

Mid-Coast Cooperative Weed Management Area Management Plan

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*, TNC). Invasive weeds have also been estimated to cause annual economic losses to Oregon of over \$83 million per year for 21 state-listed species (*Oregon Noxious Weed Strategic Plan*, ODA, 2001). 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-Coast 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-Coast CWMA totals 2479 square miles, encompassing all of Lincoln County and the western portion of Lane County as defined by the Siuslaw SWCD boundary. The area includes two distinct land features, the coastal strip composed of beaches, headlands, dunes and marine terraces, and the mountains and valleys of the Coast Range. The Coast Range is generally covered with forests of Douglas fir, western hemlock, Sitka spruce, western red cedar and red alder. Slopes are typically steep and dissected by numerous streams and rivers. Estuarine bays are found where the larger rivers meet the coastal strip. The area contains an abundance of natural resources and beauty. The forests, streams and coastlands support a rich diversity of habitats and species including federally listed species such as spotted owls, marbled murrelets, snowy plover and coastal coho salmon. Larger cities and towns are located within the coastal strip where tourism and commercial fishing are the primary industries. Smaller towns and communities of the Coast Range valleys are generally dependent upon forestry and farm industries. The area has a total population of about 62,500.

Current CWMA participants include: Siuslaw Soil and Water Conservation District; Lincoln Soil and Water Conservation District; Oregon Department of Transportation; Oregon Department of Agriculture; Bureau of Land Management, Salem District; Bureau of Land Management, Eugene District; Cascade Pacific Resource Management and Development, Inc.; Lincoln County; Siuslaw National Forest; Oregon Department of Forestry; Confederated Tribes of Siletz Indians

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 Integrated Pest Management principals with the following priorities:
 - Target sources of spread and isolated populations while protecting high value localities.
 - Determine the perimeter of larger infestations and contain them to the area.

- Attack larger infestations or widely dispersed weeds using biocontrol 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 desired future conditions after the weeds are gone.
- 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 or resources.

Goal

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

Objectives and activities

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

Activities

- a) Participate in Willamette-weed listserv
- b) Hold regular CWMA meetings

- 2) *Detect and prevent new invaders*

Activities

- a) Create weed sheets and conduct targeted distribution
- b) Conduct gorse and knotweed prevention campaigns
- c) Prepare and distribute pamphlet on machine/person cleaning
- d) Conduct a rock pit weed control campaign
- e) Encourage weed requirements for land development permits

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

Activities

- a) Have working groups
- b) Prepare and revise CWMA management and operating plans
- c) Maintain a shared weed database

4) *Conduct education and outreach related to objectives 1, 2, and 3 and appropriate to the scale at which the CWMA operates.*

Activities

- a) Prepare an annual report showing accomplishments and distribute to funding sources, media, government, citizen groups, etc.
- b) Conduct outreach/education for public
- c) Get media coverage in newspapers and newsletters

Structure and Process

- a) *Subcommittees.* For specific projects or tasks, ad hoc groups will be formed which can exist for a short time or indefinitely.
- b) *CWMA Coordinator.* The CWMA Coordinator is a staff position to help facilitate the CWMA, raise funds, manage projects, and deal with public relations related to the CWMA as a whole.
- c) *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

Notes for the table which lists weeds of concern in the CWMA area:

Weed Categories: Weeds are divided into general categories which are managed in different ways. These categories are similar to ODA's rating system, but assignment of weeds to specific categories reflects the distribution of those weeds within the CWMA region. This list of weeds may not include all weeds found locally. An official list of noxious weeds for Oregon can be obtained from ODA's Noxious Weed Control Program.

Potential Invaders: These weeds are found outside the CWMA region but could invade the region at any time in the future. Management focuses on developing an "early alert" network of people and organizations to identify sites, followed by reporting to ODA's Noxious Weed Control Program or other partner for eradication.

New invaders: These weeds exist in just a few sites in small numbers in the CWMA. They are managed in the same way as the potential invader category.

Locally established: These weeds can be locally very abundant, or occur in spotty distribution across the landscape. Management focuses on inventory to determine distribution, followed by eradication of small, isolated populations, and control or containment of larger infestations.

Widely established: These weeds occur across the landscape at a level where eradication, containment or control is not possible. Management focuses on removing them from ecologically, socially and economically important sites and slowing their spread through prevention actions. When available, biological controls should be used.

ODA rating: An “A” means the weed is either a potential invader from neighboring states or it is present in small enough infestations to make eradication/containment possible. A “B” means the weed is regionally abundant, but may have limited distribution in some counties. Biological control is the preferred approach. A “T” means ODA is implementing a statewide management plan targeted to that species.

Habitat: “U” means upland, “R” means riparian, “D” means dunes, “A” means aquatic

Table 1: Weeds of concern: “U” = upland, “R” = riparian, “D” = dunes, “A” = aquatic

Common name	Latin name	ODA rating	Habitat
Potential Invaders			
Kudzu	<i>Pueraria lobata</i>	A, T	U, R
Water primrose	<i>Ludwigia peploides</i> , <i>L. hexapetala</i> , <i>L. grandiflora</i> ssp.	B	A
Yellow Floating Heart	<i>Nymphoides peltata</i>	A	A
Spartina	<i>Spartina</i> spp.	A	A, R
Giant Hogweed	<i>Heracleum mantegazzianum</i>	A, T	U, R
Common Fennel	<i>Foeniculum vulgare</i>	NL	
Spanish Heath	<i>Erica lusitanica</i>	B	
Bull thistle	<i>Cirsium vulgare</i>	B	
Garden Loosestrife	<i>Lysimacha vulgaris</i> ;	NL	
False Indigo Bush	<i>Amorpha fruticosa</i>	B	R
Garlic Mustard	<i>Alliaria petollata</i>	B, T	U, R
New Invaders			
Saltmarsh cordgrass	<i>Spartina patens</i>	A,T	A
Elodea	<i>Elodea (=egeria)densa</i>	B	A
Parrotfeather	<i>Myriophyllum aquaticum</i>	B	A
Eurasian water milfoil	<i>Myriophyllum spicatum</i>	B	A
Common Reed	<i>Phragmites australis</i> ssp. <i>australis</i>	B	R
French Broom	<i>Cytisus monspessulanus</i>	B	U, R, D
Meadow Knapweed	<i>Centaurea pratensis</i>	B	U, R
Spotted Knapweed	<i>Centaurea maculosa</i>	B, T	U, R
Spurge Laurel	<i>Daphne laureola</i>	B	U

Yellow Starthistle	<i>Centaurea solstitialis</i>	B, T	U
Locally established			
Fragrant water lily	<i>Nymphaea odorata</i>	Not listed	A
Bamboo	<i>Sasa palmata</i>	Not listed	U, R
Butterfly bush	<i>Buddleja globosa, davidii</i>	B	U, R
False Brome	<i>Brachypodium sylvaticum</i>	B	U, R
Flag Iris	<i>Iris pseudacorus</i>	B	R, A
Herb Robert	<i>Geranium robertianum</i>	B	
Pampas/Jubata Grass	<i>Cortaderia selloana</i>	B	U, R
Policeman's Helmet	<i>Impatiens glandulifera</i>	B	R
Purple Loosestrife	<i>Lythrum salicaria</i>	B, T	R, A
Canada Thistle	<i>Cirsium arvense</i>	B	U, R
Clematis	<i>Clematis vitalba</i>	B	U, R
Everlasting Peavine	<i>Lathyrus latifolius</i>	Not listed	U, R
Japanese, giant, hybrid knotweeds	<i>Fallopia japonica, sachalinensis, Xbohemicum</i>	B	R
Himalayan knotweed	<i>Polygonum polystachyum</i>	B	R
Gorse	<i>Ulex europaeus</i>	B, T	U, R, D
Portuguese Broom	<i>Cytisus striatus</i>	B, T	U, R, D
Widely established			
Himalayan blackberry	<i>Rubus armeniacus</i>	B	U, R
Evergreen blackberry	<i>Rubus laciniatus</i>	Not listed	U, R
Scotch broom	<i>Cytisus scoparius</i>	B	U, R, D
Oxeye daisy	<i>Leucanthemum vulgare</i>	Not listed	U, R
English ivy	<i>Hedera helix</i>	B	U, R
English holly	<i>Ilex aquafolium</i>	Not listed	U
European beachgrass	<i>Ammophila arenaria</i>	Not listed	D
Reed canary grass	<i>Phalaris arundinacea</i>	Not listed	R
Tansy ragwort	<i>Senecio jacobaea</i>	B, T	U, R