

Mid Willamette Cooperative Weed Management Area Management Plan

Revised June 6, 2016

Purpose and description

The impacts of invasive weeds and the importance of their management are becoming apparent to a wide variety of organizations. After habitat loss, invasive species have been recognized as the second largest danger to threatened and endangered species (*Precious Heritage: The status of biodiversity in the United States*, The Nature Conservancy). Invasive weeds have also been estimated to cause annual economic losses to Oregon of over \$83.5 million per year for 25 state-listed species (Economic Impact from Selected Noxious Weeds in Oregon, Oregon Department of Agriculture report, 2014). Because weeds extend across multiple ownerships and travel over the landscape, collaboration and partnerships are essential for effective management. In addition, partnerships can access new sources of funding and increase implementation efficiency.

The Mid Willamette Cooperative Weed Management Area (CWMA) exists to create and support collaborative weed management among land managers and owners within its area. It promotes weed education/outreach, weed inventory and prevention, and weed control activities.

The Mid Willamette CWMA includes 2657 square miles of land delineated on a map by the three counties, Yamhill, Marion, and Polk. The common boundary and center of the area is the Willamette River. The area extends from the crest of the Cascades to township lines near the crest of the Coast Range. Butte Creek and the Chehalem Mountains form the north boundary while the Santiam River and township lines form the south boundary. The population of the three counties is approximately 438,450. The economy of the CWMA has its basis in agriculture, forest products, manufacturing, government, food processing, education and tourism. The topography varies from rugged, steep mountains to valley floodplains. The area has a diverse range of plants, wildlife, and their habitats. There are at least six distinct ecosystem types: cold, high elevation noble fir forests, wet western hemlock forests, mixed pine and fir forests, oak woodlands, valley grassland or prairie, and riparian communities. Within these ecosystems there are 27 endangered or threatened fish, wildlife and plant species along with many unique and special places. There are 17 major watersheds which include many rivers (Yamhill, Luckiamute, North Santiam, Pudding, and Willamette) and creeks (Chehalem, Willamina, Salt, Rickreall, Mill, Butte, Abiqua, and Senecal.)

Current CWMA participants include: Polk Soil and Water Conservation District; Marion Soil and Water Conservation District; Yamhill Soil and Water Conservation District; Marion County Department of Public Works; Glenn/Gibson Creeks Watershed Council; Luckiamute Watershed Council; Cascade Pacific Resource Conservation and Development, Inc; Willamette National Forest; Oregon Department of Transportation; Oregon Department of Forestry; Bureau of Land Management, Salem District; U.S. Corps of Engineers, Willamette Valley Projects, Fern Ridge; Silver Falls State Park; Oregon Department of Agriculture; North Santiam Watershed Council.

Management principles

The CWMA uses integrated weed management with the following principles:

- Projects are designed using an ecosystem management approach based on an understanding of weed biology, weed ecology, and landscape-level processes.
- Treatment follows a “wildfire management” model with the following priorities:
 - a) Target sources of spread and isolated populations while protecting high value localities.
 - b) Determine the perimeter of larger infestations and contain them to the area.
 - c) Attack larger infestations or widely dispersed weeds using bio-controls when available.
- Control projects are designed after serious consideration of a range of treatment options so that the control methods are the most effective and appropriate to a given situation.
- Projects include a vision and plan for habitat restoration
- Education and outreach activities are targeted to specific audiences, with clearly defined desired behavioral changes.

Definition of management levels

- Eradicate: the weed species is eliminated from the management area, including all viable seeds and/or vegetative propagules.
- Control: Dispersal is prevented throughout the target patch and the area coverage of the weed is decreased over time. The weed is prevented from dominating the vegetation of the area but low levels are accepted.
- Contain: Weeds are geographically contained and are not increasing beyond the perimeter of the infestation. Treatment within established infestations may be limited, but areas outside are controlled or eradicated.
- Reduce: The density and/or rate of spread of the weed are reduced across a geographic area.
- Custodial: Specific treatment for a particular plant is deferred at this time. Infestations may be treated as a result of other weed priorities. The species may not be inherently invasive, habitats are not susceptible to invasion, or the infestation is not treatable with current technology.

Goal

Prevent the introduction and control the spread of harmful invasive plant species in the CWMA region by facilitating cooperative management among all willing land managers.

Objectives and activities

- 1) *Share information amongst member organizations, funding opportunities, contractors, best management practices, and rules and regulations affecting weed control.*

Activities

- a) Hold regular CWMA meetings.
- b) Use the Willamette-weed list-serve to share and seek information.
- c) Collect existing and prepare new weed fact sheets for identification and BMPs.
- d) Hold trainings on weed identification, inventory standards, priority species and habitats, and weed distributions.

- 2) *Coordinate local projects conducted by member organizations.*

Activities

- a) Prepare and periodically revise a long-term CWMA Management Plan.
- b) Prepare an annual CWMA Operating Plan.

- 3) *Sponsor effective and innovative inventory, treatment and monitoring projects.*

Activities

- a) Conduct invasive plant inventory and control projects.
- b) Integrate control plots in treatments to monitor efficacy
- c) Promote and distribute bio-control information.

- 4) *Conduct outreach to raise awareness about weeds among the wider public.*

Activities

- a) Submit articles to newsletters and newspapers
- b) Distribute weed materials and use displays at public events
- c) Hold trainings, workshops, and field tours on weed identification, inventory standards, priority species and habitats, and weed distributions
- d) Involve schools and volunteers in weed projects

- 5) *Seek funding to support member weed programs and CWMA projects.*

Activities

- a) Provide in-kind support and write letters of support.
- b) Collect information on weed boards and advocate for county funding.

Structure and Process

- a) *CWMA Coordinator*. The CWMA Coordinator is a staff position to help facilitate the CWMA, and deal with public relations related to the CWMA as a whole.

- b) *Funding*. The CWMA will not handle funding directly. Partner organizations will apply for and manage grants themselves. Where resources need to be shared, separate agreements between the relevant parties will be developed.

Modifications and term

The Management Plan is a living document and will be revised as needed. The Plan will be reviewed on a yearly basis and the weeds of concern list adjusted as necessary.

Appendix 1: Weeds of concern

ODA rating: A Listed Weed – a weed of known economic importance which occurs in the state in small enough infestations to make eradication or containment possible; or is not known to occur, but its presence in neighboring states make future occurrence in Oregon seem imminent.

- B Listed Weed – a weed of economic importance which is regionally abundant, but which may have limited distribution in some counties.
- T Designated Weed – a designated group of weed species that are selected and will be the focus for prevention and control by the Noxious Weed Control Program. Action against these weeds will receive priority. T designated noxious weeds are determined by the Oregon State Weed Board and directs ODA to develop and implement a statewide management plan. T designated noxious weeds are species selected from either the A or B list. (T)

Mid Willamette CWMA
Noxious Weed List

Common Name	Latin Name	County	ODA Rating	Primary Occurrence									Locally established
				Ag	Forestry	Woodland	Urban	Wetland	Riparian	Grassland	Aquatic		
EDRR													
Flowering Rush	<i>Butomus umbellatus</i>		A									x	
French broom	<i>Genista monspessulana</i>		B	X	X	X					X		
Garlic mustard	<i>Alliaria petiolata</i>		B,T			X	X						
Giant hogweed	<i>Heracleum mantegazzianum</i>		A,T				X		X				
Gorse	<i>Ulex europaeus</i>		B,T		X	X					X		
Hawkweeds	<i>Pilosella spp.</i>	Marion	A,T(some)	X			x				X		
Hydrilla	<i>Hydrilla verticillata</i>		A									X	
Kudzu	<i>Pueraria lobata</i>		A,T		X	X	X						
Oblong Spurge	<i>Euphorbia oblongata</i>	Marion	A						x				
Pokeweed	<i>Phytolacca americana</i>	Marion	NL			X	X		X		X		
Policeman's helmet	<i>Impatiens glandulifera</i>		B			X	X	X	X				
Portuguese broom	<i>Cytisus striatus</i>		B,T	X	X	X					X		
Yellow Floating Heart	<i>Nymphoides peltata</i>		A									x	
High Importance													
Diffuse Knapweed	<i>Centaurea diffusa</i>	Marion	B	x	x								
Eurasian watermilfoil	<i>Myriophyllum spicatum</i>	Yamhill	B								X	x	
False brome	<i>Brachypodium sylvaticum</i>	Marion	B		X	X			X			x	
Italian Thistle	<i>Carduus pycnocephalus</i>	Yamhill/Marion	B	X			X			X		x	
Knotweeds	<i>Polygonum and Fallopia sp.</i>	All	B	X	X	X	X	X	X			x	
Lesser Celandine	<i>Ranunculus ficaria</i>	Marion	B			X	X	X	X			x	
Milk thistle	<i>Silybum marianum</i>	Marion	B	X						X			
Old Man's Beard	<i>Clematis vitalba</i>	Yamhill/Marion	B			X	X		X			x	
Parrotfeather	<i>Myriophyllum aquaticum</i>	Marion	B								X	x	
Puncturevine	<i>Tribulus terrestris</i>		B	X			X			X			
Purple Loosestrife	<i>Lythrum salicaria</i>	All	B					X	X			x	
Rush Skeleton Weed	<i>Chandrilla juncea</i>	Marion	B,T	x						X			
Spotted Knapweed	<i>Centaurea stoebe</i>	Marion	B,T	X	X								
Spurge laurel	<i>Daphne laureola</i>	Yamhill/Marion	B			X	X					x	
Water Primrose	<i>Ludwigia hexapetala & peploides</i>	Yamhill/Marion	B								X	x	
Yellow Archangel	<i>Lamium galeobdolon</i>	Marion	B		X	X	X		X				
Yellow flag iris	<i>Iris pseudacorus</i>	All	B					X	X			x	
Yellow Toadflax	<i>Linaria vulgaris</i>	Marion	B	X			X			X		x	
Widely Established/Common													
Bittersweet nightshade	<i>Solanum dulcamara</i>		NL	X		X	X		X			x	
Bull thistle	<i>Cirsium vulgare</i>		B	X		X				X		x	
Butterfly bush	<i>Buddleja davidii (B. variabilis)</i>		B		X	X	X		X			x	
Canada thistle	<i>Cirsium arvense</i>		B	X	X	X				X		x	
Common teasel	<i>Dipsacus sylvestris</i>		NL	X				X				x	
Creeping buttercup	<i>Ranunculus repens</i>		NL					X				x	
English Hawthorn	<i>Crataegus monogyna</i>		NL	X		X				X		x	
English Holly	<i>Ilex aquifolium</i>		NL			X	X					x	
English Ivy	<i>Hedera helix</i>		B			X	X		X			x	
Field bindweed	<i>Convolvulus arvensis</i>		B,T	X		X	X			X		x	
Herb robert	<i>Geranium robertianum</i>	Marion	B		X	X	X		X			x	
Himalayan blackberry	<i>Rubus armeniacus</i>		B	X	X	X	X		X	X		x	
Italian Arum	<i>Arum italicum</i>		NL		X	X	X		X			x	
Meadow Knapweed	<i>Centaurea pratensis</i>		B	X	X	X	X			X		x	
Pennyroyal	<i>Mentha pulegium</i>		NL	X				X				x	
Reed canary grass	<i>Phalaris arundinacea</i>		NL	X			X	X	X			x	
Scotch broom	<i>Cytisus scoparius</i>		B	X	X	X				X		x	
Shiny geranium	<i>Geranium lucidum</i>	Marion	B		X	X	X		X			x	
St. John's-wort	<i>Hypericum perforatum</i>		B	X						X		x	
Tansy ragwort	<i>Senecio jacobaea</i>		B,T	X						X		x	
Tree of Heaven	<i>Ailanthus altissima</i>		B		X	X	X		X			x	
Vinca	<i>Vinca major/minor</i>		NL			X	X		X	X		x	

ODA Ranking NL= Not Listed