

# COMPREHENSIVE STRATEGIC WEED MANAGEMENT PLAN

Prepared By

Ryan Lefler, Foster Creek Conservation District

# Table of Contents

Acronyms and Abbreviations	1
Overview	2
DCCWMA Priorities	
Education and Outreach	
Disseminating New Information	
Field Site Tours and Workshops	
Integrated Pest Management (IPM)	
On-The-Ground Projects	
Early Detection Rapid Response (EDRR)	
Information Sharing	
County-Wide Weed Mapping	
Pairing Land Owners with Technical Support Programs	
Priority Weed Species	
Projects Planned for the 2020 Growing Season	
CCWMA Funding Strategy	
Conclusion	

Figure 1 – Douglas County Cooperative Weed Management Area Jurisdiction

**Figure 2** – Douglas County Cooperative Weed Management Area Early Detection Rapid Response Focus Areas

# Acronyms and Abbreviations

Douglas County Cooperative Weed Management Area	DCCWMA
Comprehensive Strategic Weed Management Plan	CSWMP
Non-Government Organization	NGO
Early Detection Rapid Response	EDRR
Washington State University Cooperative Extension, Douglas County	WSU Extension
United States Fish and Wildlife Service	USFWS
Integrated Pest Management	IPM

# Overview

The Douglas County Cooperative Weed Management Area (DCCWMA) is a voluntary partnership of federal, state, and local government agencies, Non-Government Organizations (NGOs), and private land owners that manage invasive weeds within Douglas County. Douglas County is the only county in Washington State without a Noxious Weed Control Board to enforce Washington State noxious weed control laws. However, the Douglas County Weed Management Task Force has worked to provide public education and facilitate voluntary compliance with state noxious weed laws. The community of Douglas County has a shared interest in creating voluntary incentives for cooperative weed management, and numerous organizations work independently to help land owners and land managers. The DCCWMA was founded in 2018 in response to county-wide interest in education and in pooling resources across jurisdictional boundaries within Douglas County.

**Mission:** "To improve invasive weed species management county-wide through increased communication, coordination, and the sharing of technical expertise and knowledge of landowners, natural resource managers, and all interested parties. To seek funding to improve and implement on-the-ground weed management projects."

# **Member Organizations:**

Douglas County Weed Management Task Force
Foster Creek Conservation District
Douglas County Private Land Owners and Operators
The Nature Conservancy
South Douglas Conservation District
Washington Department of Fish and Wildlife
Washington State Department of Agriculture
Washington State University Extension, Douglas County (WSU Extension)
United States Fish and Wildlife Service

# Douglas County Cooperative Weed Management Area (DCCWMA) Priorities

In order to further its mission, the DCCWMA will pursue a variety of strategies to increase public knowledge and cooperation regarding noxious weed management, connect land owners with up-to-date technical resources, and coordinate county-wide weed control efforts.

### Education and Outreach

The DCCWMA will seek out opportunities at community events to bring a display and educate the public about noxious weed identification and management. Information will be directed at land owners and land managers, in order for the DCCWMA to establish itself as a resource for information, technical support, and cooperative weed management efforts. The DCCWMA will seek the involvement and input of land owners and land managers in order to promote

cooperation, county-wide transparency, and trust with regard to CWMA activities. A further goal of education and outreach will be to showcase the efforts of individuals and organizations within Douglas County to control noxious weeds. Coordinated treatment efforts, successful management techniques, and lessons learned will be shared in order to encourage continued voluntary management of noxious weeds.

# Disseminating New Information

Keeping accurate and up-to-date information is one of the greatest challenges in noxious weed management. Chemical and biological control methods, as well as target species, can change often. The DCCWMA will engage its member organizations in order to provide Douglas County residents with up-to-date information regarding noxious weed identification and management. This information will be made available through a website to be designed and maintained by the steering committee.

### Field Site Tours and Workshops

Land owners and land managers have expressed interest in workshops and field tours designed to improve weed identification and management practices. In partnership with member organizations such as the WSU Extension, The DCCWMA will develop a series of field tours which will help the public to develop a "search image" of weed species at various points in development, as well as to observe various control methods (i.e. biological controls) in action. Field tours may include activities such as observing the response of weeds in treatment areas to specific pesticides, and scouting for a *Mencinus janthiniformis*, a common biocontrol weevil found throughout Douglas County. Workshops will be held as facilitating partners and funding are available, in order to give land managers hands-on knowledge of new and emerging weed control identification and management tools and practices.

# Integrated Pest Management (IPM)

IPM is a balanced series of practices which are critical for noxious weed management. The DCCWMA will work to promote a variety of different chemical, biological, cultural, mechanical, and preventative control measures which will work together to sustainably manage noxious weeds on an individual, organizational, and county-wide level. Approaches of interest include building on the success of the Dalmatian toadflax biological control program to develop other biological control programs for priority species. Also of interest is building a set of unified principles of cultural and preventative control that work for the unique geography, climate, and land use within Douglas County. Through collaboration between members and public outreach, the DCCWMA will prescribe strategies based on established practice and sound science in order to manage noxious weeds across various jurisdictional boundaries.

### On-The-Ground Projects

The DCCWMA will implement control projects for weeds of particular concern. Projects will primarily focus on species identified for Early Detection Rapid Response, but will also include priority 1, 2, and 3 species (See Pages 5 and 6) in areas where control will reduce the

distribution of seeds, rhizomes, and other reproductive agents. Work will begin with the 5 projects identified on pages 6 and 7, and will continue as additional funding becomes available. Potential projects will be identified in each *Annual Operating Plan*. However, throughout the year, new projects will be submitted for discussion by Steering Committee members, either at quarterly DCCWMA meetings or in *Project Proposal Memorandums* circulated to Steering Committee Members, and pursued as funding and personnel are available.

#### Early Detection Rapid Response (EDRR)

The DCCWMA will maintain a list of EDRR priority species. EDRR species are those species identified by the group as having a high level of risk of spreading throughout the county. At each quarterly meeting, members of the Steering Committee will have the opportunity to add new species to the list or remove species which are no longer in need of specialized focus. A map will be maintained showing EDRR focus areas (Figure 2). These focus areas are defined as generalized areas where occurrences of EDRR species have been documented, and where the risk of spread is high. Informational cards with pictures and details on life history and control methods for each relevant species will be sent to land owners within each EDRR management area on an annual basis, in order to increase awareness and encourage reporting of EDRR species. Updated EDRR focus area maps and species lists will be included in the *Annual Operating Plan*.

# **Information Sharing**

All stakeholders in the DCCWMA will seek to build a collaborative network and pool resources in order to more effectively control noxious weeds within Douglas County. A DCCWMA website will be built with news of the group's activities, as well as relevant weed management resources. The Steering Committee will continue to meet quarterly, and will share accomplishments, new developments, and emerging challenges among stakeholders.

### County-Wide Weed Mapping

The DCCWMA will develop a system for mapping noxious weeds and noxious weed treatments throughout the county. The system will allow land managers to identify trends in noxious weed distribution, as well as priorities for noxious weed control. The right to privacy is of high importance to land owners in Douglas County, and so the mapping system will seek to accomplish its objectives while protecting land owner privacy. Progress on the mapping system will be a priority set in each *Annual Operating Plan*.

### Pairing Land Owners with Technical Support Programs

The various stakeholders in the DCCWMA offer a variety of technical support, important knowledge, and relevant experience related to noxious weed management. The DCCWMA will engage all stakeholders in order to build a collaborative knowledge base. Technical assistance programs and educational materials from various stakeholder organizations will be made available on the DCCWMA website.

# **Priority Weed Species**

The DCCWMA will focus primarily on species within three Priority Groups. Priority Group #1 weeds are species whose distribution is still very limited within Douglas County, or which are likely future invaders. Because of their limited distribution, the management goal for these species is prevention of their introduction to the County, and quick eradication if they are identified. Priority Group #2 weeds are species whose distribution is limited to portions of Douglas County. The management goal for these species is early detection and rapid response. EDRR species, as discussed on page 4, are species within Group #2 which may have potential to pose a severe risk of spreading throughout the County. Priority Group #3 are invasive species which are already widespread throughout most of Douglas County. The management goal for these species is control and minimization of their economic and environmental impacts.

# Priority Group #1

- Annual Bugloss (Anchusa arvensis)
- Black henbane (Hyoscyamus niger)
- Common bugloss (Anchusa officinalis)
- Common crupina (Crupina vulgaris)
- Common Reed grass (*Phragmites australis*)
- English ivy (Hedera helix 'Baltica', 'Pittsburgh', and 'Star'; Hedera hibernica 'Hibernica')
- Hoary alyssum (Berteroa incana)
- Leafy spurge (Euphorbia virgata)
- Medusahead (*Taeniatherum caput-medusae*)
- Spurge Flax (*Thymelaea passerina*)
- Tansy Ragwort (Jacobaea vulgaris)
- Ventenata (Ventenata dubia)
- Wild 4 O'clock (Mirabilis nyctaginea)

### Priority Group #2

- Baby's Breath (Gypsophila paniculata)
- Bull thistle (Cirsium vulgare)
- Houndstongue (Cynoglossum officinale)
- Purple loosestrife (Lythrum salicaria)
- Rush skeletonweed (*Chondrilla juncea*)
- Scotch thistle (*Onopordum acanthium*)
- Spotted knapweed (*Centaurea stoebe*)
- Yellow starthistle (Centaurea solstitialis)

# Priority Group #3

- bulbous bluegrass (Poa bulbosa)
- Canada thistle (*Cirsium arvense*)
- Cereal rye (*Secale cereale*)
- Cheatgrass (Bromus tectorum)
- -Dalmatian toadflax (Linaria dalmatica)
- Diffuse knapweed (Centaurea diffusa)
- Field bindweed (Convolvulus arvensis)
- Japanese brome (*Bromus japonicus*)
- Kochia (Bassia scoparia)
- Perennial pepperweed (Lepidium latifolium)
- Puncturevine (Tribulus terrestris)
- Reed canary grass (*Phalaris arundinacea*)
- Russian knapweed (Rhaponticum repens)
- White top (Lepidium draba)

# Projects Planned for the 2020 Growing Season

The DCCWMA will use existing resources to do a number of on-the-ground weed control projects during the 2020 growing season. These projects will be conducted in partnership with local land owners and resource agencies. The goal of these projects is to significantly impact noxious weed populations and distribution within Douglas County, as well as to develop a positive track record of coordinated work on which to base future efforts.

# 1. St. Andrews Scotch thistle control

Approximately 200 acres of Scotch thistle was identified in early 2019 in the St. Andrews area in eastern Douglas County. During the 2019 growing season, Foster Creek Conservation District worked with the 3 affected land owners and the WSU Extension to map the affected area and design a treatment plan. Funding for this effort has been provided by a USFWS Partners Grant, and USFWS logistical assistance has been provided throughout the life of the project.

In 2019, one land owner was able to mow a large portion of the affected area to reduce plant growth and increase the future effectiveness of herbicide applications. In the 2020 growing season, herbicide will be applied to all affected areas, and a native seed mix will be applied to the worst affected areas in order to provide beneficial ground cover and competition against future Scotch thistle emergence. Foster Creek Conservation District will continue to provide technical support to the affected land owners to ensure they are able to properly manage any further Scotch thistle infestations on their property.

# 2. Moses Coulee yellow star-thistle control

A yellow star-thistle infestation has been identified in central Douglas County. Two consecutive years of chemical treatment carried out by the WSU Extension have

severely weakened the population. The DCCWMA will work with land owners and the WSU Extension to design a third year treatment plan and implement appropriate control measures during the 2020 growing season.

### 3. Rush skeletonweed outreach and control

Numerous infestations of rush skeletonweed have been identified within Douglas County, and are in need of mapping and treatment. The DCCWMA will conduct outreach to land owners and provide technical assistance and weed control cost share.

# 4. West Foster Creek Russian knapweed riparian rehabilitation

A large infestation of Russian knapweed has been identified in a riparian area in northwest Douglas County. The riparian area in question provides transport for seed into a major waterway and further spread. The DCCWMA will partner with the two adjacent land owners to design a treatment plan and implement weed control and reseeding with native species, in order to decrease the distribution of Russian knapweed within that part of the county.

# 5. North Douglas houndstongue non-chemical control

In 2019, a population of houndstongue was identified in northern Douglas County. The DCCWMA will partner with the land owner to design a treatment plan, implement weed control, and re-seed with native species.

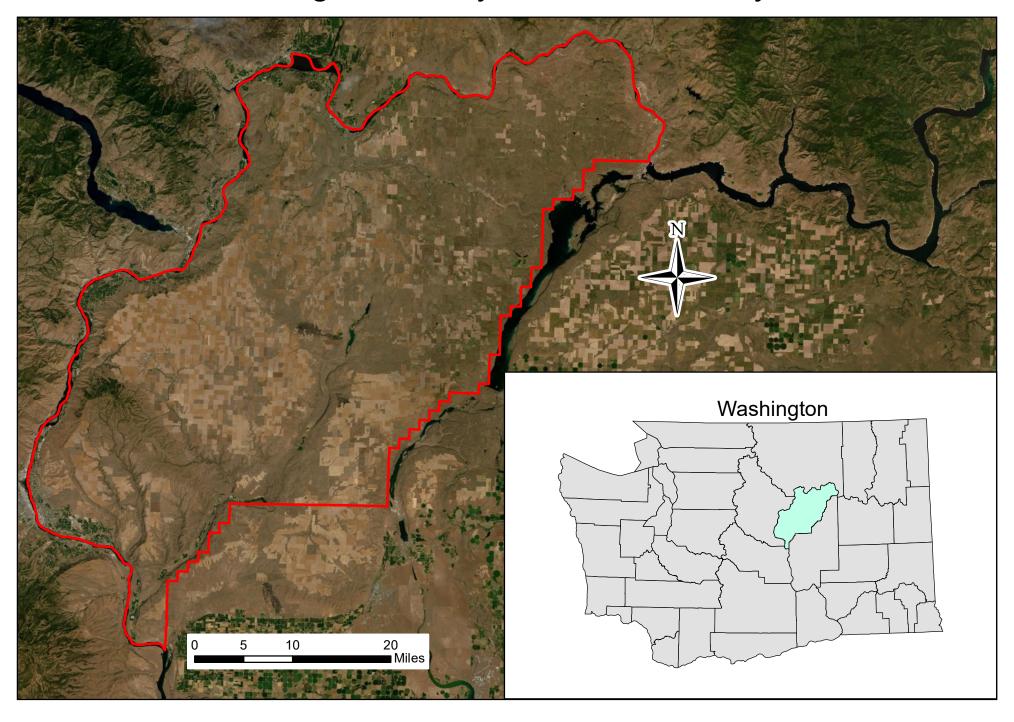
# **DCCWMA Funding Strategy**

The DCCWMA will require a sustained funding source in order to continue operations. The organization will first identify noxious weed control grant opportunities, prioritizing those that are intended for CWMA applicants. Such funding will allow the DCCWMA to continue to carry out projects, workshops, and field tours. As the group develops a reputation for successful project implementation and beneficial community engagement, grant funding for sustained operational costs will be obtained. Seeking sustained funding will require collaborative effort from all stakeholders.

# Conclusion

Douglas County encompasses a diverse landscape within central Washington which has a unique set of environmental and cultural conditions. All stakeholders share a distinct concern about noxious weeds, from the effects of noxious weeds on environmental quality, crop yields, rangeland productivity, to urban landscapes. The DCCWMA seeks to help solve weed problems and bring local people together to manage their land responsibly for the benefit of all.

# Douglas County CWMA Boundary



# **Douglas County Cooperative Weed Management Area Early Detection Rapid Response (EDRR) Focus Areas**

