

# North Coast Cooperative Weed Management Area Long Term 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*, 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 expand throughout the landscape, collaboration and partnerships are essential for effective management. In addition, partnerships can access new sources of funding and increase implementation efficiency.

The North Coast 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 North Coast CWMA includes the entirety of Clatsop, Columbia and Tillamook Counties, as well as the far western portion of Washington County, as defined by the Nehalem watershed line. The population of the North Coast CWMA is approximately 150,000. The economy of the CWMA has its basis in agriculture, timber and forest products, commercial and sports fisheries, and tourism.

The Pacific Coast, Tillamook Bay, Columbia River estuary, Willapa Bay, and the Coast Range dominate the landscape. There are five major watersheds in Oregon's portion of the CWMA area: Lower Columbia, Lower Columbia-Clatskanie, Necanicum, Nehalem, and Wilson-Trask-Nestucca. These are further divided into sub watersheds which include the Upper and Lower Nehalem, Nicolai-Wickiup, Young's Bay, Skipanon, Necanicum, Ecola Creek, Scappoose Bay, Clatskanie, Beaver Creek, and Plympton Creek.

Current CWMA Partners include: Clatsop Soil and Water Conservation District; Columbia Soil and Water Conservation District; Tillamook Soil and Water Conservation District; Lower Columbia River Watershed Council; Oregon Department of Forestry; Oregon Department of Transportation; Oregon State University Extension Service - Columbia County; Bureau of Land Management - Salem District; Cascade Pacific Resource Conservation and Development, Inc.; Lower Nehalem Watershed Council Lower Columbia Estuary Partnership; Scappoose Bay Watershed Council; Oregon Department of Forestry; Longview Timber; Tillamook Bay Watershed Council; Columbia Land Trust; Natural Resource Conservation Service, Clatsop County; Oregon Department of Agriculture, Lewis and Clark Historical Park

## 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 have a monitoring component to document success and areas for improvement.
- Projects include a vision and plan for desired 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 among CWMA members about member roles, projects, funding opportunities, new invaders, inventory and treatment methods, weed biology, and weed distribution.*

### **Activities**

- a) Prepare and periodically revise a long-term CWMA Management Plan.
- b) Prepare an Annual CWMA Operating Plan.
- c) Have regular CWMA meetings.
- d) Have project site visits, joint workdays, and field workshops
- e) Use the Willamette Weed list-serve
- f) Collect existing and prepare new weed fact sheets

- 2) *Accomplish cooperative weed management*

### **Activities**

- a) Work together collaboratively whenever possible
- b) Share technical knowledge
- c) Participate in CWMA EDRR activities

- 3) *Conduct outreach and education to raise awareness about weeds and the CWMA among the wider public.*

### **Activities**

- a) Disseminate information to landowners through garden & farm stores
- b) Provide information to loggers, contractors, operators, gravel pits
- c) Hold seminars and tours
- d) Publish in newsletters

- 4) *Generate funding*

### **Activities**

- a) Write grants jointly
- b) Support others in their grant writing

## Structure and Process

### *CWMA Lead(s)*

#### Roles:

- Share information.
- Share Management Plan and the Annual Operating Plan and coordinate their implementation.
- Provide leadership to generate staff CWMA coordination support.
- Interact with media and interested citizens. Partners will take the lead on their particular projects and SWCDs will represent activities in their counties.

Composition and Process: Representatives of signatories to the MOU will form the core of the group, but the meetings will be open to any other interested persons.

- a) *Subcommittees.* For specific projects or tasks, ad hoc groups will be formed which can exist for a short time or indefinitely.
- b) *CWMA Lead.* The CWMA Coordinator is a staff position to help facilitate the CWMA, and deal with public relations related to the CWMA as a whole.
- c) *Meeting management.* CWMA Lead will chair (prepare agenda and lead meeting) and secretary will take and distribute minutes (prepare and distribute meeting notes).
- d) *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 five 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.

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.

Agricultural: These weeds pose an economic cost on agricultural fields but do not pose a risk to wild lands or pasture lands. Management focuses on education by county extension agents and other farmer assistance programs about control options.

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. An asterisk (\*) means the weed is targeted for biological control.

Table 1: Weeds of concern

Common name	Latin name	ODA rating
<b>Potential Invaders</b>		
French Broom*	<i>Cytisus monspessulanas</i>	B
Pampas Grass	<i>Cortaderia selloana</i>	Not listed
Everlasting Peavine	<i>Lathyrus latifolius</i>	Not listed
Puncturevine*	<i>Tribulus terrestris</i>	B
Meadow knapweed*	<i>Centaurea pratensis</i>	B
Saltmarsh/meadow cordgrass	<i>Spartina patens</i>	A, T
Garlic mustard	<i>Alliaria petiolata</i>	B, T
<b>Locally established</b>		
Common Reed	<i>Phragmites australis</i>	A

Giant Hogweed	<i>Heracleum mantegazzianum</i>	A, T
False Brome	<i>Brachypodium sylvaticum</i>	B
Clematis, Old Man's Beard	<i>Clematis vitalba</i>	B
Policeman's Helmet	<i>Impatiens glandulifera</i>	B
Butterfly bush	<i>Buddleja davidii</i>	B
Yellow Archangel	<i>Lamiastrum glaeobdolon</i>	B
Herb Robert	<i>Geranium robertianum</i>	B
False Indigo Bush	<i>Amphofruticosara</i>	B
Parrot's feather	<i>Myriophyllum aquaticum</i>	B
Gorse*	<i>Ulex europaeus</i>	B, T
<b>Widely established</b>		
Japanese, Giant, hybrid knotweeds (fleece flower, Mexican bamboo)	<i>Polygonum cuspidatum, sachalinense, Xbohemicum</i>	B
Himalayan knotweed	<i>Polygonum polystachyum</i>	B
Elodea, S. American waterweed	<i>Elodea (=egeria)densa</i>	B
Eurasian water milfoil	<i>Myriophyllum spicatum</i>	B
Yellow flag iris	<i>Iris pseudacorus</i>	B
Purple loosestrife*	<i>Lythrum salicaria</i>	B
Himalayan blackberry	<i>Rubus discolor</i>	B
Canada thistle*	<i>Cirsium arvense</i>	B
Tansy ragwort*	<i>Senecio jacobaea</i>	B, T
Scotch broom*	<i>Cytisus scoparius</i>	B
English ivy	<i>Hedera helix</i>	B
English holly	<i>Ilex aquafolium</i>	Not listed
European beachgrass	<i>Ammophila arenaria</i>	Not listed
Reed canary grass	<i>Phalaris arundinacea</i>	Not listed
Milk thistle*	<i>Silybum marianum</i>	B