# Cascade County Noxious Weed Management Plan

January 1, 2018 through December 31, 2019

Cascade County Weed & Mosquito Division

279 Vaughn S Frontage Rd, Great Falls, Montana 59404

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<u>Cascade County Commissioners</u>: Joe Briggs, Jim Larson, Jane Weber

<u>Weed Board</u>: Randy Setzer, Stan Meyer, Bruce Keaster, Timothy Wylder, Gene Hughes

<u>Weed & Mosquito Division Superintendent</u>: Joshua Blystone

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#### I. Introduction

The Cascade County Weed Management District (District), within the State of Montana (State), has been established under Montana Law, and is currently operating pursuant to the Montana County Weed Control Act (Act), Montana Code Annotated, Title 7, Chapter 22, Part 21.

Montana State Law mandates through the County Weed Control Act that each Montana County (or consolidated area) establish a Weed District and appoint a District Board to administer the County Noxious Weed Program. The Act specifies authority and responsibility.

Current copies of the law and administrative rules are kept on file with this plan at the District.

#### II. Cascade County General Weed Management Policy

The primary responsibility for noxious weed control lies with the landowner. Weed Districts are intended to provide information, guidance, enforcement, and some limited integrated management.

The priority rankings of goals, weed species, and control measures, in addition to pertinent human and environmental safety concerns, will all be considered before taking a particular action. In general, however, a high priority weed will be managed even in a low priority area. Likewise, even a low priority weed will be managed in a high priority area. Care will be taken to select the most effective method available for a particular situation within the confines of the long term environmental concerns associated with a particular management method. Environmentally sensitive areas such as riparian zones will be considered according to the problem present and the means of weed management that may be effective in a particular location which pose the least risk to the sensitive area. In areas where an environmentally safe and effective management method is not available, the primary focus will be to prevent the noxious weed from spreading out and away from the sensitive area.

Cascade County has an ongoing program to address the safety and well-being of the environment, the general public, and the workers involved. The District is continually maintaining and improving its facilities to provide for safe and effective storage of materials and equipment, as well as facilities for mixing, loading, maintaining and cleaning equipment used in pesticide application. Facilities for personal hygiene and decontamination for either daily routine or accidental situations are provided and upgraded as needed on an ongoing basis. Pesticide selections, container sizes, transportation methods and travel routes are continually scrutinized to minimize any ensuing hazard should an accident situation occur. Spill containment procedures and materials are continually upgraded as new technology becomes available, and employees are instructed in current procedures. Pesticide applicators are trained in the proper procedures for dealing with all facets of pesticide use, and are required to be licensed by the State of Montana to apply pesticides. Employees are also

presented with training on District procedures, requirements, and expectations. They are also trained to aid in maintaining a safe, healthy, and productive work environment. Other areas addressed include basic first aid, use of safety equipment, use of emergency equipment, defensive driving, and other topics of a relevant nature.

Cascade County encompasses approximately 1.7 million acres of land. The county contains roughly 1,100 miles of county maintained roads, 300 miles of State highway, 60 miles of interstate highway, and 200 miles of railroad right-of-way. There are three major rivers and several other significant streams located within the county. Overall crew size varies from year to year, but can include upwards of 18 employees, which are distributed among the areas as the season and the weed infestations require.

Equipment available for use/rent by the public includes several commercial grade sprayers on trailers or truck bed slide-ins. Herbicides are sold at cost only to those who are part of a Conservation District cost share program, or are a cooperator in a Montana Department of Agriculture Noxious Weed Trust Fund Grant. A limited amount of herbicides are sold to the general public that rent our sprayers at a marked up cost. Primary chemicals used by the District are selective for the control of broad-leafed plants. Herbicides purchased for use by the District are registered for use in the state of Montana, and are stored, transported, mixed, and applied according to EPA labeling and current Montana Department of Agriculture and MSU Extension guidelines. Particular products are evaluated on an ongoing basis to assess their placement in the District's herbicide application program. Individual applications are tailored by amount and specific product so as to most safely and effectively manage the specific target and situation, while providing the greatest protection for the surrounding environment. Selection of particular herbicide applications is based on the most current information that is available from industry and university recommendations.

#### III. Weed District Mission and Goals

Under the guidelines set by state law, the District has set as its primary goal the continual improvement of weed management activities within the District, and the consequent continual reduction in the overall noxious weed infestation within the District. Toward that end, the District has developed and adopted the following goals, listed here in decreasing order of priority:

- 1. Prevent the development of infestations of new noxious weeds that are not already located within the District.
- 2. Prevent the spread of noxious weeds already located within the District to new areas not currently infested.
- 3. Eradicate noxious weed infestations that are small and localized in nature where this is a possibility.
- 4. Reduce the amount of established noxious weed infestations wherever possible.

The District will work to achieve these goals using an integrated management approach. The following practices will be implemented to obtain the greatest effect against the noxious weed infestations present or threatening the District:

- 1. Increase the awareness of the noxious weed problem and its ramifications in all segments of the population within the District.
- 2. Support the development of biological control agents and implement these measures within the District as they become available.
- 3. Evaluate the presence, location, and flux of noxious weed infestations in and near the District.
- 4. Maintain an ongoing program to continually survey the District for the possibility of invasion by noxious weed species not currently present within the District.
- 5. Control known noxious weed infestations by chemical or other means that may be or may become available.

With the high priority placed on prevention of new weeds and/or new infestations, and the responsibilities of the District as set down in the Act, the District will pursue its actual control measures according to the following priority:

- 1. Infestations located on county or municipally owned or controlled lands and rights-of-way.
- 2. Infestations in disturbed areas, particularly gravel pits, borrow areas, utility and pipeline disturbances, etc., from which material will be moved to other areas, or where weeds may become established because previously existing vegetative cover has been compromised.
- 3. Infestations located on or near routes of transportation.
- 4. Infestations approaching or threatening water as environmentally safe effective treatments become available.
- 5. Infestations located on other public lands (i.e. federal and state, etc.).
- 6. Small infestations with the greatest possibility for eradication.
- 7. Infestations which are or may be containable.
- 8. Other infestations as resources allow.

#### IV. Noxious Weed Distribution and Abundance

Cascade County has adopted four general categories of noxious weeds, and has developed a general control strategy for each category of noxious weeds. This control strategy will be applied to each designated noxious weed species after considering the extent of infestation in the county, the availability of proven control techniques, the environmental consequences of control or no control, and the economics of control. The categories and management philosophies that will be applied to each species or situation are as follows:

# CATEGORY 1 PREVENTION OF NOXIOUS WEEDS FROM OUT-OF-DISTRICT (Priority level 1)

Emphasis: Awareness, Education, Scouting, Monitoring, and Prevention

Definition: Noxious weeds which are not found in Cascade County, but which have potential for imminent infestation.

Components of this category include, but are not limited to:

- 1. Operate a continuing education and awareness program to facilitate recognition and early detection of category 1 weed species if they enter Cascade County.
- 2. Prepare and operate educational displays of category 1 weed species.
- 3. Operate a monitoring program to identify category 1 weeds if they enter Cascade County.
- 4. Take immediate eradication measures as soon as a category 1 species is identified in Cascade County.
- 5. Identify and treat the causes of weed infestation to prevent the infestation or reinfestation of new noxious weeds in Cascade County.
- 6. If a category 1 weed is identified in Cascade County, it will be placed in category 2, and appropriate action will be taken as described under category 2.

Reason for category 1: There are many noxious weed species which have not been identified in Cascade County, but the potential for infestation is present. It is more economical and in keeping with the principles of integrated pest management (IPM) to initiate awareness and education programs before new noxious weed species invade Cascade County and become established.

#### CATEGORY 2 ERADICATION AND EXCLUSION

(Priority level 2)

Emphasis: Eradicating the noxious weeds where they are found, and stopping the spread of noxious weeds to other areas.

Definition: Noxious weeds whose distribution in Cascade County is limited to a small total area. Important note: Each noxious weed situation is unique. Sites differ in soil type, terrain, moisture availability, land management practices, background species composition, and a host of other variables which can directly or indirectly influence an attempt at eradication. Consequently, it is impossible to define an exact acreage figure where eradication (total elimination of a plant species) is possible or economically feasible. Therefore, eradication feasibility will be determined on a case by case situation with each specific site and weed species in question. Prevention of spread is a key factor in a successful category 2 program.

Components of this category include, but are not limited to:

- 1. Operate a continuing education and awareness program to increase recognition of category 2 weeds in Cascade County.
- 2. Prepare and show educational displays of Category 2 weeds.
- 3. Operate a monitoring program to identify and locate new infestations while they are still small.
- 4. Take immediate action to eradicate infestations as soon as a new invading species is identified in Cascade County.
- 5. Identify and treat the causes of infestation to prevent infestation or re-infestation of noxious weeds.
- 6. Maintain an extensive monitoring program in the immediate area(s) of new infestations to insure that all infestations are mapped and controlled.

Reason for category 2: All of the noxious weeds on the noxious weed list were originally small infestations which could have been treated effectively before the infestations spread and became established. Unfortunately and all too often, weed management efforts have been concentrated on noxious weeds which have already spread to the extent that eradication is no longer possible (Canada thistle or field bindweed etc.). Consequently, new invaders which were not yet causing concern and economic loss were ignored until they became established, making eradication impossible.

#### CATEGORY 3 CONTAINMENT AND PREVENTION

(Priority level 3)

Emphasis: Noxious weed species in this category have become well established and have spread to the extent that eradication in Cascade County is no longer possible. Therefore, emphasis in this category is placed on containment and prevention of the spread of these species to uninfested areas, and on establishing effective biological control or other management measures where possible.

Definition: Noxious weeds whose distributions are less than county wide, and much of Cascade County still remains free from presence of these species.

Components of category 3 include, but are not limited to:

- 1. Maintain a solid prevention program to contain these noxious weeds in their present geographic locations.
- 2. Take action to eradicate new infestations and small infestations of these species as they are located.
- 3. Aggressively manage these species when they are found along transportation rights-of-way or other areas that could facilitate rapid dispersion.
- 4. Deploy biological control agents when successful agents are available.
- 5. Employ other methods of management to assist in reducing larger infestations where feasible.

Reason for category 3: Well established noxious weeds cannot be eradicated with current technology. Eradication of new spots and small infestations may still be possible. Therefore, managing existing larger infestations and preventing the spread of these noxious weed species to new areas is a realistic goal. Biological control agents are now established and becoming increasingly effective at many sites. Infestation reductions and density decreases are taking place in many of these areas. Containment programs buy land managers more time to establish other management practices or biological control agents while preventing the spread of noxious weeds to new places.

#### CATEGORY 4 MAINTENANCE AND MANAGEMENT

(Priority level 4)

Emphasis: Education, Maintenance, and Management

Definition: Those noxious weed species that are generally present throughout Cascade County.

Components of category 4 include, but are not limited to:

- 1. Deploy biological control agents where successful agents are available.
- 2. Employ herbicide and other management methods to reduce the impact of these species to lands under direct District responsibility, and to reduce their spread from these areas.
- 3. Promote land management practices which prevent the development and perpetuation of these noxious weed infestations.
- 4. Provide information and assistance to land managers with infestations of these species
- 5. Require preventive and mitigation actions to reduce the infestation of these weeds in disturbed areas.

Reason for category 4: As with category 3 species, category 4 weeds have spread to the extent that eradication is no longer possible. These species are already widely spread throughout Cascade County. Because of the extent of these infestations, the only reasonable approach to

management is to employ practices which promotes mitigation. Biological control agents will be introduced when available. Other long term vegetation management practices will be promoted. Designing mitigation measures (revegetation, management practices, permanent ground covers, nurse crops etc.) into land disruptive projects will reduce the impacts of these noxious weeds.

#### CATEGORY 5 WATCH LIST (Not Montana listed noxious weeds)

Emphasis: Monitoring and Observation

Definition: Plants that may or may not be present in the county that are being monitored and evaluated to determine if they exhibit the characteristics which might warrant their designation as noxious weeds.

Components of category 5 include, but are not limited to:

- 1. Determine if these plants are present in Cascade County.
- 2. Observe the characteristics and growth habits of the plants if any are found.
- 3. Evaluate the possible threat of these species to Cascade County.
- 4. Assist landowners that wish to attempt to remove these species from their properties.

Reason for category 5: New plant species are continually being brought into Montana either purposely or by accident. Some of these plant species are already present and established, but are not designated State listed noxious weeds. Some of these species do demonstrate weedy characteristics. Early determination of the actual threat to this area, a noxious designation if appropriate, and early management measures, could prevent them from becoming serious problems here.

#### **CATEGORY 6** Regulated Plants (*Not Montana listed noxious weeds*)

Emphasis: Monitoring, Observation, and spread prevention were applicable

Definition: These regulated plants are not native to Montana, and have the potential to have significant negative impacts on native ecosystems. These plants may not be intentionally spread or sold other than as a contaminant in agricultural products. The State recommends research, education, and prevention to minimize the spread of the regulated plant.

Components of category 6 include, but are not limited to:

- 1. Observe the characteristics and growth habits of the plants if any are found.
- 2. Evaluate the possible threat of these species to Cascade County.
- 3. Assist landowners that wish to attempt to remove these species from their properties.

Reason for category 6: Some of these plant species are already present and well established in Cascade County, but are not designated State listed noxious weeds. Some of these species do demonstrate weedy characteristics and can pose a threat to native ecosystems. Early determination of the actual threat to this area, a noxious designation if appropriate, and early management measures, could prevent them from becoming serious problems here.

#### NOXIOUS WEED SPECIES CATEGORY DESIGNATION IN CASCADE COUNTY

<u>Category 1</u> (Distribution: Not known to be present in Cascade County)

Dyers woad, yellow starthistle, common crupina, tansy ragwort, meadow hawkweed, orange hawkweed, tall buttercup, rush skeletonweed, flowering rush, phragmites, curly leaf pondweed, tall buttercup, Scotch broom, blueweed, Eurasian water milfoil, St. Johnswort, and common buckthorn.

<u>Category 2</u> (Distribution: Isolated areas if present in Cascade County)

Purple loosestrife, knotweed complex, salt cedar, sulfur cinquefoil, yellow flag iris, yellow toadflax, and perennial pepperweed, common tansy, Russian knapweed, and diffuse knapweed.

<u>Category 3</u> (Distribution: Small to large areas throughout Cascade County)

Dalmatian toadflax, spotted knapweed, leafy spurge, ox-eye daisy, houndstongue, whitetop, and hoary alyssum.

Category 4 (Distribution: Commonly found in areas throughout Cascade County)

Field bindweed, and Canada thistle.

**Category 5** (Distribution: Monitoring where present)

Bittersweet nightshade and poison hemlock.

<u>Category 6</u> (Distribution: May or may not be present; management where appropriate)

Cheatgrass, Hydrilla, Russian Olive, Brazilian waterweed, Parrot feather watermilfoil.

#### V. <u>Estimated Costs of the Program</u>

**Expenses**: The total approved budget expenses for the District for the fiscal year of July 1<sup>st</sup> 2017 to June 30th 2018 is \$597,650.00.

The salaries and wages portion of the budget (#100 line items) is \$274,740.00; Operating supplies and chemicals portion of the budget (#200 line items) is \$120,700.00; Vehicle mileage, training services and other services portion of the budget (#300 line items) is \$55,050.00; Insurance portion of the budget (#400 line items) is \$22,160; Transfers to other funds portion of the budget (#800 line items) is \$125,000.

Fiscal year 2016 -2017 expenses totaled \$361,010.61

The District also receives a \$7,500 grant from the Noxious Weed Trust Fund every year for various expenses, namely equipment upgrades.

**Revenues**: The total approved budget revenues for the District for the fiscal year of July 1<sup>st</sup> 2017 to June 30th 2018 is \$364,522.00.

The tax revenue portion of the budget (#31 line items) is \$260,091.00.

The entitlement revenue portion of the budget (#33 line items) is \$7,036.00

The weed control spraying portion of the budget (#34 line items) is \$81,000.00.

The miscellaneous portion of the budget (#36 line items) is \$1,785.00.

The transfer from perm levy portion of the budget (#38 line items) is \$14,610.00.

Additional revenue may be generated from a \$50.00 fee per Proposed Weed Management Plan completed by the District, necessary when applying for subdivision and special use application permitting through the County Planning Office.

#### VI. Compliance Strategy

The District shall employ and enforce the Montana Weed Control Act, other appropriate law, and supplemental weed policy in a fair and consistent manner.

If the District receives a complaint of noxious weeds being present on a property, knows there are noxious weeds present on a property, or believes there are noxious weeds present on a property, a representative of the District investigates the matter to pursue voluntary compliance. If the responsible party does not respond to notifications from the District, or refuses to comply, they are found to be in non-compliance and actions from the District then follow the noncompliance process (Montana Code Annotated 7-22-2131 through 7-22-2134).

Areas of compliance enforcement focus for the years 2018 through 2020 will be:

- 1. Properties within or around State noxious weed trust fund grant cooperative weed management project areas
- 2. Properties in, or near, high traffic flow areas that increase likelihood of weed seed spread
- 3. Properties that receive a complaint of possible noxious weeds being present
- 4. County zoned properties within, and directly around, Great Falls

#### VII. Attachments and Addenda

State Noxious Weed List
MOU with the City of Great Falls
Proposed Noxious Weed Management Plan Form
Right of Way Weed Management Agreement Form
Notice of Noxious Weeds and Request for Inspection Letter
Notice of Non-Compliance Letter
Pesticide Discharge Management Plan
Pesticide Use Notice
Pesticide Spill Response Plan

### VIII. Signatures of Adoption

Approved by the Cascade County Wee	d Management Board on
Gene Hughes -Board Member	Timothy Wylder-Board Member
Bruce Keaster -Board Member	Stan Meyer-Board Member
Randy Setzer -Board Chair	Joshua Blystone - Division Superintendent
PASSED AND ADOPTED by the Board of Cascac 	de County Commissioners this day of *APPROVED AS TO LEGAL CONTENT:
Jim Larson, Commissioner	Carey Ann Haight, Chief Deputy Civil Attorney
Joe Briggs, Commissioner	
Jane Weber, Commissioner	
ATTEST:	
Rina Fontana Moore County Clerk and Record	lor.