

Categorical Exclusion Documentation

A. Background

BLM Office: Eugene District

Lease/Serial/Case File No: NA

Categorical Exclusion Number: DOI-BLM-OR-E000-2010-00015-CX

Proposed Action: Seed Orchard General Operation Activities

Location of Proposed Action: Project is located at Tyrrell Seed Orchard in Township 20 South, Range 5 West, Sections 9, 15, and 21.

Land Use Allocation(s): Administratively withdrawn

Description of Proposed Action: Tyrrell Seed Orchard, located near Lorane, Oregon, is one of four centralized seed orchards that are managed by the BLM in western Oregon. The orchard, established about 20 years ago, provides genetically improved seed to Eugene, Roseburg and Coos Bay BLM Districts and to eleven orchard cooperators. There are currently about 250 acres devoted to conifer seed production (see attachment 1).

Routine management actions for orchard maintenance activities would occur periodically. Ongoing orchard activities required for day-to-day operations include items such as removal of dead/dying material, orchard thinning, roguing, stump removal/grinding, pile burning, chipping, mowing, tilling, scion collection, planting, tree moving, field grafting, pruning, topping, bark scoring, flower stimulation, tree breeding, cone collection, orchard inventory, and fence and building maintenance.

Trees are removed from the orchards during a variety of operations. Dead and dying trees are periodically removed for purposes of safety and sanitation. Orchards are thinned to increase light, improve crown development and modify pollen flow. Lower ranked clones are also removed (roguing) to improve genetic quality of the orchards. Roguing can take place throughout the life of the orchard, reducing the number of trees per acre by 20-70% of the original planting. Trees are cut using chainsaws or hydraulic mechanical harvesters and then hauled from the orchard using a farm tractor with grapple or forwarder. Depending on the market, useable material may be sold for lumber, chips, or firewood. Branches and slash may be sold for chip material, chipped on-site, or piled and burned. Following tree removal, stumps are typically ground to 6 inches below the ground surface to remove the operational hazard. Ground disturbance for tree removal activities is minimal.

Mowing is done throughout the growing season to allow for operational access, as a means of fire prevention, and to control the spread of noxious weeds. Farm tractors with mowers, walk-behind mowers, and string trimmers are used to complete this task. Approximately 475 orchard acres would be mowed, based on the acreage mowed in previous years.

New orchard blocks are planted infrequently, involving tilling of fallow ground that has been previously cleared but never planted to trees. Each orchard row in these grass-covered areas would be tilled to a width of 6ft-8ft., leaving approximately 12 ft. of untouched cover crop between rows. Scion material (cuttings) would be collected from specified parent trees and grafted to rootstock, either in a greenhouse or in the field. The seedlings would be planted, mulched for vegetation control, tubed for animal control, and hand-watered for several years. Occasionally, a tractor-mounted tree spade is used to move young trees from one position to another. Bark scoring, using knives or small chainsaws during the dormant season, may be required to improve graft compatibility.

Orchards would be pruned to remove unwanted rootstock vegetation (as graft unions become established), to remove lower limbs to improve equipment access, and to thin and shape tree crowns. In addition, some orchard trees would be topped to reduce tree height and to thereby make cone collection more cost-effective.

Orchard trees would be periodically stimulated for flower production by girdling (done in the spring using a hand saw or chainsaw), using an application of calcium nitrate fertilizer in early winter, or applying gibberellic acid in conjunction with girdling. Stimulation is required for developing consistent operational cone crops and for controlled breeding operations.

Cone crops are harvested between August and October. Work is typically completed under contract by climbing and/or the use of aerial lifts. Cones are collected and brought to the office compound for inventory and temporary storage prior to seed extraction.

General building repair in the administrative compound (roof, water, electrical, etc) and fenceline construction/maintenance are done infrequently on an as-needed basis.

Farm tractors and all terrain vehicles are frequently used throughout the orchard, resulting in low-level background noise throughout the year.

A list of potential general orchard activities planned for 2010 can be found in attachment 1.

B. Land Use Plan Conformance

The Proposed Action is in conformance with the 1995 Eugene District Record of Decision and Resource Management Plan, which addresses the need for tree improvement and states that "Genetically improved indigenous trees would be used in reforestation to the extent available" (pg 1-41).

Tyrrell Seed Orchard is administratively withdrawn. Specifically, Public Land Order 6662 withdrew a total of 823.5 acres at the seed orchard from surface entry and mining under the general land laws and mining laws.

The project is consistent with the 2001 Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines, as incorporated into the Eugene District Resource Management Plan. The project area does not include habitat for Survey and Manage species, because past management of the Seed Orchard has simplified the composition and structure of vegetative communities (as detailed in EA-01-05, "Travis Tyrrell Seed Orchard Insect Control"). Therefore no pre-project surveys or management are required.

C. Compliance with NEPA

The Proposed Action is categorically excluded from further documentation under the National Environmental Policy Act (NEPA) in accordance with 516 DM 11.9C (1), which allows for "land cultivation and silvicultural activities (excluding herbicide application) in forest tree nurseries, seed orchards, and progeny test sites".

This categorical exclusion is appropriate in this situation because there are no extraordinary circumstances potentially having effects that may significantly affect the environment. The proposed action has been reviewed, and none of the extraordinary circumstances described in 516 DM2 apply.

Table 1: Categorical Exclusions: Extraordinary Circumstances Review

The Proposed Categorical Exclusion Action Will:	Yes	No
2.1 Have significant impacts on public health or safety		X
Rationale: All proposed activities follow established Occupational Safety and Health Administration rules concerning health and safety. The proposed general orchard operations would have no effect on public health or safety.		
2.2 Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation or refuge lands; wilderness areas; wild or scenic revivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas.		X
Rationale: The area proposed for general orchard operations is outside of any unique areas such as those discussed above		
2.3 Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources [NEPA section 102 (2)(E)].		X
Rationale: The effects of general orchard operations are not controversial. This type of work has been taking place at Tyrrell since the 1980's. Care is taken to complete tasks in a manner that minimizes the chance for compaction and runoff. There are no unresolved conflicts concerning alternative uses of available resources.		
2.4 Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks.		X
Rationale: The proposed general orchard operations are not unique or unusual. The BLM has considerable experience implementing similar actions at the seed orchard without highly controversial, highly uncertain, or unique or unknown risks		
2.5 Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects.		X
Rationale: The BLM has conducted similar actions at the seed orchard since its inception. There is no evidence that general orchard operations have potentially significant environmental effects and it would not establish a precedent or decision for future actions with potentially significant environmental effects.		
2.6 Have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects.		X
Rationale: The proposed action would not have a direct relationship to other actions with any kind of environmental effect.		
2.7 Have significant impacts on properties listed or eligible for list, on the National Register of Historic Places as determined by either the Bureau or office		X
Rationale: No properties listed or eligible for listing are affected.		
2.8 Have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species.		X
Fisheries: The action will not adversely affect any ESA-listed fish species. Wildlife: the action "May Affect, but is Not Likely to Adversely Affect" the marbled murrelet and spotted owl due to disturbance in the latter part of their breeding periods (July 8 through September 30). There would be "No Effect" due to disturbance from October 1 through February 28. There would be "No Effect" to Critical Habitat for those species. Use of chainsaws would not take place within 100 yards of the old-growth habitat in section 15 between March 1 and August 5. Use of chain saws within 100 yards of that habitat between August 6 and September 15 would not begin until two hours after sunrise and must cease two hours prior to sunset.		
2.9 Violate a Federal law, or a State, local, or tribal law or requirement imposed for the protection of the environment.		X
Rationale: Proposed general orchard operations follow all known Federal, State, local, and Tribal laws imposed for the protection of the environment		
2.10 Have a disproportionately high and adverse effect on low income or minority populations (Executive Order 12898)?		X
Rationale: There would be no adverse effect on low income or minority populations associated with		

general orchard operations.		
2.11 Limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (Executive Order 13007).		X
Rationale: There are no known Indian sacred sites located within the seed orchard. The proposed action would not limit the use of or the physical integrity of Indian sacred site on Federal land.		
2.12 Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112).		X
Rationale: Contractors would be required to clean all heavy equipment using a pressure washer prior to entry on BLM lands to prevent the spread of noxious weeds and root disease. Some of the actions, such as mowing, would contribute to controlling the spread of noxious weeds.		

D. Signatures

Prepared By:		Date:	2/23/2010
Michael Crawford: Forester/Seed Orchard Program Manager			
Reviewed By:		Date:	3/11/2010
Richard Hardt: Environmental Coordinator			
Approved By:		Date:	3/11/2010
Virginia Grilley: District Manager, Eugene District BLM			

Contract Person

For additional information concerning this Categorical Exclusion review, contact Mike Crawford, Seed Orchard Program Manager; (541) 683-6445.

ATTACHMENT 1:

General Orchard Activities

The following table lists other cultural treatments (non-pesticide applications) that could be used at the Tyrrell Tree Seed Orchard in 2010. All treatments except for flower stimulation and planting were addressed in the IPM EIS as common mechanical/manual methods of IPM. Land clearing was analyzed in Seed Orchard Recycling – Orchard Establishment Categorical Exclusion 1791A-ORE000-2009-0012 (DOI-BLM-OR-E000-2009-00012-CX). Except for pile burning, which requires compliance with Oregon Department of Forestry regulations concerning limits on tonnage and air quality standards, there are no known governmental restrictions concerning timing of these treatments.

Table 6. *Other possible cultural treatments for 2010*

Cultural Treatment	Qty ¹	Units	Dates ²
Cone Collection	55	Acres	August – October
Dead/Dying Tree Removal	310	Acres	October – April
Duff/Litter Vacuum	10	Acres	October
Flower Stimulation	91	Acres	March – April
Land Clearing	30	Acres	June – October
Mowing	800	Acres	March – August
Mulching	17	Acres	January – March
Pile Burning	500	Tons	October – May
Planting	17	Acres	January – March
Pruning	275	Acres	October – March
Roguing/Thinning	150	Acres	September - October
Soil Aeration	300	Acres	February – March
Stump Grinding	2,500	Stumps	October – March
Fertilization	220	Acres	February – March
Tilling	6	Acres	October - September

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
EUGENE DISTRICT OFFICE

DECISION RECORD

Decision:

It is my decision to implement this action on BLM lands as described in the categorical exclusion documentation DOI-BLM-OR-E000-2010-00015-CX. The action is in conformance with the 1995 Eugene District Resource Management Plan.

Decision Rationale:

The proposed action has been reviewed by Resource Area Staff and appropriate project Design Features as specified will be incorporated into the proposal. Based on the NEPA Categorical Exclusion Review, I have determined that the proposed action involves no significant impact to the human environment and no further analysis is required.

Administrative Remedies:

Notice of the decision to be made on the action described in this categorical exclusion will be posted on the District internet website. A decision is subject to appeal to the Interior Board of Land Appeals under 43 CFR Part 4.

Authorizing Official:

/s/ Virginia Grilley _____

Virginia Grilley
District Manager
Eugene District Office

March 11, 2010 _____

Date