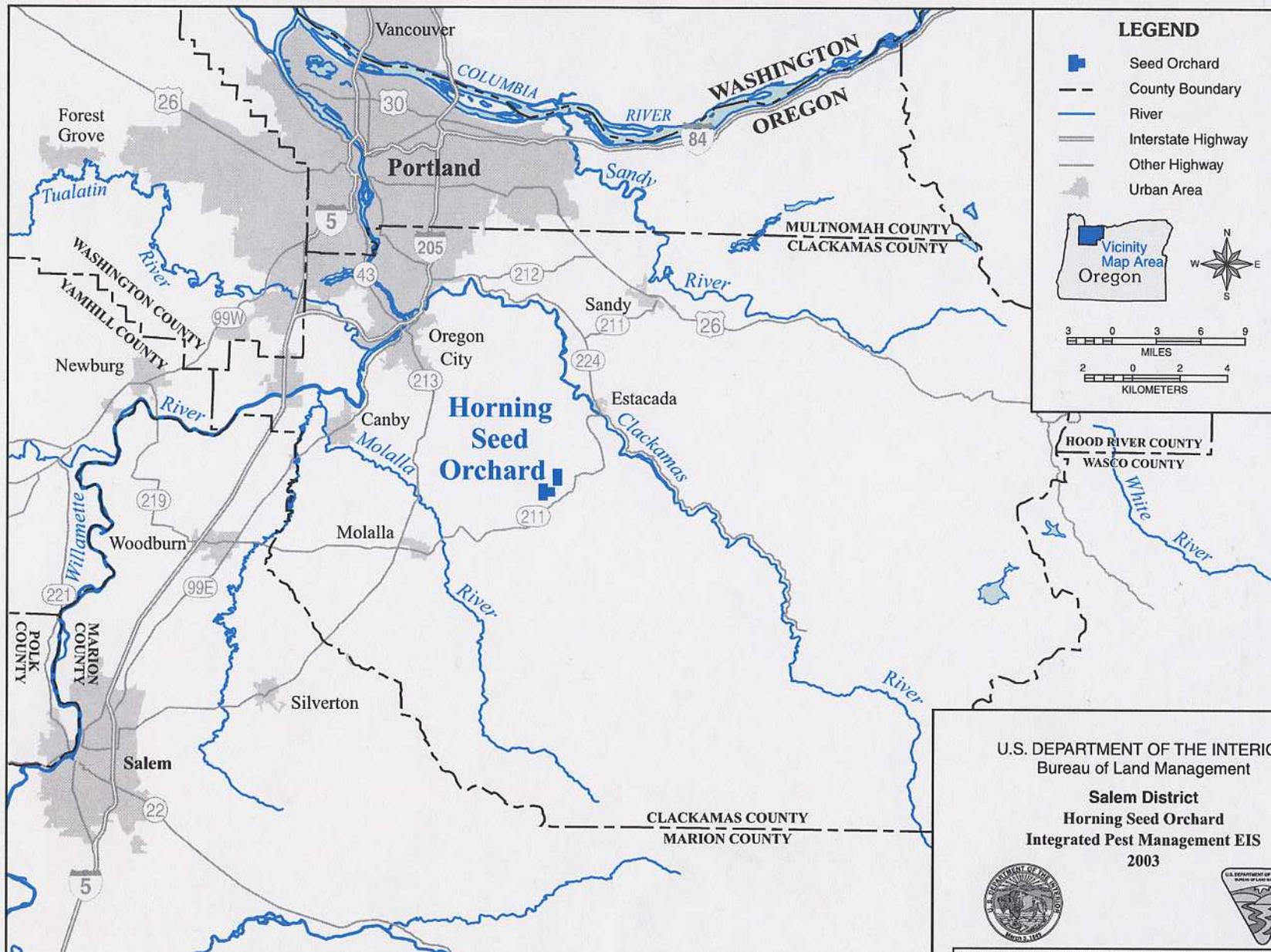
Spill

- Equipment used for pesticide transport, mixing, and application would be properly maintained to avoid leaking pesticides into water or soil.
- Pesticides would be mixed and equipment cleaned in areas protected (e.g. paved and bermed, or on a portable bermed mixing pad) from the potential for runoff to surface waters or leaching to groundwater in the case of a spill. Chemical containers would be kept in plastic drip pans that are large enough to hold the entire volume of each container in case the containers develop leaks.
- To prevent the impacts to aquatic species associated with a spill, chemical pesticides would not be transported within 50 feet of any stream channel.
- All chemical loading operations will occur within the orchard building compound.
- A spill containment kit would be on site in the orchard building compound.
- Procedures outlined in the orchard Spill Prevention and Countermeasure Containment Plan will be followed if there is any spill.
- Containers will be disposed of by rinsing three times, puncturing and disposing in a sanitary landfill or incineration in a county facility.
- Application tank will be rinsed with NutraSol. Washout from applicator and tank will be drained into current Seed Orchard greenhouse effluent disposal system.

Drift

- All applications of liquid pesticides will occur early in the morning when wind is minimal (<6mph). Wind speed will be monitored on-site prior to and during spray applications. Operations will be suspended if wind speeds exceed 6 mph. Application will not occur when wind direction is toward flowing streams.
- Factors such as relative humidity, wind speed, and air temperature would be considered to determine the timing of applications that would minimize the potential for off-target drift.
- Pesticide applications will not be made during temperature inversions.
- Drift cards would be placed on all sides of areas to be treated when liquid pesticides are used, and applications would cease if there is any indication that chemical is moving out of the target area.

Figure 1.2-1: Location of Horning Seed Orchard



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Salem District
Horning Seed Orchard
Integrated Pest Management EIS
2003



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