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U.S. Department of the Interior
Bureau of Land Management

Final

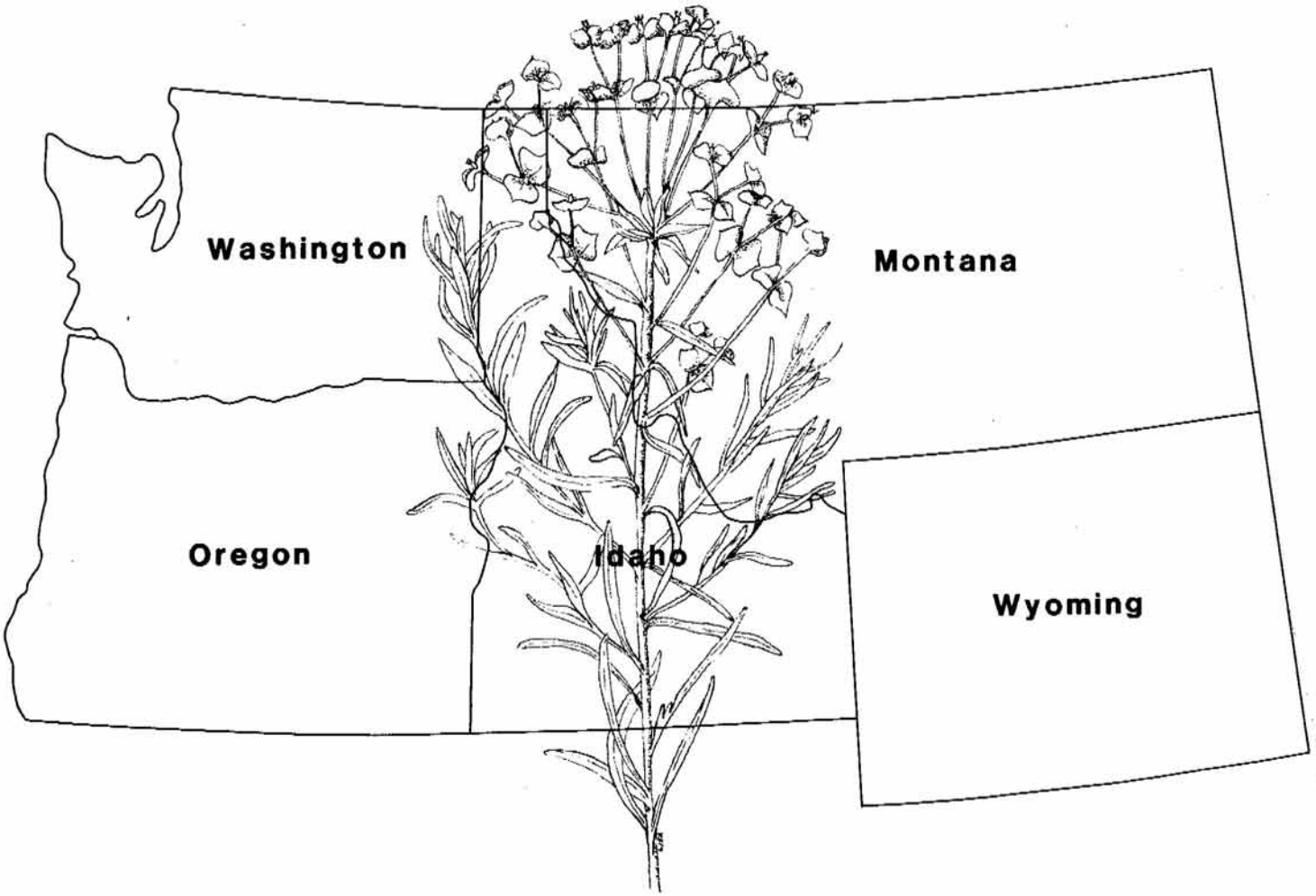
Oregon State Office

December 1985

Northwest Area Noxious Weed Control Program

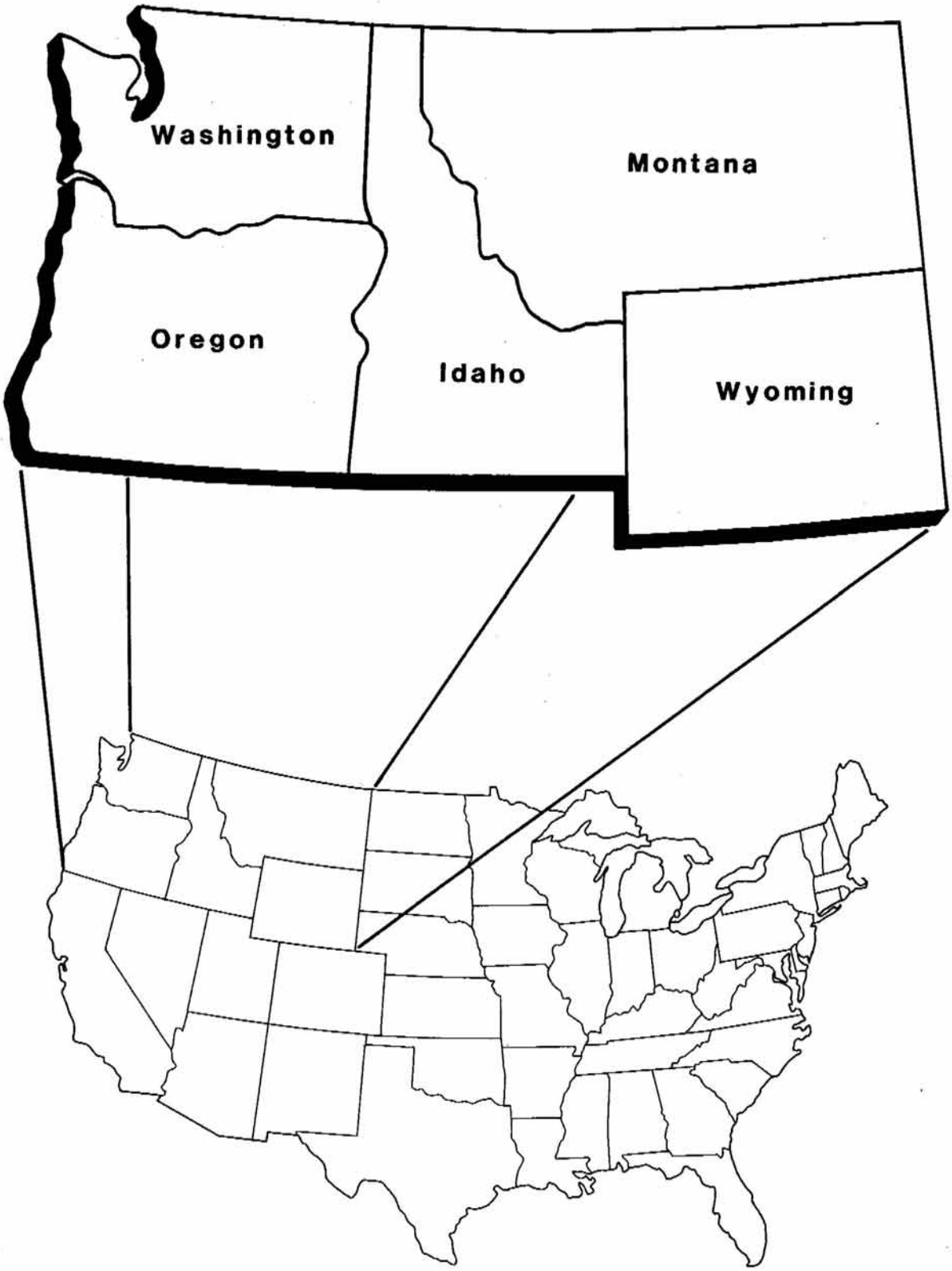
Final

Environmental Impact Statement



Noxious Weed Control Program

General Location Map



IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

OREGON STATE OFFICE
P.O. Box 2965 (825 NE Multnomah Street)
Portland, Oregon 97208

This is the Final Environmental Impact Statement (EIS) for noxious weed control in five northwestern states (Idaho, Montana, Oregon, Washington and Wyoming.) The statement analyzes the impacts that would result from the Proposed Action and three alternatives. The purpose of the statement is to disclose the probable environmental impacts and to assure that these impacts are considered along with economic, technical, and other factors in the decisionmaking process. In using this analysis, readers should keep in mind that the EIS (draft or final) is not a decision document.

The analysis provided here has been refined and updated as a result of public comment, peer review, and internal review of the Draft EIS. Seventy-two letters were received during the Draft EIS comment period. All are printed in the Final EIS, along with our responses.

Comments received on this Final EIS as well as those received after the close of the comment period on the Draft EIS will be considered in the decision process. Decisions will be prepared and issued after February 15, 1986.

Thank you for your past and future assistance in our efforts to manage public lands in the best interests of all concerned.

Sincerely,

William G. Leavell
State Director, Oregon and
Washington

Final

Northwest Area Noxious Weed Control Program

Environmental Impact Statement

Prepared by

U.S. Department of the Interior
Bureau of Land Management
December 1985

State Director, Oregon State Office

Proposed Northwest Area Noxious Weed Control Program

Draft ( ) Final (x) Environmental Impact Statement

U.S. Department of the Interior, Bureau of Land Management

1. **Type of Action:** Administrative (x) Legislative ( )

2. **Abstract:** This EIS describes and analyzes the environmental impacts of implementing the proposed five-state program for the control of noxious weeds. A worst-case analysis of the impacts of herbicide use on human health is included.

The most effective and efficient suppression methods are proposed for use to adequately control noxious weeds. These weeds are reducing public rangeland productivity, spreading to nearby noninfested lands, and increasing the economic burden on private landowners and state and federal taxpayers. The alternatives analyzed include 1) the Proposed Action, 2) No Aerial Herbicide Application, 3) No Herbicide Use, and 4) No Action. Alternative 1 is the preferred alternative. Significant environmental impacts of the preferred alternative include increased productivity of public land and the elimination of BLM land as a noxious weed seed source for the further infestation of nearby nonpublic land. Important environmental and resource values would be protected from adverse effects.

3. The draft statement was filed with the Environmental Protection Agency (EPA) and made available to the public on May 30, 1985.

4. **For further information contact:**
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Summary

This environmental impact statement (EIS) describes and analyzes the environmental impacts of implementing a program for controlling noxious weeds on public lands administered by the Bureau of Land Management (BLM) in the states of Idaho, Montana, Oregon, Washington, and Wyoming. In accordance with the National Environmental Policy Act, this EIS identifies impacts on the natural and human environment of four alternatives. Alternative 1, the Proposed Action, is the preferred alternative.

Alternatives

The proposed program for controlling noxious weeds would involve coordination with the states, counties, and private landowners to ensure that safety factors are adequate. Chemical, manual, mechanical, and biological methods of control are considered for use under two alternatives. The analysis makes assumptions that may oversimplify what would actually happen. For example, the analysis assumes the use of a maximum expected application rate for each herbicide, whereas the actual rate would be much lower and would depend on weed species, time of year, application method, number of applications, and formulation of herbicide. Treatment levels for the Proposed Action attempt to conform to individual state program goals for noxious weed control on BLM-administered lands. Treatment levels under Alternatives 2 and 3 would be somewhat less, and Alternative 4 would provide no attempt to control noxious weeds.

Alternative 1--Proposed Action. All approved methods of noxious weed control could be used in an integrated program. Average annual treatments throughout the EIS area would typically involve 21,200 acres of herbicide treatment, 300 acres of manual treatment, 800 acres of mechanical treatment, and 21,695 acres of biological treatment. All safety requirements and project design features would be followed in accordance with BLM policy and EPA registration restrictions.

Alternative 2--No Aerial Application of Herbicides. This alternative would be similar to the Proposed Action except no aerial application of herbicides would be allowed. Average annual treatments would typically involve 17,953 acres of chemical treatment, 300 acres of manual treatment, 900 acres of mechanical treatment, and 21,840 acres of biological treatment.

Alternative 3--No Use of Herbicides. Alternative 3 would not allow the use of herbicides, but all other treatments would be used. Average annual treatments would typically include 4,080 acres of manual treatment, 2,200 acres of mechanical treatment, and 21,950 acres of biological treatment.

Alternative 4--No Action. Under Alternative 4, no attempt would be made to control noxious weeds. Any control would only be a natural function of the environment with no planned intervention by land management actions.

Environmental Consequences

Air Quality. The major impacts on air quality would be slight increases in particulates and possibly visible smoke intrusions from weed burning. Particulate levels from burning under all alternatives, would not exceed the federal and state air quality standards for particulate concentrations. Some areas could be affected by relatively brief visible smoke intrusions under all alternatives except alternative 4. The likelihood of such an occurrence, however, would be extremely low because so few acres are proposed for burning.

Soils. Under Alternatives 1, 2, and 3, burning would result in a short-term loss of soil organic matter, microorganisms, and nutrients by leaching. Both burning and tilling would result in short-term, slight increases in erosion. The persistence of herbicides in soils under Alternatives 1 and 2 would be greater in the more arid portions of the EIS area.

Water Resources. The potential for herbicides to affect the quality of surface water is greatest under Alternative 1 with decreased amounts under Alternative 2. Alternatives 3 and 4 would not add herbicides to detectable background levels occurring in some streams from other sources. With the mitigation provided by design features such as buffer strips, suspended sediment and total dissolved solids are not expected to significantly increase. Ground water would not be affected under any alternative.

Vegetation. Alternative 1 would improve the ecological condition of rangelands and reduce the spread of noxious weeds to noninfested lands. Alternative 2 would have impacts similar to those of Alternative 1 except in areas accessible only to aerial herbicide treatment. In these areas, weeds would continue to spread. Alternative 4 would allow noxious weeds to spread unchecked. The spread of noxious weeds in turn would result in (1) a decline in rangeland ecological condition and (2) the infestation of adjacent lands, contributing to a decline in productivity. Alternative 3 would result in

impacts similar to those of Alternative 4 where manual, mechanical, and biological methods do not control noxious weeds.

Animals. Alternatives 1 and 2 would benefit livestock and wild horses by increasing the amount of available forage and reducing the number of toxic plants in treatment areas. Alternative 4 would harm livestock and wild horses by allowing available forage to decrease and toxic plants to increase.

Alternatives 1 and 2 would have slightly adverse short-term impacts on wildlife that use proposed treatment areas by resulting in the loss of target and nontarget vegetation used for food and cover. However, higher quality habitat would occur after treatment. In the long term, however, these alternatives would benefit wildlife, especially big game, by increasing available forage. Alternative 4 would harm wildlife, particularly big game, by allowing the amount of available forage to decrease and would reduce wildlife diversity. Alternative 3 would affect wildlife much as would Alternative 4 where nonchemical control measures did not adequately control noxious weeds. Game fish populations would not be adversely affected by any alternative.

Cultural Resources. Appropriate measures would be taken to identify and protect cultural sites before ground-disturbing activities under Alternatives 1, 2, and 3. Undiscovered cultural sites would be susceptible to damage, but once a site is found, measures would be taken to reduce or avoid damage. Under all alternatives, sites found before disturbance would be managed to protect significant scientific and interpretive values.

Visual Resources and Recreation. Scenic degradation would be low to nonexistent under all alternatives. Alternatives 1 and 2 would benefit recreation areas infested with noxious weeds by decreasing visitor exposure to the detrimental effects of weeds. Alternative 4 would cause a decline in recreation use by allowing noxious weeds to spread as would Alternative 3 where nonchemical treatment would fail to produce the desired results.

Wilderness and Special Areas. The suppression of exotic noxious weeds in wilderness areas and wilderness study areas under Alternatives 1 and 2 would control exotic weeds that compete with native plants. These benefits would be similar under Alternative 3 only if nonchemical treatment sufficiently controls weeds. Alternative 4 would allow nonnative noxious weeds to spread unchecked, adversely affecting native plants.

Economic Conditions. Economic activity related to activities on BLM land (employment and personal income) would increase slightly under Alternatives 1 and 2 and would remain the same or slightly change under Alternative 3. Economic activity would decrease under Alternative 4. Alternatives 3 and 4 would cause economic losses by allowing noxious weeds to spread to nearby nonpublic land. Potential economic losses from the spread of noxious weeds would be less under Alternative 2 than under Alternatives 3 and 4.

Social Conditions. Some unsettling social effects would occur under all alternatives. Alternatives 2, 3, and 4, which emphasize particular uses or restrictions, are likely to generate polarized reactions. Alternative 1 incorporates a variety of weed control practices in an attempt to respond to a range of public attitudes and concerns.

Human Health. Herbicides proposed for use under Alternatives 1 and 2 would present no significant risk of toxicity to workers or the public since they would be used in compliance with labels approved by the Environmental Protection Agency and the state where the herbicide is being applied. Exposure to herbicides would be much greater for workers than for the public. The greatest exposure would occur under Alternative 2. The probability of contracting cancer from herbicide exposure under Alternatives 1 and 2 is low to the worker and expremely low to the public, and the health risk is small relative to other hazardous events.

Increasing hazards from manual treatment would occur under Alternatives 2 and 3 respectively. Alternatives 3 and 4 would increase the health hazard to humans because of the decreased control of weeds that are potential teratogens or cause allergic reactions or serious health defects when ingested. Physical harm can be caused to humans due to the characteristics of some weed species, such as yellow starthistle.