USDA

Decision Memo
Forest Plan Amendment for the Addition of Aminopyralid

USDA Forest Service
Umatilla National Forest

Grant, Morrow, Umatilla, Union, Wallowa, Wheeler (Oregon), Asotin, Columbia, Garfield, Walla Walla (Washington) counties.

Background

In 2005, the Pacific Northwest Regional Forester amended all the Land and Resource Management Plans (Forest Plans) in the region to update the invasive plant management program. This plan approved the use of ten herbicide active ingredients (USDA 2005b. Pacific Northwest Region Invasive Plant Program Record of Decision. Portland, OR. Referred to as R6 2005 ROD). The R6 2005 ROD explained that other herbicide ingredients may be added in the future.

In 2007, an independent contractor, Syracuse Environmental Research Associates, Inc., completed a Human Health and Ecological Risk Assessment for the herbicide active ingredient: aminopyralid (SERA 2007). This active ingredient was specifically developed for use in wildland settings.

This Forest plan amendment is a relatively minor modification to the invasive plant program. It would not, in itself, approve any projects on the ground. Project-level analysis would be required before aminopyralid would be used on the ground.

Information about aminopyralid is summarized in Table1, included below. This information is based on the Aminopyralid Risk Assessment (SERA 2007) using peer-reviewed articles from the open scientific literature and current Environmental Protection Agency (EPA) documents. SERA considered worst-case scenarios including accidental exposures and application at maximum label rates. The risk assessments met the requirements of the Pesticide Use Handbook, FSH 2109.14 Chapter 20. The SERA Risk Assessments are available at http://www.fs.fed.us/foresthealth/pesticide/risk.shtml.

Need for Change

Aminopyralid is needed to more effectively treat broadleaf invasive plants and reduce risks to people and the environment. Aminopyralid is more effective than the herbicides currently in use for many invasive plants found on Umatilla National Forest, including hawkweeds, knapweeds and thistles. It would eliminate or reduce the use of more persistent or toxic herbicides. It poses low risk to people, fish and wildlife.

Aminopyralid was developed specifically for wildland use and is particularly effective on broadleaf invasive species. A common product containing aminopyralid, Milestone, does not contain any inert ingredients. It also does not contain hexachlorobenzene, a carcinogenic industrial byproduct of

manufacturing picloram and clopyralid (two of the chemicals that are currently approved for use on invasive plants in R6). Aminopyralid could replace the use of clopyralid, picloram, and glyphosate for many known invasive plant sites. The 2007 Aminopyralid Risk Assessment indicates a comparable or lower level of risk to people and the environment than the other herbicides currently listed in Standard 16 of the Pacific Northwest Region Invasive Plant Program Record of Decision.

Treatment effectiveness is influenced by the tools available for use; the more tools available, the greater the potential effectiveness of the treatment. On page 4-18, the R6 2005 FEIS noted that "the widest variety of herbicides and herbicide families available for use [would] have the greatest potential to result in effective treatments."

Increasing treatment effectiveness while minimizing risks associated with herbicide use would be useful to meet the R6 invasive plant program's objectives (R6 2005 ROD Attachment 1):

- Objective 1.4 - Use an integrated approach to treating areas infested with invasive plants. Utilize a combination of available tools including manual, cultural, mechanical, herbicides, biological control.
- Objective 3.1 - Avoid or minimize public exposure to herbicides, fertilizer, and smoke.
- Objective 3.2 - Reduce reliance on herbicide use over time in Region Six.
- Objective 4.1 - Maintain water quality while implementing invasive plant treatments.
- Objective 4.2 - Protect non-target plants and animals from negative effects of both invasive plants and applied herbicides. Where herbicide treatment of invasive plants is necessary within the riparian zone, select treatment methods and chemicals so that herbicide application is consistent with riparian management direction, contained in PacFish, InFish, and the Aquatic Conservation Strategies of the Northwest Forest Plan.
- Objective 4.3 - Protect threatened, endangered, and sensitive species habitat threatened by invasive plants. Design treatment projects to protect threatened, endangered, and sensitive species and maintain species viability.
- Objective 5.1 - Use an adaptive management approach to invasive plant management that emphasizes monitoring, learning, and adjusting management techniques. Evaluate treatment effectiveness and adjust future treatment actions based on the results of these evaluations.

Decision

I have decided to amend the 1990 Umatilla Forest Plan to add aminopyralid to the list of herbicides approved to treat invasive plants on the Umatilla NF (standard 16). This action is categorically excluded from documentation in an environmental impact statement (EIS) or an environmental assessment (EA). The applicable category of actions is identified in agency regulations 36 CFR 220.6(e)(16) as "Land management plans, plan amendments, and plan revisions developed in accordance with 36 CFR 219 et seq. that provide broad guidance and information for project and activity decision-making in a NFS unit."

Extraordinary Circumstances

I find that my decision does not have extraordinary adverse effects that would warrant further analysis and documentation in an EA or EIS. I do not believe that the use of aminopyralid in substitution of other herbicides would have extraordinary circumstances as defined by 36 CFR 220:

Federally listed threatened or endangered species or designated critical habitat, species proposed for federal listing or proposed critical habitat, or Forest Service sensitive species.

This amendment would have no effect on federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat, or on any Region Six Forest Service designated sensitive species. Aminopyralid does not pose any additional risks to these species than the herbicides already listed in the Forest Plan, and may benefit these species by more effectively treating invasive plants.

Flood plains, wetlands, or municipal watersheds.

This amendment would not pose new risks to flood plains, wetlands or municipal watersheds. Standards for the protection of these areas would remain in place.

Aminopyralid does not pose any additional risks to these types of areas. Aminopyralid may be used in a wider range of site conditions than some of the herbicides already approved in R6, thus, it may improve conditions within these areas more effectively.

Congressionally designated areas such as wilderness, wilderness study areas, or national recreation areas.

This amendment would not pose any risks to these designated areas. Use of aminopyralid in these areas would be designed to meet all management direction for special areas.

Research Natural Areas

This amendment would not pose any risks to Research Natural Areas. Use of aminopyralid in these areas would be designed to meet existing management direction.

Inventoried roadless areas or potential wilderness areas.

This amendment would not pose any risks to roadless areas or potential wilderness areas. Use of aminopyralid in these areas would be designed to meet existing management direction.

American Indians and Alaska Native religious or cultural sites

Ongoing consultation with American Indian tribes on invasive plant management is occurring to ensure protection of religious and cultural sites. This amendment would not have any effect on these sites.

Archaeological sites, or historic properties or areas

Consultation with the State Historic Properties Office would occur as needed before herbicide or other invasive plant methods are used on the ground. This amendment would not affect any archaeological sites or historic properties.

Rationale

I have decided to approve use of aminopyralid on the forest for invasive plant treatment because it will be more effective on invasive plants that have been particularly difficult to control. By label, it

may be used in a wide variety of site conditions, including next to streams, which can increase our ability to control invasive plants in these areas.

U.S. EPA (2005) has concluded that the use of aminopyralid as a replacement for other herbicides will decrease risk to some non-target species:

> *"Aminopyralid is a Reduced Risk herbicide that provides reliable control of a broad spectrum of difficult-to control noxious weeds and invasive plants on rangeland and pastures, rights-of-way, and wildlife habitat areas. Aminopyralid has a favorable human health toxicity profile when compared to the registered alternatives for these use sites and will be applied at a lower rate. Its residual action should alleviate the need for repeat applications, resulting in a reduction in the amount of herbicides applied to the environment for the control of these weeds. Aminopyralid has been determined to be practically non-toxic to non-target animals at the registered application rates, compared to the alternatives, and is less likely to impact both terrestrial and aquatic plants."*

Information about aminopyralid is summarized in Table 1, below. This information is based on the Aminopyralid Risk Assessment (SERA 2007). This table and the additional information below demonstrates that adding aminopyralid to the list of approved herbicides will not increase risk to workers and the public, non-target plants, wildlife, water, fish or any other natural resource.

Table 1. Aminopyralid Characteristics

	Aminopyralid Characteristics
Selectivity	Effective on broadleaf species. Grasses are tolerant.
Soil Activity	Soil Active, degraded by soil microbes, low toxicity to soil organisms
Half Life in Water	Degrades in water in 0.6 day in sunlight. Half-lives longer in water that is not exposed to sunlight.
Half Life in Soil	Range 5-89 days. Relatively rapid breakdown reduces potential for run-off or leaching.
Mobility	Weakly adsorbed to soil, but dissipation studies indicate it is non-persistent and relatively immobile in the field. Models indicate 0.01 % of that applied may reach stream after first significant rainfall
Human Health	Little to no risk to workers or public from proposed use. Drinking water not affected.
Bio-Concentration Potential	Does not bioaccumulate or bio-concentrate. Rapidly adsorbed and excreted and is not substantially metabolized in mammals.
Birds and Mammals	Low toxicity to birds and mammals
Fish and Invertebrates	Low toxicity to fish or aquatic invertebrates
Amphibians	Low toxicity to amphibians (data is limited).
Aquatic Plants and Algae	Aquatic plants and algae are not susceptible
Bees and Earthworms	Low toxicity to bees and earthworms

Forest Plan Amendment

I do not believe this amendment needs to be informed by a stand-alone assessment (§ 219.6 (c)) because it applies to such a narrow scope of impact and the need for change is well understood. The impacts of integrated invasive plant treatment have been analyzed on the Umatilla National Forest (USDA, 2007).

This amendment would not affect the sustainability and diversity requirements (§219.8 and 219.9) of the 2012 planning rule. To a small extent, availability of an additional herbicide would help the Forest Service maintain or restore the ecological integrity of terrestrial and aquatic ecosystems and watersheds in the plan area by increasing the effectiveness of invasive plant control while minimizing risk to some non-target plants (grasses). Including the option to use aminopyralid along with or, in lieu of, other herbicides would not pose additional risks to ecological integrity.

This amendment would not adversely affect the multiple use requirements of § 219.10. The R6 2005 FEIS considered how invasive plant management direction could influence relevant aesthetic values, air quality, cultural and heritage resources, ecosystem services, fish and wildlife species, forage, geologic features, grazing and rangelands, habitat and habitat connectivity, recreation settings and opportunities, riparian areas, scenery, soil, surface and subsurface water quality, timber, trails, vegetation, viewsheds, wilderness, and other relevant resources and uses. Use of an additional herbicide would not influence these findings, and could help reduce the potential for adverse effects on these values from invasive plants or invasive plant treatments.

This amendment would not influence timber harvest suitability (§ 219.11).

Although the risk assessments have limitations (see R6 2005 FEIS pages 3-95 through 3-97), they represent the best science available. The SERA Risk Assessment is available at http://www.fs.fed.us/foresthealth/pesticide/risk.shtml.

Public Involvement

This action was originally listed as a proposal on the Umatilla National Forest Schedule of Proposed Actions and updated periodically during the analysis. A 30-day public scoping period was established from July 7 to August 8, 2016. Comments from the scoping period were considered in the decision.

Findings Required By Other Laws and Regulations

Table 2. Compliance with Other Laws, Regulations, and Policies

Year Enacted	Title	Summary	How applied in this project
1897	Organic Act	This Law is the foundation for multiple use and Forest Service management of National Forest System Lands	Implementation of this project follows direction in this law for the Forest Service to manage National Forest System Lands.
1947	Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)	FIFRA provides for federal regulation of pesticide distribution, sale, and use. All pesticides distributed or sold in the United States must be registered (licensed) by EPA. Before EPA may register a pesticide under FIFRA, the applicant must show, among other things, that using the pesticide according to specifications "will not generally cause unreasonable adverse effects on the environment."	Aminopyralid was registered for use by the EPA in 2005 so may be distributed, sold and used.
1969	National Environmental Policy Act (NEPA)	Creates the environmental impact statement (EIS) and environmental assessment (EA) as instruments of environmental policy. Requires public participation. Council on Environmental Quality regulations allow federal agencies to exclude certain categories of actions from documentation in EA or EIS.	Scoping was conducted as required by NEPA. This project follows FSH 1909.15 Chapter 30 requirements for categorically excludable activities.
1973	Endangered Species Act (ESA)	Provides broad protection for species of fish, wildlife and plants that are listed as threatened or endangered in the U.S. or elsewhere. Provisions are made for listing species, as well as for recovery plans and the designation of critical habitat for listed species. The Act outlines procedures for federal agencies to follow when taking actions that may jeopardize listed species, and contains exceptions and exemptions.	The project is in compliance with the Endangered Species Act. Applicable procedures were followed with respect to threatened and/or endangered species. Consultation was made with the National Marine Fisheries Service and Fish and Wildlife Service during scoping and no comments were received..
1976	National Forest Management Act (NFMA)	Requires the Secretary of Agriculture to assess forest lands, develop a management program based on multiple-use, sustained-yield principles, and implement a resource management plan for each unit of the National Forest System. It is the primary statute governing the administration of national forests.	This project was developed in full compliance with NFMA via compliance with the Umatilla National Forest Land and Resource Management Plan 1990, as amended. The project follows appropriate standards and guidelines and management direction for the Management Allocations in the project area.

Administrative Review or Objection Opportunities

A draft of this Record of Decision was subject to objection procedures at 36 CFR 219 Subpart B. Objections, including attachments, were accepted within 45 days from the publication date of notice in the East Oregonian, the newspaper of record. The publication on March 9, 2017 in the newspaper of record was the exclusive means for calculating the time to file an objection.

Individuals or organizations who submitted comments during the scoping and comment periods specified at 36 CFR 219 Subpart B were eligible for filing an objection to this project. There were no notices of objection received before the closing of the objection period on April 25, 2017. See the public involvement section of this decision document for details.

Implementation Date

This decision shall be implemented after it is signed.

Contact Information

For additional information concerning this decision, contact: Paula Brooks, Forest Botanist, Umatilla National Forest, 72510 Coyote Road, Pendleton, Oregon 97807; 541-278-3931.

5-11-17

Genevieve R. Masters
Forest Supervisor

Date