

Grand County Noxious Weed Management Plan
Adopted in 1997
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I. Introduction

A. Statement of Compliance

This plan complies with the Colorado Noxious Weed Act (Title 35, Article 5.5, C.R.S) as revised by the 2004 Colorado Legislature. The purpose of the Grand County Noxious Weed Management Plan is to overview the control of targeted noxious weeds within Grand County as determined by the Colorado Noxious Weed Act. The targeted noxious weeds to be controlled are designated within this plan. Control is aimed at eradicating, reducing, suppressing or containing populations of non-native, invasive noxious weeds which pose a threat to the environment and economy of Grand County by reducing wildlife habitat, agricultural production, property value, and threatening the native plant population unique to Grand County.

B. County Policies

Upon acceptance of these revisions, the Grand County Board of County Commissioners will approve the amended Grand County Noxious Weed Management Plan (CRS§35-5.5-105). Grand County Division Natural Resources will then implement the Grand County Noxious Weed Plan.

The Grand County Division of Natural Resources will control weeds on county properties, on governmental properties and right of ways under intergovernmental cooperative agreements between the federal, state, county and local governments found within the county, and on private property under contract with the private property owner. In addition, the Colorado State University Cooperative Extension Service, the Middle Park Soil Conservation District, and the Natural Resources Conservation Service will work in conjunction with the Division of Natural Resources with landowners for the management of weed populations found on their properties. Requests for assistance from the public will be directed to the Grand County Division of Natural Resources, Grand County Colorado State University Extension Service and Natural Resources Conservation Service.

C. Severity of Noxious Weeds in Grand County

At the present time Grand County has a manageable weed problem. Due to the invasive nature of many noxious weeds, a major weed problem could develop in a very short period of time without prompt identification and diligent control. The increased soil disturbance through the subdivision of land into residential and recreational areas, as well as increased use of public and private lands may create a noxious weed problem. It is imperative that the Grand County Weed Control Program continues to monitor weed populations throughout the county and initiate control programs before weed densities become unmanageable.

D. Operating Budget

The Grand County Noxious Weed Program is administered by Grand County Division of Natural Resources. Funding sources include, but are not limited to, Grand County budgets, cooperative funding, grants and revenue producing contracts.

E. Public Comment

Public comment and participation is encouraged. Public comments will be taken at the Grand County Division of Natural Resources, Colorado State University Extension Service Office or at any meeting of the Grand County Weed Advisory Board. Grand County Weed Advisory Board meeting schedules will be posted at the Grand County Courthouse.

F. Grand County Weed Advisory Board

The Grand County Commissioners will appoint the Grand County Weed Advisory Board (CRS§35-5.5-107). The Grand County Weed Advisory Board will provide policy and advice for weed control in Grand County with the approval of the Grand County Board of County Commissioners. Powers for the Weed Advisory Board are outlined in the Colorado Noxious Weed Act under the provision of CRS§35-5.5-107.

II. SITUATION STATEMENT OF THE NOXIOUS WEED PROBLEM IN GRAND COUNTY

A. Under the Colorado Noxious Weed Act, the Colorado Department of Agriculture has appointed a Colorado State Noxious Weed Advisory Board. The Colorado State Noxious Weed Advisory Board has designated the following noxious weed species and management goals below:

1. Any designated Colorado “A List” Species. List A species are rare noxious weeds for which state wide eradication is the goal. To date the List A species are:

African rue (*Peganum harmala*)
Camelthorn (*Alhagi pseudalhagi*)
Common crupina (*Cupina vulgaris*)
Cypress spurge (*Euphorbia cyparissias*)
Dyers woad (*Isatis tinctoria*)
Giant salvinia (*Salvinia molesta*)
Hydrilla (*Hydrilla verticillata*)
Meadow knapweed (*Centaurea pratensis*)
Mediterranean sage (*Salvia aethopsis*)
Medusahead (*Taeniatherum caput-medusae*)
Myrtle spurge (Euphorbia myrsinites)
Orange hawkweed (Hieracium aurantiacum)
Purple loosestrife (*Lythrum salicaria*)
Rush skeletonweed (*Chondrilla juncea*)
Sericea lespedeza (*Lespedeza cuneata*)
Squarrose knapweed (*Centaurea virgata*)
Tansy ragwort (*Senecio jacobaea*)
Yellow starthistle (*Centaurea solstitialis*)
Denotes species presently found in Grand County

2. List B noxious weed species are weed species with discrete statewide distributions that are subject to eradication, containment or suppression in order to stop their continued spread. To date, these List B Species are:

Absinth wormwood (Artemisia absinthium)
Black henbane (Hyoscyamus niger)
Bouncingbet (Saponaria officinalis)
Bull thistle (Cirsium vulgare)
Canada thistle (Cirsium arvense)
Chinese clematis (Clematis orientalis)
Common tansy (Tanacetum vulgare)
Common teasel (Dipsacus fullonum)
Dalmatian toadflax (Linaria dalmatica)
Dame's rocket (Hesperis matronalis)
Diffuse knapweed (Centaurea diffusa)
Eurasian watermilfoil (Myriophyllum spicahim)
Hoary cress or Whitetop (Cardaria draba)
Houndstongue (Cynoglossum officinale)
Leafy spurge (Euphorbia esula)
Moth mullein (Verbascum blattaria)
Musk thistle (Carduus nutans)
Oxeye daisy (Chrysanthemum leucanthemum)
Perennial pepperweed (Lepidium latifolium)
Plumeless thistle (Carduus acanthoides)
Quackgrass (Elytrigian repens)
Redstem filaree (Erodium cicutarium)
Russian knapweed (Centaurea repens)
Russian olive (Elaeagnus angustifolia)
Saltcedar (Tamarix ramossissima)
Scentless chamomile (Matricaria perorate)
Scotch thistle (Onopordum acanthium)
Spotted knapweed (Centaurea maculosa)
Spurred anoda (Anoda cristata)
Sulfur cinquefoil (Potentilla recta)
Venice mallow (Hibiscus trionum)
Wild caraway (Carum carvi)
Yellow nutsedge (Cyperus esculentus)
Yellow toadflax (Linaria vulgaris)
Denotes species presently found in Grand County

3. C List Species are species of noxious weed that are so widespread throughout Colorado that they are targeted for improved management. To date the List C species are:

Cheatgrass (Bromus tectorum)
Chicory (Cichorium intybus)
Common burdock (Arctium minus)
Common mullein (Verbascum thapsus)

Field bindweed (Convolvulus arvensis)
 Halogeton (Halogeton glomeratus)
 Johnsongrass (Sorghum halepense)
 Jointed goatgrass (Aegilops cylindrica)
 Perennial sowthistle (Sonchus arvensis)
 Poison hemlock (Conium maculatum)
 Puncturevine (Tribulus terrestris)
 St. Johnswort (Hypericum perforatum)
 Velvetleaf (Abutilon theophrasti)
 Volunteer rye (Secale cereale)
 Wild-prose millet (Panicum miliaceum)
Denotes species presently found in Grand County

B. Description of Grand County

1. Major Natural Features:
 - a. Lakes and Reservoirs: Grand Lake, Lake Granby, Williams Fork Reservoir, Shadow Mountain Reservoir, Windy Gap Reservoir, Wolford Mountain Reservoir, Willow Creek Reservoir and Meadow Creek Reservoir.
 - b. Major River Drainages: Fraser, Colorado, Willow Creek, Williams Fork, Corral Creek, Blue, Big Muddy and Troublesome.
 - c. Major Mountain Ranges: The Middle Park Valley is bordered on the north and east by the Continental Divide. The Gore Range borders the West end. Elevations range from 7,300 to over 13,000 feet.
2. Landowner Statistics
 - a. US Forest Service approximately 571,563 acres
 - b. State of Colorado 48,434 acres
 - c. Rocky Mountain National Park 96,587 acres
 - d. Bureau of Reclamation 8,985 acres
 - e. Division of Wildlife 21,507 acres
 - f. Bureau of Land Management 144,047 acres
 - g. Private land approximately 350,000 acres
3. Major Soil Types:
 - a. Soils on low terraces, flood plains and adjacent fans and side slopes and ridges: Cumulic Cryaquolls – Tine, Aaberg-Waybe-Binco and Harsha-Leavitt
 - b. Soils on mountainsides, ridges and fans: Cimmarron-Mayoworth-Mord, Quander-Youga-Anvik and Rock outcrop – Dalquist-Stunner
 - c. Soils on the high mountain and alpine slopes: Frisco-Peeler-Unita, Scout-Upson, Cowdrey-Gateway, Leighcan-Newcomb- Rock outcrop and Meredith-Bross-Mirror
4. Cities and Towns within Grand County include: Granby, Grand Lake, Fraser, Hot Sulphur Springs, Kremmling and Winter Park
5. Unincorporated Private Grand County towns include: Tabernash and Parshall

6. Unincorporated subdivisions: Approximately 700 are identified in County records

C. County Awareness of Noxious Weeds

1. *West Grand County* – Historically West Grand County has aggressively controlled noxious weeds because of private agricultural concerns. This end of the county consists primarily of ranches and public lands, although “small parcel” development is now taking place. Invasive noxious weed problems are increasing on lands being developed for rural housing and/or subdivisions.

2. *East Grand County* – Education and outreach programs have increased the awareness for the need of noxious weed control. The large influx of new owners and developments of “small parcels” along with the associated land disturbance has created countless new noxious weed infestations. In response Grand County Planning and Zoning Department is now requiring the revegetation of disturbed sites.

D. Transportation Corridors

1. Major Transportation Corridors

a. Colorado Department of Transportation (CDOT) Highways – 40, 34, 9, 134 and 125 (336 lane miles)

b. County roads (1620 lane miles)

c. United States Forest Service (USFS) and Bureau of Land Management (BLM) Service Roads (500 lane miles)

d. Others: Railroad (63 mainline miles) and power line rights-of-way.

Continuing construction, improvement and maintenance operations on state and county rights-of-way, power lines and railroad rights-of-way create effective passageways for the proliferation of noxious weeds. All such areas require a continual monitoring program for noxious weed identification and control.

E. State and Federal Lands

The majority of lands within Grand County are public lands (74%). Grand County has an assistance agreement with USFS, BLM, Colorado Division of Wildlife (DOW), the Colorado State Land Board, CDOT and the Middle Park Habitat Partnership Program (HPP) that enables Grand County Division of Natural Resources cooperatively to manage noxious weed infestations on public lands. Grand County Weed Advisory Board will adhere to state guidelines in CRS§35-5.5-111 for cooperating with state and federal agencies.

III. PRIORITIES AND GOALS

A. Public Education

The Grand County Division of Natural Resources, Natural Resources Conservation Service and the Colorado State University Cooperative Extension Office will place timely articles in local papers, newsletters and other publications as educational pieces. Additionally, a spokesperson will be provided for local

community and civic organizations as part of the educational program. Public education will be conducted through the use of posters, seminars, newspaper articles, radio interviews, newsletters, FFA meetings, 4-H meetings, public meetings and direct contact with the public.

B. Operation (Integrated Pest Management) Priorities

The Grand County Weed Control District will promote an Integrated Pest Management Program (CRS§35-5.5-102), which includes chemical, mechanical, biological, cultural and revegetation methods for the control of noxious weeds. Listings of commercial applicators that may apply restricted-use herbicides on lands within the county are on file with the Division of Natural Resources. In addition, a listing of local contractors to assist landowners with reseeding and other control practices is on file with the Division of Natural Resources.

C. Economic Priorities

Best management practices (BMP) will be implemented based on environmental concerns and economic feasibility.

D. Environmental Priorities

Environmental concerns including human interactions, water, air, wildlife, fisheries, amphibians, soil, plants and beneficial insects will be considered when selecting and implementing a specific weed control program.

E. Endangered Species

1. Osterhous Milkvetch (*Astragalus osterhoutii*) -approx. 1,019 acres
R81W, T2N, Sec. 14,24,4,9,13,23,24,25,26,36
R80W, T1N, Sec. 33,9
R81W, T3N, Sec.32
2. Penland Penstemon (*Penstemon penlandii*) – approx 835 acres
R79W, T2N, Sec. 29,30,31,32
R79 ½ W, T2N, Sec. 13

F. Short Term Goals (Present -2010)

Grand County Division of Natural Resources will:

1. Continue to develop public education and outreach programs, focusing on identification, prevention and control of targeted weeds.
2. Increase efforts to aid private landowners, both large and small, to identify and control weeds.
3. Continue to maintain reasonable control of the targeted weeds through GIS mapping to monitor the progress of the noxious weed control program
4. Identify and monitor new noxious weed infestations
5. Continue efforts in gaining the cooperation of all landowners, private and public, in noxious weed control.
6. Continue cooperative agreements with federal and state land management agencies.

G. Long Term Goals (Present – 2015)

Grand County's long-term goal is to contain and reduce the present infestations of noxious weeds found in Grand County. In accordance with the Colorado Noxious Weed Act (C.R.S. §35-5.5-101, *et seq.*) total eradication of rare noxious weed species found in Grand County is a top priority. The Division of Natural Resources will continue its efforts to prevent the introduction of additional noxious weed infestations through educational and outreach programs for both the public and private sectors. BMP's including chemical, mechanical, biological and re-vegetative methods will be implemented.

IV. Plan of Work Implementation

A. Education

Emphasis is placed on education and will be achieved through the use of a multimedia package that will target desired audiences. These following programs will be utilized to reach our educational objective:

1. Articles will be placed in local publications
2. Local radio broadcasts for general information will be used to reach the public.
3. A speaker will be provided upon request for any organization's meetings (i.e. federal and state agencies, Board of Realtors, homeowners associations, builders associations, etc.)
4. Seminars will be conducted in various regions of the county to educate the public on noxious weed identification and control.

B. Description of Integrated Weed Management Techniques

Grand County Weed Control District will establish and set criteria for management of the noxious weed species found within the county, using an integrated management program. The district will cooperate with Grand County Division of Natural Resources, CSU Cooperative Extension Service and NRCS to help landowners develop and implement their Integrated Pest Management Program. The district may enter into cooperative agreements with other governmental agencies, local municipalities and private landowners for the implementation of their Integrated Pest Management Program where appropriate. For this plan the following definitions for the control measures will be used.

1. Cultural Control means those methodologies or management practices conducted to favor the growth of desirable plants over undesirable plants, including, but not limited to, maintaining an optimum fertility and plant moisture status in an area, planting at optimum density and spatial arrangement in an area, and planting species most suited to an area (CRS §35-5.5-103c).
2. Mechanical Control means those methodologies or management practices that physically disrupt plant growth, including but not limited to, tilling, mowing, burning, flooding, mulching, hand-pulling and hoeing (CRS §35-5.5-103d).

3. Biological Control means the use of organisms such as sheep, goats, cattle, insects and plant diseases to disrupt the growth of undesirable plants (CRS§35-5.5-103a).

4. Chemical Control means the use of herbicides or plant growth regulators to disrupt the growth of undesirable plants (CRS§35-5.5-103b).

Management of the various undesirable plants will vary depending on the site where the plant is located. The integrated management options listed above are meant to provide various management techniques for controlling the noxious weeds in the various environmental sites they are found. Additional combinations of management techniques are possible which may be submitted by private landowners. The Grand County Division of Natural Resources and CSU Cooperative Extension Agent will evaluate integrated weed management plans submitted by individual landowners. The NRCS will assist in establishing criteria for revegetation of rights-of-way as well as disturbed areas on private and public lands. Non-compliance procedures will be followed as outlined in the 1996 Colorado Weed Management Act and the Colorado Noxious Weed Act.

C. Prevention Measures

Preventative control means using BMP, which will stop or forestall weeds from contaminating an area. These are often the most practical and cost effective means of weed control. Recommended practices for Grand County include:

1. Promoting revegetation with weed-free seed and mulch applied to all disturbed areas.
2. Promoting the Colorado Weed Free Hay and Forage Program (C.R.S. §35-27.5-101 *et seq.*) and Colorado Seed Act (C.R.S. §35-27-101 *et seq.*)
3. Prioritizing weed management in areas that contain abundant weed concentrations and escalating dispersion rates to reduce the potential spread.
4. Minimize soil disturbance on new development sites or other soil disturbing activities such as excessive grazing (where applicable).

D. Mapping of Infestations

Historical maps dating back to 1986 are located at the Grand County Division of Natural Resources in Granby Colorado. Grand County Division of Natural Resources is currently developing a master GIS map that is located at the Grand County Division of Natural Resources in Granby. This master map will be updated yearly.

E. Resource Information

1. Colorado Weed Control Handbook – Current edition
2. Weeds of Colorado, CSU Cooperative Extension Service
3. Weed and Poisonous Plants of Wyoming and Utah
4. Colorado's Most Troublesome Weeds
5. Colorado's 30 Troublesome Weeds
6. Weeds of the West
7. Specimen Labels

8. CSU – Service in Action Sheets
9. Weed Management Resource Library
10. NRCS Technical Guides
11. Techline Publications
12. Troublesome Weeds of the Rocky Mountain West
13. Biology and Management of Noxious Rangeland Weeds

F. Landowner Responsibility

The control of noxious weeds is the responsibility of every landowner (CRS§35-5.5-104). Grand County Division of Natural Resources, the CSU Extension Service, NRCS and other agencies will provide technical advice and assistance to landowners upon request. The above agencies will cooperate with landowners to develop and manage an acceptable noxious weed control plan. Under the requirements of the Colorado Noxious Weed Act, a landowner may be required to file and comply with an acceptable plan to control noxious weeds on the property they manage/own.

G. Enforcement on Private Lands

Grand County will adhere to the Colorado Noxious Weed Act concerning all enforcement issues. Private lands enforcement procedures are outlined in CRS§35-5.5-109 and include Grand County Division of Natural Resources personnel physically inspecting a property at the request of the property owner, a neighboring landowner or occupant that has reported suspected noxious weed infestations, or if noxious weeds are visually observed from a public right-of-way. The landowner will be notified via certified mail of the inspection date, noxious weed species, approximate size of noxious weed infestation found and the best available control methods of integrated management. The property owner will then have a reasonable time after receipt of notification, which at no time shall exceed 10 days, to comply with the terms of notification, or develop and submit an acceptable plan to the Grand County Division of Natural Resources and schedule for the completion of the submitted plan for compliance, or request arbitration at the property owners expense.

H. Enforcement on Public Lands

Grand County will adhere to the Colorado Noxious Weed Act concerning all enforcement issues. Public lands enforcement procedures are outlined in CRS§35-5.5-110. As stated in the Colorado Noxious Weed Act it is the duty of each state board, department or agency that administers or supervises state lands to manage noxious weeds on any lands under its jurisdiction. The Grand County Division of Natural Resources may give notice to any state board, department or agency advising of the presence of noxious weeds, and specify the best available methods of integrated management that are in compliance with federal law. The Grand County Division of Natural Resources may assist with development of a plan for the management of noxious weeds on the premises or lands within a reasonable time after receipt of notification, which shall not exceed ten days.

If the state board, department or agency fails to comply with the notice to manage the identified noxious weeds or to implement the management plan then the Grand County Division of Natural Resources may enter upon such lands and undertake the management of such noxious weeds or cause the same to be done and the expense of this management will be charged against said state board, department or agency which as jurisdiction over the lands.

1. Payment

An agreement in writing for payment shall be reached within two weeks after the date such an expense is submitted. If no agreement has been reached or the charge is not immediately paid, the charge shall be submitted to the controller who shall treat such amount as an encumbrance on the budget of the state board, department or agency involved.

I. Enforcement on Utility Owned and State Regulated Lands

Grand County will adhere to the Colorado Noxious Weed Act concerning all enforcement issues. Utility owned and State-Regulated lands, including railroad rights-of-way enforcement will follow CRS§35-5.5-109 and CRS§35-5.5-110 as appropriate. As stated in the Colorado Noxious Weed Act, each land owner, including utility board or operator on any state-regulated lands is responsible for noxious weed management on any land under its jurisdiction. The Grand County Division of Natural Resources may give notice to any utility board or operator on any state-regulated lands advising of the presence of noxious weeds, and specifying the best available methods of integrated management that are in compliance with federal law. The Grand County Division of Natural Resources may assist with development of a plan for the management of noxious weeds on the subject lands within a reasonable time after receipt of notification, which shall not exceed ten days.

If the utility board or operator on any state-regulated lands fails to comply with the notice to manage the identified noxious weeds or to implement the management plan, the Grand County Division of Natural Resources may enter upon such lands and undertake the management of such noxious weeds or cause the same to be done. The expense of this management will be charged against the utility or operator which as jurisdiction over the subject lands.

1. Payment

An agreement in writing for payment shall be reached within two weeks after the date such an expense is submitted. If no agreement has been reached or the charge is not immediately paid, the charge shall be submitted to the controller who shall treat such amount as an encumbrance on the budget of the state board, department or agency involved.