

UNION COUNTY WEED MANAGEMENT PLAN

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Prepared by Union County Weed Board – May 2007

Approved by Union County Commissioners – _____ 2007

UNION COUNTY WEED MANAGEMENT PLAN

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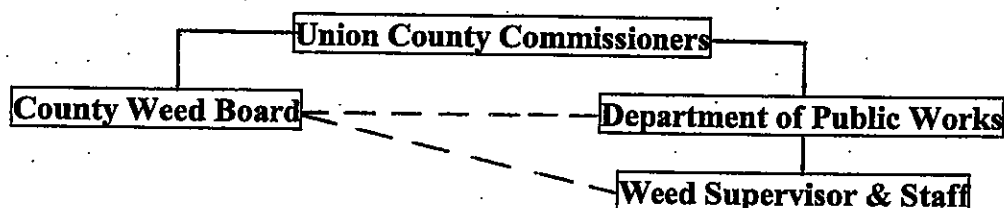
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UNION COUNTY WEED MANAGEMENT PLAN

Introduction

Union County is a rich and diverse landscape that is affected by innumerable variables. Effectively managing threats from invasive weeds requires coordinated strategies on a local and regional scale. In 1946 the County formed a Weed Control District. The County operates within the context of Oregon State Law, Oregon Revised Statutes 570.505 – 570.600, Oregon’s Comprehensive Guide for the Protection of Oregon’s Resources (2001), Union County Ordinances 1986-2 and 1989-4, and is now adopting this integrated Weed Management Plan to extend the tools it has to deal effectively with invasive species.



The Union County Commissioners are the elected officials ultimately responsible to the community for the management of noxious weeds in the Weed Control District. They approve all noxious weed policy and budget decisions. Their decisions are based on recommendations provided by the Union County Department of Public Works, the Union County Weed Board, and the citizens of Union County.

The Union County Weed Board is an advisory committee appointed by the Union County Commissioners to help set noxious weed program priorities. The board is a cross-section of local citizens representing the six weed management zones, and is an active participant in noxious weed management. The Weed Board works to increase public awareness of the spread of noxious weeds, and its members provide outreach between the zones they represent and the Commissioners and Weed Supervisor.

The Union County Public Works Department administers the County’s roadside vegetation and weed management programs with advice and assistance from the Weed Board.

The Weed Supervisor reports to the Public Works Director, and has a positive working relationship with the Union County Weed Board. Weed funds are managed by the Weed Supervisor. The Weed Supervisor is involved in the planning, organizing, directing and evaluation of programs that control weeds throughout Union County, and assists the Public Works Director with other duties when needed. Specific responsibilities include:

- 1) Survey weed populations, treat noxious weeds using integrated methods, including spot-spraying to eliminate small weed populations, monitoring treatment results, coordination of weed control projects, oversee cost-share projects, and general management of the district weed control program.

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- 2) Coordinate field activities with landowners, agencies, weed management areas, and other departments and cooperators.
- 3) Facilitate noxious weed law enforcement process.
- 4) Seek opportunities at public events and schools to present the County Weed Identity Display and Weed Educational Program.
- 5) Help organize and actively participate in monthly Weed Board meetings to discuss current status of projects and prioritize future work.

This Weed Management Plan is a supplement to the Union County Integrated Roadside Vegetation Management Policy, April 2007.

Purpose of Weed Management Plan

The Plan provides a written strategy to inform and guide weed management activities beyond roadsides for the entire Union County Weed Control District. This plan provides a framework for coordinating county-wide noxious weed management within a regional context. Land managers with federal, state, and county agencies, private landowners, and community groups may use it as a guide for prioritization of projects through risk assessments of real or potential threats by a specific weed, or to a specific site. This document is not intended to be static, but rather to be added to and modified as needed to fit new priorities and new weeds. Prioritization of work will be based on annual Weed Control District goals, objectives, and priorities established in the following pages.

The integrated approach to weed management laid out in this document will aid in the prudent use of available resources, and increase economic and ecological benefit to the land. The Weed Management Plan will serve as an educational tool for those wishing to understand local weed control efforts, and will provide accountability of weed control actions in the District to citizens and elected officials. This plan will also heighten awareness among citizens, governments, and community groups as to the impacts and management of invasive weeds and the importance of current work. The Weed Management Plan will provide a foundation from which to build and maintain strong, effective weed control programs into the future.

Mission Statement of Union County Weed Board

To serve as representatives of Union County in a manner which assists landowners, land managers, and land users of Union County to be responsible stewards of the land and resources by protecting and conserving our agricultural lands, recreational areas, and natural resources from the degrading impact of exotic, invasive noxious weeds.

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To work cooperatively with landowners, land managers, and land users to establish and maintain an integrated vegetation management approach toward the control of noxious weeds within Union County, and in doing so help 1) prevent the import of new invasive plants, 2) eliminate small infestations of noxious weeds where possible, and 3) contain and manage existing weed populations.

The Need for Weed Management

Invasion of natural landscapes by exotic invasive plant species is one of the most significant ecological and economic threats facing North America. Weed invasions threaten the integrity of ecosystems by reducing biodiversity, altering native plant communities, reducing domestic crop values, increasing soil erosion, degrading wildlife habitat, and reducing carrying capacity for domestic and wild ungulates. These detrimental impacts reduce the economic value of agricultural lands, rangelands, forestlands, and wetlands, and invasive weeds are one of the more serious resource and economic issues facing Union County.

Descriptors of a weed for management purposes may include exotic, non-native, and invasive, but from a legal standpoint, "noxious weed" means any weed designated by the Union County Board of Commissioners that is injurious to public health, agriculture, range, recreation, wildlife, or any public or private property, and any weed that impacts and displaces desirable vegetation, such as threatened and endangered plant species, wildlife habitat, and livestock forage.

The number of noxious weed species in Union County is growing, as is the acreage with some level of weed infestation. Care must be taken to minimize disturbance of already infested areas. The spread of weeds increases as human activity and development increases. Weeds are spread by vehicles, humans, domestic animals, wildlife, wind and water. They prefer disturbed sites such as roadways, construction sites, overgrazed areas, trailheads, and areas affected by fire. However, they can also invade relatively undisturbed communities. Recreational activities, including the use of off-road vehicles, can increase weed seed dispersal if user groups are not effectively educated in weed control strategies. Some agricultural and livestock grazing practices must also be refined to reverse negative impacts that encourage weed invasion. Without an increase in coordinated and integrated treatment, noxious weeds will continue to spread across the region and degrade the productive lands that are Union County's heritage.

Noxious weeds impact transportation and recreation, affect human and animal health, and cause widespread economic loss. Annual economic losses from 21 of the 99 noxious weeds listed by Oregon, estimated in 2000, were \$83 million or about 3,329 jobs per year. In addition, Oregon forgoes an additional \$52 million annually in lost opportunity to the impacts of the same 21 weeds (1).

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The spread of noxious weeds can signal the decline of entire plant communities as the weeds compete with native vegetation for resources, and weeds can replace native plant communities in many areas. Historic control efforts have only been partially successful, and have contained the spread of only a few noxious weeds. A new focus on coordinated treatment, new herbicide technologies, the expanded use of biological control agents, and the strengthening of partnerships between counties and public and private landowners gives current weed management efforts a better chance of success.

Integrated weed management is a comprehensive strategy for managing noxious weed invasions. This approach combines prevention, chemical, mechanical, cultural, and biological control methods in a strategic fashion to minimize economic inputs and maximize weed control. Prevention is a critical element of integrated weed management by reducing the conditions that favor invasive plant introduction and establishment.

Prevention strategies include:

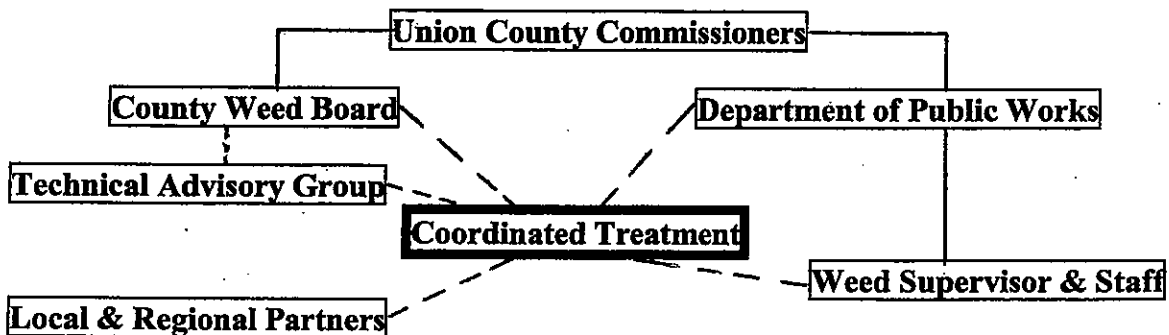
- a) educating the public to the threat and identification of noxious weeds,
- b) managing for healthy, weed-resistant plant communities,
- c) diligently surveying to provide early detection and treatment of new invasions.

Herbicides are most effective in the initial stages of infestation when eradication and/or containment are possible. As research and experience continue to document success of biological controls and prescription livestock grazing, managers increasingly rely on these tools to treat landscape-scale infestations. Biological control and carefully managed grazing hold potential for weed control in situations where traditional methods are restricted by environmental or economic constraints.

The challenge for Union County is to define desired plant communities, tolerable thresholds of non-native plants, and to choose target non-native invaders for eradication and/or containment on a site-specific basis using strategic planning, public education, collaboration with local partners, and integrated weed management methods.

Union County Weed Control District

The following chart illustrates the general functioning of the Weed Control District.



Union County Weed Control District – Working Relationships

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The Weed Control District supports the responsible use of natural resources by the local community. Stock growers, loggers, farmers, and other resource managers are invaluable allies in finding and controlling noxious weeds, and in creating healthy plant communities that are more resistant to noxious weeds. However, it is also recognized that any disturbance from resource use can provide a niche and a vector for noxious weeds. Therefore, all land owners and managers in the district are encouraged to consider the risk created by disturbance and the potential for noxious weed invasion and manage accordingly. Careful use and management of natural resources generates community benefit that can sustain multigenerational knowledge and stability among natural resource managers and landowners. This type of knowledge and stability is critical to long-term understanding of weed control and proper resource use, and therefore community and landscape health.

The Union County Weed Board provides professional and technical recommendations to the Union County Board of Commissioners, and works cooperatively with the Weed Supervisor and the Public Works Director. The Public Works Department is the primary entity responsible for implementing integrated weed management in the Weed Control District in accordance with County weed policies, and the enforcement of County regulations dealing with noxious weeds. Other partners include local, state, and federal land management agencies, Tri-County Cooperative Weed Management Area (CWMA), Lower Grande Ronde CWMA, Baker and Wallowa County Weed Control Districts, local timber and agriculture producers, and interested citizens.

The Union County Weed Management Plan prioritizes noxious weed species for treatment using a risk assessment based on the competitive nature of specific weeds, and their occurrence in Management Zones delineated within the County. The Management Zones include North County (Palmer Junction - Elgin areas), Valley Floor (Summerville to Union), Western Foothills (Mt. Emily - Glass Hill), Eastern Foothills (Mt. Harris - Catherine Creek), South County (North Powder - Medical Springs areas), and federal, state, and private forest and range lands. This prioritization process provides a baseline for decision making by land managers in the Weed Control District. Appendices to the Plan provide detailed information regarding current weed infestations and control efforts, and a map of the Weed Control District is found in Appendix A.

Noxious weeds currently rated as top priority include knapweeds (spotted, diffuse, and Russian), yellow starthistle, leafy spurge, meadow hawkweed, dalmatian toadflax, sulfur cinquefoil, and whitetop (Hoary cress). Rush skeletonweed, leafy spurge, common bugloss, and Dyer's woad have established a competitive presence in adjacent counties, and present a threat to Union County. Yellow starthistle continues to spread south from the Cove area, and whitetop is spreading north from Baker County. Knapweeds, continue to be a serious problem in northern parts of the County, and leafy spurge is spreading along the Grande Ronde River and adjacent agricultural lands.

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The Union County Weed Board goals are to assist the Commissioners in setting noxious weed program priorities, assist in increasing the public awareness and education on noxious weed issues, and to work closely with the Weed Supervisor on weed management programs.

The Weed Board is comprised of a minimum of 7 and a maximum of 12 volunteers appointed by the Board of Commissioners. Diversity among members is encouraged with the common factor being the commitment to control the spread of invasive noxious weeds. Each member serves a three year term, and may be re-appointed for additional terms. Members do not receive monetary compensation; however, the commission may at times reimburse weed board members for travel expenses under certain circumstances.

Officers of the Board consist of Chair, Vice-Chair, and Secretary. Election of officers will be conducted at the February meeting and officers will serve two year terms.

Responsibilities of Officers include:

Chair: Contact members prior to meetings and define agenda items; delegate responsibility among weed board members and organize work groups and committees; work with the Weed Supervisor to help implement the strategic plan and action items; act as liaison to the Board of Commissioners; administer meetings.

Vice-Chair: Assist Chair with duties and responsibilities and assume the position of Chair if needed.

Secretary: Record proceedings at Board meetings and provide those minutes to the Chair and Vice-Chair for review. Upon approval by the Chair, forward the minutes to the Weed Supervisor for enclosure with the next month's meeting notice mailing to Board members and Technical Advisory Group members. Provide other written information to Board members, Advisory Group, local partners, Commissioners, the general public and the media as directed by the Chair.

The Weed Board holds regular monthly meetings at a location and time determined by the Board. Meeting notices will be sent to all members and partners at least 7 days prior to the meeting date, and meeting minutes will also be sent out to all members, the Advisory Group, and other interested partners.

The Chair calls the meeting to order, followed by introduction of guests and new members. Board members will in turn introduce themselves to guests and new members. Agenda items are discussed in order. The Weed Board intends to make decisions through the consensus process, however when circumstances prevent consensus, a decision will be made by a majority vote of board members. This decision will serve as a recommendation to the Board of Commissioners.

Commissioners, Public Works Department staff, other Agencies, and members of the public are encouraged to attend Weed Board meetings. The Board may also meet formally with the County Commissioners at their request. The Weed Board will conduct at least one evening meeting annually to review and report activities to the public.

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Strategic planning by the Union County Weed Board, their Advisors, and the Weed Supervisor is ongoing and includes yearly updates of the noxious weed list and priority status. Action Items related to site specific projects are developed and implemented. Responsibility for each item is designated to sub-committees or individuals. Monitoring results and reporting on a regular basis by the Weed Supervisor provides additional strategies, helps prioritize funding, and assists in developing funding requests.

Union County Weed Policy and Classification

It is acknowledged that certain noxious weeds have become so thoroughly established and are spreading so rapidly on county, state, and federally owned lands, as well as on private land, that they may have been declared by Oregon Revised Statute 570.505 to be a menace to public welfare. Steps leading to eradication where possible are necessary. It is further recognized that the responsibility for such eradication and/or intensive control rests not only on the private landowner and operator, but also the county, state and federal government.

Therefore, it shall be the policy of Union County to:

- a) Increase awareness of potential economic loss due to existing and new invading weeds through continuous education of the public.*
- b) Rate and classify weeds at the County level. Organize strategic planning by species and County management zones.*
- c) Prevent the establishment and spread of noxious weeds in partnership with Oregon Department of Agriculture and the Tri-County CWMA.*
- d) Encourage and implement control of infestations of designated weed species and, where possible, their eradication. When budgets allow, offer cost share assistance to landowners for "A" rated weeds, or other weeds designated for cost share assistance by the County Commissioners.*
- e) Cooperate with other states, federal agencies, adjoining counties, the Tri-County CWMA, private citizens, and other groups and individuals in controlling noxious weeds in Union County.*

The Weed Board prioritizes noxious weeds using four weed management criteria:

1. Invasive ability and threat level,
2. Confirmation of presence and estimated area affected,
3. Potential to eradicate and/or contain population,
4. Effectiveness of biological control.

The purpose of the rating system is to provide an official guideline for implementing noxious weed control programs in Union County, and assist the County in the distribution

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of available funds as specified in ORS 570.580 to 670.600 (cost share assistance grant and matching fund grants).

Noxious Weeds shall be designated "A", "B", "Watch", or "Residential Watch".

****"A" designated weed is a priority noxious weed** designated by the Union County Commissioners as a **target weed species** on which the Weed Control District will comply with a state wide management plan and/or implement a county wide plan for intensive control and monitoring. An "A" rated weed may also be a weed of known economic importance which occurs in small enough infestations to make containment/eradication possible; or one that is not known to occur here, but its presence in neighboring counties make future occurrence here seem imminent.

*Recommended Action: Infestations are subject to **intensive control** when and where found. Education through a county website.*

****"B" designated weed is a weed of economic importance**, which is both locally abundant and abundant in neighboring counties.

*Recommended Action: **Moderate control and/or monitoring** at the county level. Education through a county website.*

****"Watch List" designated weeds** are weeds that have been known to occur in Union County, but thought to be eradicated or have been reduced to small easily manageable population due to aggressive control or biological agents.

*Recommended Action: **Monitoring** at the county level and education through a county website.*

****"Residential Watch List" designated weeds** are aggressive ornamental weeds that have been identified in a residential setting, or are known noxious weeds that may be available through commercial horticulture sources.

*Recommended Action: **Monitoring** at the county level and education through a county website.*

The Union County Noxious Weed List with designations is found in Appendix B.

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Noxious Weed Enforcement Policy and Procedures

In accord with ORS 570.500-600, the Union County Weed Board will annually submit a proposed list of A, B, and Watch designated weeds, and the recommendations for control and enforcement to the Board of Commissioners list by the first of April each year.

The Union County Commissioners will review, revise and publish a public/user friendly final list and enforcement policy for two consecutive weeks (in accord with ORS) in local newspapers.

The Union County Weed Supervisor (Weed Inspector as appointed in accord with ORS 570.520) will be designated as the primary enforcement officer for management of noxious weeds in Union County. The Weed Supervisor will locate, map, and record infestations of noxious weeds on public and private lands within the county. An infestation is defined as the presence of one or more plants listed as a noxious weed in the current Union County Weed List. The Weed Supervisor is directed to implement noxious weed enforcement actions in the progressive manner described below (steps 1-4). However, it is noted that before moving to enforcement actions, the inspector should use all available means (such as education, facilitation, and reasonable cost share) to resolve noxious weed issues. It is also noted that a violation of noxious weed law may be deemed urgent and that the inspector, at his/her discretion, is required to use only steps 3 and 4 below.

1) Verbal Notification or Informal Letter (Optional): The inspector shall send a letter of friendly tone notifying the property owner of a noxious weed infestation on their property (with photo of their property, if possible), informing them of their obligation to control the infestation (copy of ORS 570.500-600 and the County Weed List), offering technical assistance and requesting that the property owner report to the Weed Inspector their intentions for controlling the infestation. The Weed Inspector should sign the letter.

2) Hand Delivered Or Certified Letter (Optional): A hand delivered or certified letter will be given/sent to property owners who fail to respond to the Notification Letter. The letter reminds the property owner of the previous notification letter (a copy of which is enclosed), cites appropriate sections of ORS 570.500 -600, and repeats the offer of technical assistance. The letter also directs them to report, within 10 days, to the Weed Inspector their plans for controlling the infestation. Sent by Weed Inspector and carbon copied to District Attorney.

3) Posting/Enforcement Letter (Hand Delivered or Certified Letter): The property may be posted and/or a hand delivered or certified letter sent by the Weed Inspector and carbon copied to the District Attorney directing the property owner to initiate specific control efforts within 2-20 days (or by a specific date the following spring), and that failing to do so will result in criminal citation and financial liability for control efforts implemented by the County or its agents.

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4) Citation: If there is no response to the Enforcement letter, or if there is non-compliance with the expected control plan within the allotted time, the landowner will be cited by the appropriate law enforcement agency and referred to the District Attorney for prosecution. The Weed Inspector will be directed to undertake control efforts on the property with the property owner to be held liable for costs; either within the criminal prosecution, or a lien on the property will be established.

Weed District Funding

Historically, the noxious weed program has been funded through fees for services, the county general fund, road department, and grants. Road Department dollars are distributed to meet safety, maintenance and environmental needs. The road department receives 33% of its revenues from Highway User Fees, 57% from Federal Forest Receipts, and 10% from miscellaneous revenues. The loss of timber receipts from National Forest lands and the associated budget reductions have constrained weed management activities.

Local and regional partners with vested interests in this Weed Management Plan have financial resources and/or skills and equipment to perform certain tasks. Partners collaborate on noxious weed control and coordinate application to accomplish weed district goals. Local volunteers and partners will be instrumental in educational events, work days, prevention strategies and other aspects of weed management.

Integrated Weed Control Methods

Effective weed management depends on an understanding of plant biology and ecological community dynamics. The pervasiveness and complexity of noxious weeds makes it necessary to use all management tools available in an integrated weed management strategy. An integrated management strategy includes:

- a. Education, inventory, and impact assessment
- b. Prioritizing sites by potential for invasion from and by a weed species, and choosing an appropriate and cost effective management strategy.
- c. Adopting proper land management practices.
- d. Evaluating the management strategy through monitoring, and adjusting techniques to optimize the control program.

Surveying and mapping weed populations allows data to be used for estimating and mapping weed populations and density, followed by weed classification and a prioritization process to schedule control activities. Integrated weed management methods include:

Prevention and Education

Prevention and education are the "frontline" of any long-term strategy for managing healthy weed-resistant plant communities, and limiting the spread of noxious weed seed

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and plant parts by humans, domestic animals, and wildlife. Identification of weeds and assessing invasive characteristics is critical to early detection and prevention strategies. Increasing awareness by the general public through educational information will add community support, increase weed identification and detection, and foster cooperation and partnerships. Implementing weed control laws and educating the public on weed control strategies will increase awareness of individuals to clean infested equipment, and manage their activities to minimize negative impacts to the environment.

Mechanical Control

Physical and mechanical control methods can be effective on small infestations. Methods include hand pulling/grubbing individual plants, tillage to uproot weeds, mowing actively growing plants, mulching to exclude light to target plants, flooding to create anaerobic conditions, and fire to remove biomass and create seed bed for revegetation efforts. Some perennial weeds with adventitious rooting and rhizomes, such as leafy spurge, may be spread through tillage, but repeated tillage regularly throughout the growing season may offer effective control.

Cultural Control

Cultural controls are aimed at enhancing desirable vegetation to minimize weed invasion. Agricultural practices including the use of cover crops, competitive crop species, no-till cultivating, revegetating with desired species to fill empty niches, and developing weed resistant pastures and agricultural fields. Fertilization can also be useful in increasing competitiveness of desired species.

Biological Weed Management

Biological control is using living organisms to affect the biology of a target species. Insects, nematodes, and microorganisms like fungi and bacteria are among organisms introduced to weed populations through programs coordinated by the Oregon Department of Agriculture. Insect herbivory has played an important role in plant evolution and community dynamics. The release of host-specific seed-head flies and root boring insects shows promise in reducing weed populations and containing their spread. The annually revised Pacific Northwest Weed Control Handbook includes a list of the current status of biological weed control agents in Oregon, Washington, and Idaho (3).

Grazing by herbivores can also be directed to negatively impact weed populations while enhancing the competitive nature of desired plant communities. By matching animal preference for individual weed species, a grazing prescription can be developed. Prescription grazing for weeds must be applied when weeds are most palatable to the herbivore and susceptible to damage by grazing. Furthermore, grazing should be implemented when the associated plant community expresses the most grazing tolerance or lowest relative palatability, and timed to not negatively impact bio-agents if present. Prescription grazing should be approached primarily from the standpoint of weed management, with livestock production as a secondary benefit.

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Chemical Control

Use of herbicide applications to target plants is most effective during initial establishment of weed populations when eradication may be possible. However, chemical control will remain an integral part of weed containment and landscape scale infestation management. Timing and rate of application is critical, and knowledge of plant physiology, phenology, and morphology are essential for effective chemical control. Use of selective herbicides can remove broad leaf weeds and shift the competitive balance towards grasses. Broad spectrum herbicides may affect all plants, thereby requiring additional care in application and revegetation of open niches with desired species may be necessary. Herbicides with residual soil activity are effective in range and forestland settings when follow-up treatment may be restricted by remoteness. The annually revised Pacific Northwest Weed Control Handbook provides herbicide treatment recommendations (3). This handbook is designed as a reference for weed control practices used in cropping systems, and sites in Oregon, Washington, and Idaho. Herbicide use is subject to federal and state law, and label information provides legal guidelines and application restrictions.

Re-vegetation

Re-vegetation is the seeding or planting of degraded or treated sites to fill empty niches created by removal of a weed species. Methods include seed bed preparation by chemical, cultural, or mechanical control of the weed population, and seeding of desired species by hand or with equipment, including range drills. Incorporating livestock trampling shows promise to enhance seed-bed preparation and seed-soil contact. Knowledge of weed seed dormancy cycles and soil characteristics are important to the application methods.

In conclusion, the Union County Weed Control District realizes that prevention and education, combined with early detection and eradication, are the most powerful tools for long-term management of invasive, noxious weeds. Early detection can lead to eradication, which is hugely more cost effective than managing containment areas and landscape level infestations. This strategic plan is one more tool available in Union County's integrated approach to protecting natural resources, and preserving them for future generations.

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Participants

Thank you to the many people who have dedicated their time and expertise in keeping Union County as weed free as it is. Without their work, the knowledge and expertise they have shared, and the learning that they generated, this plan would not be possible. The following agencies, organizations and individuals were participants in developing this plan:

Union County Commissioners

Union County Department of Public Works

Union County Weed Control District -- Union County Weed Board

Tri-County Cooperative Weed Management Area Board

Oregon Department of Agriculture

Oregon Department of Fish and Wildlife

LaGrande Ranger District, USDA Forest Service

Wallowa County Weed Control District

Baker County Weed Control District

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3. Pacific Northwest Weed Control Handbook. 2004. Oregon State University, Oregon State Department of Agriculture, Washington State University, and University of Idaho. Agricultural Communications, Oregon State University, Administrative Services A422 Corvallis, OR 97331-2119 (541) 737-2513 *or* Bulletin Office Cooperative Extension, Cooper Publications Building, Washington State University, Pullman, WA 99164-6912 (509) 335-2857.

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Appendices

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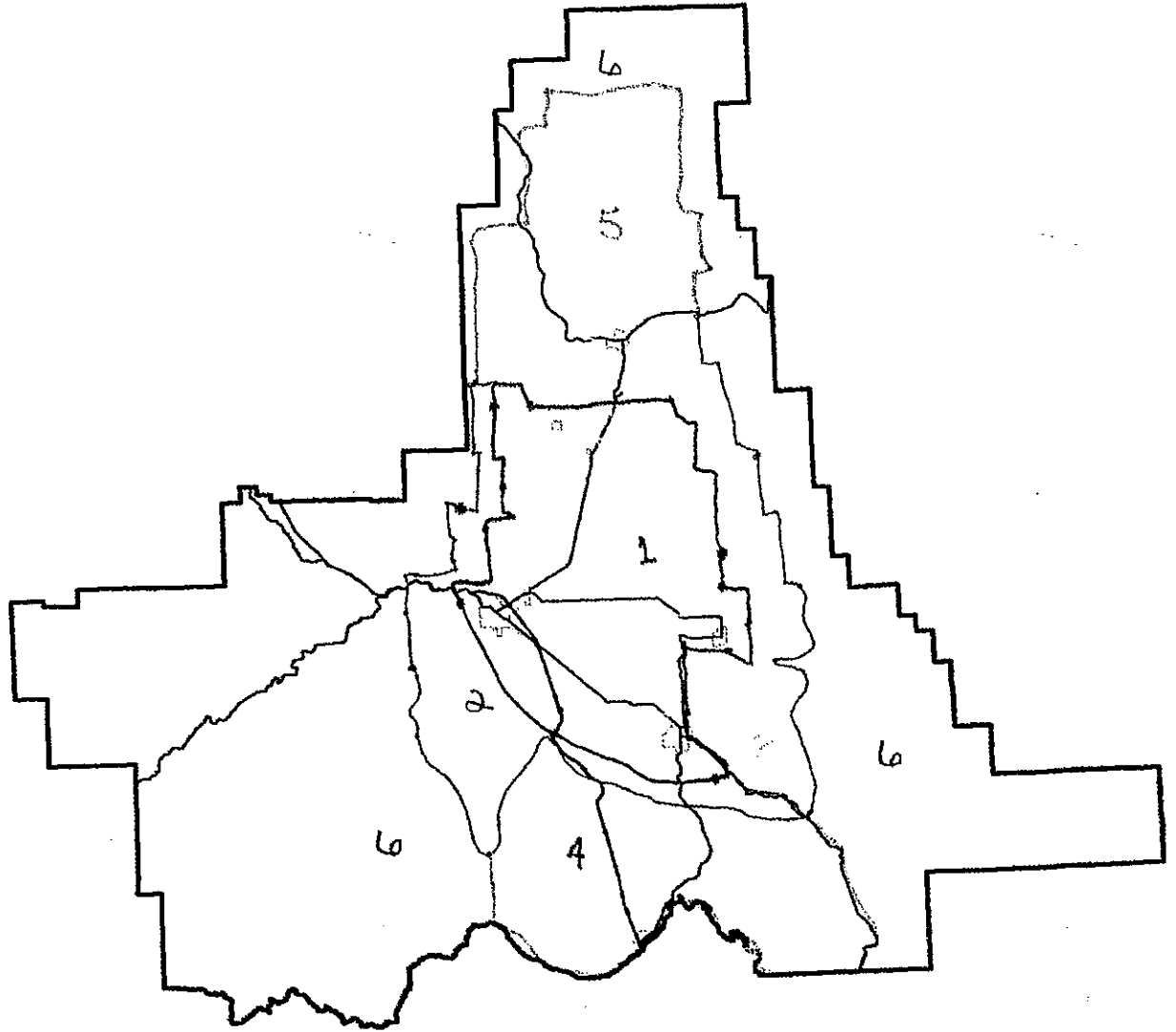
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APPENDIX A

Union County Weed Control District

UNION COUNTY WEED ZONES



ZONE 1 - VALLEY FLOOR

ZONE 2 - WEST FOOTHILLS

ZONE 3 - EAST FOOTHILLS

ZONE 4 - SOUTH COUNTY

ZONE 5 - NORTH COUNTY

ZONE 6 - NATIONAL FOREST

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APPENDIX B

Union County Noxious Weed List

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Updated April 2007

CLASS "A" WEEDS

Acroptilon repens	Russian knapweed-- <i>Cove area/High Valley/Medical Springs</i>
Anchusa officinalis	Common bugloss
Centaurea pratensis	Meadow knapweed-- <i>Cove area</i>
Centaurea solstitialis	Yellow starthistle (outside the established containment areas, Little Creek to Rhinehart Lane and Union-Cove Hwy)
Chondrilla juncea L.	Rush skeletonweed
Cytisus scoparius	Scotch broom
Euphorbia esula	Leafy spurge (greater than 1 mile from the Grande Ronde River)
Hieracium spp.	Hawkweed complex
Hieracium piloselloides	King-devil hawkweed
Hieracium pratense	Meadow hawkweed
Hieracium pilosella	Mouse-ear hawkweed
Hieracium aurantiacum	Orange hawkweed
Hieracium floribundum	Yellow hawkweed
Lepidium draba	Hoary cress -- White top (within the Grande Ronde basin, develop containment areas)
Lepidium latifolium L.	Perennial pepperweed
Polygonum (Fallopia)	Knotweed complex (outside of residential ornamentals)
Polygonum sachalinense	Giant knotweed
Polygonum cuspidatum	Japanese knotweed
Polygonum polystachyum	Himalayan knotweed
Polygonum x bohemicum	Hybrid or bohemian knotweed
Senecio jacobaea	Tansy ragwort

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CLASS "B" WEEDS

Aegilops cylindrica	Jointed goatgrass
Centaurea stoebe	Spotted knapweed (Develop containment areas; too widespread for Class A)
Centaurea diffusa	Diffuse knapweed
Centaurea solstitialis	Yellow starthistle (Develop containment areas, Little Creek to Rhinehart Lane and Union-Cove Hwy)
Cirsium arvense	Canada thistle
Euphorbia esula	Leafy spurge (within 1 mile of Grande Ronde River)
Lepidium draba	Hoary cress -- Whitetop (within Powder River basin)
Linaria dalmatica	Dalmation toadflax <i>-bio control in place</i>
Lythrum salicaria L.	Purple loosestrife <i>-bio control in place, no spread</i>
Onopordum acanthium	Scotch thistle
Potentilla recta	Sulphur cinquefoil
Tribulus terrestris	Puncturevine— <i>roadside mainly recreation affect</i>

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AGRICULTURAL CLASS "B" NOXIOUS WEEDS

Asteraceae conyza	Horse weed – Mares tail
Galium aparine	Catchweed bedstraw
Kochia scoparia	Kochia
Agropyron repens	Quackgrass
Conium maculatum	Poison hemlock
Salsola tenuifolia	Russian thistle

AGRICULTURAL SEED CONTAMINATES -- WEEDS OF ECONOMIC IMPORTANCE

Landowners within Union County are responsible for controlling weeds identified within the Oregon Seed Certification Handbook. This list is available online <http://www.oscs.orst.edu/> or via the my "Field Crops" page at the Union County Agriculture Service Center web site <http://extension.oregonstate.edu/union/index.php>.

Focus Weeds For Grants and Coordinated Noxious Weed Management Plan

Centaurea solstitialis	Yellow starthistle (Develop containment areas and treatment strategy, Little Creek to Rhinehart Lane and Union-Cove Hwy)
Centaurea stoebe	Spotted knapweed (Develop containment areas and treatment strategy)
Euphorbia esula	Leafy spurge (Develop containment areas and treatment strategy for populations greater than 1 mile from the Grande Ronde River)

Union County Noxious Weed List

Updated April 2007

WATCH LIST WEEDS

Weeds that have been present at some time in the past but are now considered controlled or eradicated. There is not a recognized vector for reintroduction or an impending threat from neighboring counties

Abutilon theophrasti Medic.	Velvet leaf— <i>thought to be eradicated at Pyles Canyon train derailment in 1980's. Known to occur in bird seed</i>
Carduus nutans	Musk thistle — <i>Bio control in place, very isolated populations</i>
Isatis tinctoria	Dyers woad-- <i>Thought to be eradicated. First identified at the mouth Pyles Canyon</i>
Solanum rostratum	Buffalo burr-- <i>thought to be eradicated at Pyles Canyon train derailment in 1980's. Known to occur in bird seed</i>

RESIDENTIAL WATCH LIST WEEDS

Weeds identified in residential gardens in Union county. They are known to move offsite and may become a threat in other areas.

Cytisus scoparius	Scotch broom
Euphorbia myrsinites	Myrtle spurge
Hieracium Aurantiacum L.	Orange hawkweed
Isatis tinctoria	Dyers woad
Knotweed complex	Japanese knotweed (outside of residential ornamentals)

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Information on Specific Weeds in Union County

Common bugloss: listed in the vascular plants of Rebarrow Forest (EOU property contact Karen Antell). Known at the old Union sawmill, and a single plant at Arnie Grammons old place off Bond Lane near Flying J Truckstop. Introduced in Wallowa County by a pioneer beekeeper since it blooms all summer. Herbal uses and probably ornamental at one time.

White top: primary movement in contaminated hay in our area. Just about every horse lot in Union has some.

Meadow knapweed: a natural hybrid of brown and black knapweeds. It was planted fairly extensively in Western Oregon particularly Southwest (Medford country) as a high protein forage for a while in the 1940's. Ours is in the Cove area, largely developed as home sites now, along Mill Creek above town, and at the Union cemetery. A few sites are being located that appear to be associated with hunters. Likely being transported in by western Oregon hunters.

Russian knapweed: creeping perennial. Seems to be slow spreading but difficult to kill and forms very dense stands. Most sites appear to be associated with contaminated hay. Durkee area had quite a bit that was said to have been brought in with sheep. Many old hayfields in the West have developed problems with this apparently with the seeds coming with contaminated alfalfa seed. Known locations are at Medical Springs, a report (unconfirmed as far as I know) near North Powder, and a small patch a mile south of Cove along High Valley Road in a pasture.

Rush skeletonweed: creeping perennial, very fast moving threat to all classes of land. It's coming at us along the freeway from Umatilla County, and along Linton Mountain road and the Tollgate Highway. Known sites are along I-84 in and around the Flying J exit, and on the right of way (County and freeway) at the Hilgard exit and back to Five Points Creek.

Scotch broom: fairly old site along the tracks below Palmer Junction. A bunch of plants are around an old cabin on Steen Bowman Road, and a small lot on Forest Capital just off the 63 road on the bench above Lookingglass Creek. There have been several single plant sites removed over the years on both forests. Probably a combination of ornamental escapes (the old cabin is one), hunters, and possibly logging equipment.

Hawkweeds: State Class A weed. Invaders of mountain meadow type habitats, although we are seeing dense stands in meadow pastures on Bear Creek just outside of Wallowa, and in the Leep country north of Enterprise (prairie type country)

Meadow hawkweed: Mostly in Wallowa County with a small spot on the Little Minam River just north of Union County, and in fall of 2006 a find on Mount Harris by a contractor working for Forest Capital.

Orange hawkweed: So far the only known in Eastern Oregon have come from a nursery in Bend. Possibly more aggressive than Meadow hawkweed. Lots of movement apparently with logging equipment, ATV's, and horses (packstock).

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Perennial pepperweed: creeping perennial tough to kill. Heavy in Malheur County, Harney County, Warner wetlands. Movement with hay mostly. The dried seedheads have been used in dried flower arrangements. The seeds are VERY viable. Limited in Union County. Several small spots on Ladd Marsh and adjacent areas near Hot Lake. A small site just below the restaurant at North Powder (pasture). A couple small spots on Seven Diamond's land in Pyles Canyon, and some along Government Gulch out of Telocaset

Knotweeds: virtually all were originally ornamental. All of ours so far appear to be staying put. They are moved with improper disposal of plant material (dumping along the river would be a killer) and high water events do move root fragments and stems that will sprout and form dense stands along waterways. Two known sites that are causing severe problems in Wallowa County.

Tansy ragwort: original introductions were largely by hunters from Western Oregon. Toxic to cattle and horses, this plant was responsible for the loss of \$5 million annual losses in Western Oregon prior to successful biological control. The potential loss in Eastern Oregon has been estimated to be \$13 million annually. The bio-control bugs don't survive here. There are three sites in Union County that have plants every year: Tamarack flat above Ladd Creek, Lookingglass Creek, and South Catherine. Usually six to ten other sites may have a few plants. There are hundreds of locations that have had plants in the past that are being checked annually

UNION COUNTY WEED MANAGEMENT PLAN

APPENDIX C

Current Projects and Emphasis Areas

UNION COUNTY WEED MANAGEMENT PLAN

APPENDIX D

Management Strategies for Specific Noxious Weeds

UNION COUNTY WEED MANAGEMENT PLAN

APPENDIX E

Union County Weed Board By-Laws

Union County Weed Board By-Laws

May 2007

Article I -- Mission

To serve as representatives of Union County in a manner which assists landowners, land managers, and land users of Union County to be responsible stewards of the land and resources by protecting and conserving our agricultural lands, recreational areas, and natural resources from the degrading impact of exotic, invasive noxious weeds.

To work cooperatively with landowners, land managers, and land users to establish and maintain an integrated vegetation management approach toward the control of noxious weeds within Union County, and in doing so help 1) prevent the import of new invasive plants, 2) eliminate small infestations of noxious weeds where possible, and 3) contain and manage existing weed populations.

Article II -- Objectives

Assist the County Commissioners in setting noxious weed program priorities, and work closely with Public Works and the Weed Supervisor in effectively implementing those program priorities.

Assist the County in increasing public awareness on noxious weed issues, and providing public education as to the serious nature of the current problem in Union County. Assist in public education on noxious weed identification, control methods, and the legal obligations of landowners to control noxious weeds.

Assist Public Works and Tri-County CWMA in identifying and obtaining traditional and non-traditional funding sources for weed control programs.

Encourage cooperation and coordination between jurisdictions, public agencies, land managers, and private landowners in Union County.

Work with our neighboring counties, Tri-County CWMA, and local, state, and federal agencies in management and control of noxious weeds.

Article III -- Membership

The Weed Board is comprised of a minimum of 7 and maximum of 12 volunteers appointed by the Union County Board of Commissioners. Weed Board membership is open to anyone who is interested in the control and prevention of invasive/exotic/noxious weeds, and the objectives of the Board. Members shall represent the management zones of the County as described in the Union County Weed Management Plan: North County (Palmer Junction - Elgin areas), Valley Floor (Summerville to Union), Western Foothills (Mt Emily - Craig Mt), Eastern Foothills (Mt Harris - Catherine Creek), South County

Union County Weed Board By-Laws

May 2007

(North Powder, Medical Springs areas), and the private, state, and federal forest and range lands. When there is a vacancy on the Board, the County Commissioners shall advertise an opening, accept applications, and appoint new member(s). Each member serves a three year term, and may be re-appointed by the Commissioners.

Article IV – Election of Officers

Officers of the Board consist of Chair, Vice-Chair, and Secretary. A minimum of two members appointed by the Chair will serve as a nominating committee for officers, and nominations may also come from any member. Election of officers will be conducted at the February meeting and officers will serve two year terms. A quorum (one more than 50% of members) of Board members is required for election of officers.

Responsibilities of Officers include:

Chair: Contact members prior to meetings and define agenda items; delegate responsibility among weed board members and organize work groups and committees; work with the Weed Supervisor to help implement the strategic plan and action items; act as liaison to the Board of Commissioners; administer meetings.

Vice-Chair: Assist Chair with duties and responsibilities and assume the position of Chair if needed.

Secretary: Record proceedings at Board meetings and provide those minutes to the Chair and Vice-Chair for review. Upon approval by the Chair, forward the minutes to the Weed Supervisor for enclosure with the next month's meeting notice mailing to Board members and Technical Advisory Group members. Provide other written information to Board members, Advisory Group, local partners, Commissioners, the general public and the media as directed by the Chair.

Article V – Conduct of Meetings

The Weed Board holds regular monthly meetings at a location and time determined by the Board. Meeting notices will be sent to all members and partners at least 7 days prior to the meeting date, and meeting minutes will also be sent out to all members, the Advisory Group, and other interested partners.

All Board meetings will be conducted according to Robert's Rules of Order. The Chair calls the meeting to order, followed by introduction of guests and new members. Board members will in turn introduce themselves to guests and new members. Minutes of the previous meeting are reviewed, and agenda items are discussed in order. The Weed Board intends to make decisions through the consensus process, however when circumstances prevent consensus, a decision will be made by a majority vote of board members. This decision will serve as a recommendation to the Board of Commissioners.

Union County Weed Board By-Laws
May 2007

County Commissioners, Public Works Department staff, other Agencies, and members of the public are encouraged to attend Weed Board meetings. The Board may also meet formally with the County Commissioners at their request. The Weed Board will conduct at least one evening meeting annually to review and report activities to the public.

The November Board meeting will include summarizing the year's activities, presenting an annual work plan for the coming year, and begin accepting nominations for the February elections.

Board members are expected to attend meetings, and shall give advance notice to the Chair if unable to attend. Exceptions are granted for unplanned events/emergencies, but follow-up notice to the Chair is expected.

Article VI -- Termination of Membership

Any member may be removed from the Weed Board by the County Commissioners if they deem such action is in the best interest of the County and Weed Board. A two-thirds majority of Board members is required to make a recommendation to the Commissioners for member removal. A written notice from the Chair stating the grounds for removal shall be given to the member.

Article VII -- Advisory Group

There will be a Weed Board Advisory Group that will be kept informed of the Board's meetings, agendas, and proceedings. This Group will have representatives of the many public agencies and institutions that are concerned about the spread of noxious weeds in Union County, and will assist the Weed Board by providing technical and professional advice and expertise on weed management, public education, financial assistance, and other issues. The Advisory Group is encouraged to attend Weed Board meetings, but will not be voting members of the Board.

Article VIII -- Adoption of By Laws

These By Laws shall become official upon recommendation by a majority of the Weed Board members, and acceptance by the County Commissioners.

UNION COUNTY WEED MANAGEMENT PLAN

APPENDIX F

Union County Weed Board Members

UNION COUNTY WEED MANAGEMENT PLAN

UNION COUNTY WEED BOARD

Wade Bingaman, Imbler

Dale Case, Cove

Nancy Dake, LaGrande – **Chair**

Don Dodson, North Powder

Alan Guttridge, Union – **Vice Chair**

Gene Hardy, Elgin

Phil Hassinger, Cove

Ed Hoofnagle, Cove

Sonny Johnson, Cove

Aric Johnson, US Forest Service

Bob Kelly, Union Co. Public Works

Jennie Tucker, Elgin – **Secretary**

UNION COUNTY WEED MANAGEMENT PLAN

APPENDIX G

Weed Board Advisory Group

UNION COUNTY WEED MANAGEMENT PLAN

Weed Board Advisory Group

Greg Winans, Tri-County Cooperative Weed Management Area

Dan Sharratt, Oregon Dept. of Agriculture

Jon Paustian, Oregon Dept. of Fish & Wildlife

Darren Walenta, OSU Extension Service

Paul Oester, OSE Extension Service ???

_____, Oregon Dept. of Forestry ???

Arnie Grammon, Baker County Weed Supervisor

Mark Porter, Wallowa County Weed Board Chairman