

NOXIOUS WEED MANAGEMENT PLAN for FREMONT COUNTY, COLORADO Including the City of Canon City and City of Florence

Background: In 1992 Fremont County developed and implemented a noxious weed management plan, which was written to comply with the requirements of HB90-1175; The “Colorado Weed Management Act” which was signed into law on May 7, 1990. The 1990 act was superceded by the “Colorado Noxious Weed Act” (HB96-1008) on May 23, 1996. In 2003 the Colorado General Assembly passed and Governor Owens signed into law a number of revisions to the Colorado Noxious Weed Act. Specifically, these revisions directed the Commissioner of Agriculture to restructure the state’s noxious weed list, and implement state noxious weed management plans for specific noxious weed species. The Noxious Weed Management Plan for Fremont County is written to conform with the 1996 law and to the 2004 revisions of the “**Colorado Noxious Weed Act**” (‘ACT’).

Requirements of the Colorado Noxious Weed Act

Among other things, the Colorado Noxious Weed ACT of 1996 requires each county and municipality to adopt a noxious weed management plan. The plan is to address the management of the state noxious weeds “Designated by rule”. Each county or municipality may declare additional noxious weeds for inclusion in the plan, but only after a public hearing. The Colorado Department of Agriculture has developed rules pertaining to the 1996 ACT; and has adopted new permanent rules (119-CR 5 (2003) of 2004) for the administration and enforcement of the ‘ACT’. The most significant changes made to the ‘ACT’ in 2004 pertain to the classification of noxious weeds into one of several categories (C.R.S.35-5.5-108).

- 1. List A:** rare noxious weed species that are subject to eradication wherever detected statewide in order to protect neighboring lands and the state as a whole. All populations of List A species are designated by the commissioner for eradication.
- 2. List B:** noxious weed species for which the commissioner, in consultation with the state weed advisory committee, local governments, and other interested parties, develops and implements state noxious weed management plan designed to stop the continued spread of these species.
- 3. List C:** noxious weed species for which the commissioner, in consultation with the state weed advisory committee, local governments, and other interested parties, will develop and implement weed management plans designed to support the efforts of local governing bodies to facilitate more effective, integrated weed management on public and private lands. The goal of such plans will not be to stop the continued spread of these species but to provide additional educational, research and biological control resources to jurisdictions that choose to require management of List C species.
The *current State A,B,C Listed weed species is attached as addendum “A” to this management plan.*

The 1996 Noxious Weed Act also requires that each municipality shall provide for the administration of their weed management plan. The 'ACT' allows for cooperative planning and plan administration among counties and municipalities. Additionally, the 'ACT' establishes the position of State Weed Coordinator in the Colorado Department of Agriculture, and creates a State Noxious Weed Management Fund. The Department of Agriculture may make special grants from this fund to local entities for the management of State noxious weeds.

Objectives of this Plan

The main objective of this plan is to meet requirements of the Colorado Noxious Weed Act of 1996 and revisions of 2004. This plan provides policy and guidance for the control and reduction of noxious weeds in Fremont County. This plan is for the use of all landowners and managers, both public and private.

Policy Statement

It is the policy of the Fremont County Weed Advisory Board that Integrated Vegetation Management principles be used in the control and reduction of noxious weeds. The Colorado Noxious Weed Act of 1996 defines Integrated Vegetation Management as "the planning and implementation of a coordinated, program utilizing a variety of methods for managing noxious weeds, the purpose of which is to achieve desirable plant communities. Such methods may include, but are not limited to, education, preventive measures, good stewardship and the following techniques:

The techniques listed and described are biological, chemical, cultural and mechanical control measures. Of these techniques, chemical control can be most controversial. Therefore, county sponsored herbicide activity will be conducted only by certified public or commercial applicators, as licensed by the State of Colorado.

It is understood that all applicators will carry such liability insurance and/or bonding as is required for certification and further that any chemicals used will be applied strictly-according to the manufacturers label. The Fremont County Weed Advisory Board assumes no liability for the miss-use of chemicals, and relies solely upon the integrity and judgment of the applicator to apply herbicides properly.

The Fremont County Weed Manager will advise landowners of the need and feasibility of weed control. However, only the Certified applicator will make recommendations of the suitable chemicals and method of application. Private landowners will be encouraged to do their own herbicide control work where they wish to do so. They will also be advised to strictly follow the manufacturers label when applying chemical herbicides.

History and Current Situation

Fremont County has had a roadside (herbicide) control program and private landowner (volunteer) weed control off and on since 1989. The efforts over the years have helped control weeds. In accordance with the 1992 Weed Control Plan, Leafy spurge, Russian knapweed, and Diffuse knapweed were the primary targets. Some control work has been done on Canada thistle, but control of this weed was not a priority.

For the most part, herbicides have been quite effective in limiting the spread and reducing the density of weed infestations. However, in some areas, chemical control efforts have been less successful. There are infestations of Leafy spurge and Knapweed growing near streams and in riparian areas. These areas have been targeted for biological control. When chemical control has become a necessity in these areas, only herbicides which are approved for aquatic use are used to reduce the threat of water pollution.

Insects that attack specific noxious weeds have been released each summer since 1991. Two species of seed head gall flies and stem-boring beetles have been released at several Diffuse knapweed sites. Stem-boring moths and weevils have been released on Dalmatian toadflax. The results have been encouraging but not dramatic. Over the same time period, four species of root feeding flea beetles were released on several Leafy spurge sites and three species of seed head weevils and one stem-boring weevil species were released on Musk thistle. Results on Spurge and Musk Thistle have been dramatic, one area in the Tallahassee Creek drainage has been brought to total control by the flea beetles. Other individual areas of Musk thistle have been totally decimated by the seed head weevil

Targeted Weeds

Weeds covered under this plan are all included in the state noxious weed list designated by rule. In Fremont County, the following twelve weeds will receive priority for control:

1. **Leafy Spurge [Euphorbia esula]**
2. **Russian Knapweed [Acroptilon repens]**
3. **Diffuse Knapweed [Centaurea diffusa]**
4. **Canada Thistle [Cirsium nutans]**
5. **Musk Thistle [Carduus nutans]**
6. **Hoary Cress "whitetop" [cardaria draba]**
7. **Spotted Knapweed [Centaurea maculosa]**
8. **Yellow Toadflax [Linaria vulgaris]**
9. **Dalmatian Toadflax [Linaria genistifolia]**
10. **Houndstongue [Cynoglossum officinale]**
11. **Tamarisk [Tamarix ramosissima]**
12. **Bull Thistle [Cirsium vulgare]**

Field bindweed, Jointed goatgrass and Kochia are listed in the State's 'C' List but are not considered that much of a problem in Fremont County. If infestations of weeds not included on the list become a problem, the required public hearings will be held, and weeds will be added to the Fremont County list as needed.

Coordination and Cooperation

The Weed Control Manager will coordinate noxious weed control efforts among various landowners, including private, municipal, county, federal and state landowners and managers. In Fremont County, this includes, but is not limited to the following:

- Fremont County
- Canon City
- City of Florence
- Farmers, ranchers and landowners
- School Districts
- Irrigation companies
- Canon City Recreation District
- Colorado State Land Board
- Colorado Division of Wildlife
- U.S. Bureau of Land Management
- U.S. Forest Service
- Colorado Department of Transportation

Cooperative agreements and memorandums of understanding will be entered into as needed.

Education

The Weed Control Manager will seek out and disseminate educational materials concerning the identification, propagation, and control of noxious weeds. Various outreach and educational tools will be utilized, such as news releases, slide presentations, traveling exhibits, and field trips. Target groups include schools, farm and ranch organizations, service organizations, recreational groups, and individual landowner

Biological Management

Biological management of noxious weeds will continue to grow as more biological controls are developed. The use of biological agents will be integrated with other methods of weed control to lessen the use of chemicals whenever possible.

Noxious weed infestations in waterways and in high underground water areas are of prime concern. Although we have had good success using flea beetles on Leafy spurge and seed head weevils on thistle in some locations, there are different insects coming on the market that may prove even more effective. Fremont County will test new control agents as they become available, and continue to use agents that have proven effective.

One of the key elements of a successful biological control program is monitoring. Fremont County has been fortunate to have the services of the 4-H Entomology Club to monitor insect populations and their effects on weeds. We hope to continue this liaison in the future. In any event, monitoring will continue to be an integral part of Fremont County's biological weed control program.

Chemical Management

The use of herbicides is expected to remain our most effective tool for the reduction and control of noxious weeds. For example, there are no biological control agents available at the present time to attack Russian knapweed or hoary cress. At present, Russian knapweed is the most wide-spread and persistent noxious weed in Fremont County. Hoary cress infestations are currently growing and have become a problem in some areas of Fremont County.

Management of these weeds, as well as those subject to biological controls, calls for the sensible application of chemical herbicides. According to the policies stated previously, Fremont County will use chemical control methods when appropriate.

Cultural and Mechanical Management

Cultural and mechanical control methods of noxious weeds are closely related. In essence, they both call for intensive and constant management of the vegetative community. The common key is to create conditions favorable for desirable plants at the expense of undesirable noxious weeds. When properly applied, these methods are effective as control measures as well as preventive measures.

Tools include proper irrigation, mowing, burning, properly timed livestock grazing, plowing and seeding, to mention a few. In the long run, the intelligent application of these tools can be as effective as biological or chemical control methods.

The implementation of cultural and mechanical control methods is complicated. Many landowners do not understand the complex interrelationships involving plant competition, soil characteristics, climate and land use practices. However, the use of these methods will be encouraged whenever the opportunities arise.

Monitoring and Mapping

Tracking the invasion and control of noxious weeds in Fremont County requires an effective system of monitoring. Previous efforts have consisted of plotting weed infestations and control activities on various maps as time allowed. The results were several sets of maps that present a picture of the task at hand. U.S. Bureau of Land Management, in cooperation with other federal, state and Fremont County mapped the known noxious weeds infestations in Fremont County in 1998 and 1999, using the Geographic Positioning System (GPS) and Geographic Information Systems (GIS) to create maps. These maps can be easily updated, providing an understandable record of vegetative changes over time. The map information is stored in a digital format that can be overlaid with other maps that display previous vegetation, roads, streams, land status and other

features of interest. Matching funds were made available to initiate the mapping of noxious weeds.

Funding

The noxious weed control program in Fremont County is funded by various entities, including Fremont County, the Fremont Conservation District, Canon City, and landowners. These monies are deposited in the county "weed fund". Expenditures from this fund are approved by the Fremont County Commissioners and monitored by the County Finance Officer. Historically, weed control, funds have been generated locally in response to the Colorado Weed Management Act of 1990.

The Colorado Noxious Weed Act of 1996 has superseded the 1990 Act. The 1996 Act provides for appropriations by the state legislature "for the purpose of funding noxious weed management projects". The Colorado Department of Agriculture is authorized to award grants from these funds to local weed control agencies.

The Weed Control Manager, at the direction of the Weed Advisory Board, and with the consent of the County Commissioners, will apply for such grants as needed.

Review and Amendments

The 1996 Colorado Noxious Weed Act requires that local noxious weed management plans be reviewed at least once every three years. Implicit in this language is that the Weed Advisory Board can conduct review and updating at any time. The County Commissioners must approve any changes to the Noxious Weed Management Plan. Mandatory review of this plan will be conducted by May 31, 2011.

*In Spring 2007, the Fremont County Board of County Commissioners approved the **Fremont County Management and Control of Noxious Weeds; Priorities and Procedures**. This document outlines the priorities and procedures to be taken to ensure that noxious weeds are controlled on all property within Fremont County. These specific priorities and procedures are in affect and attached to this plan as addendum "B" in its entirety.*

