

Noxious Weed Management Plan  
for  
Meagher County  
(2011-2013)



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# Table of Contents

<b>I. Introduction</b> .....	3
A. Goals and Objectives .....	3
B. Statement of the Weed Problem .....	4
C. Montana Weed Laws and Regulations .....	4-5
<b>II. Management Priorities for Noxious Weeds</b> .....	5-6
A. Priority 1 .....	5
B. Priority 2 .....	5
C. Priority 3 .....	5-6
D. Meagher County Designated Noxious Weeds .....	6
<b>III. Integrated Weed Management Strategies and Methods</b> .....	6 - 7
A. Prevention .....	6
B. Education .....	7
C. Mapping .....	7
D. Chemical .....	7
E. Biological Control .....	7
F. Mechanical .....	7
G. Revegetation .....	7
<b>IV. Pesticide Management Goals and Procedures</b> .....	7 - 8
<b>V. Special Management Zones and Requirements</b> .....	9
A. Gravel Pits .....	9
B. Subdivisions .....	9
C. Utility Companies .....	9
D. City of White Sulphur Springs .....	9
<b>VI. Current Program and Program Needs</b> .....	9
A. Meagher County Weed District .....	9
B. Noxious Weed Seed Free Forage Program .....	9
C. Private Landowners .....	10
D. Cities and Towns .....	10
E. Lands Administered by Meagher County.....	10
F. Lands Administered by State Agencies.....	10-11
G. Lands Administered by Federal Agencies.....	11
<b>VII. Estimated Budget for Weed Management Program</b> .....	11
A. Personnel .....	11
B. Operations .....	11
C. Equipment .....	11
<b>VIII. Plan Implementation and Evaluation</b> .....	11-12

<b>IX. Appendices .....</b>	<b>12</b>
A. State and Meagher County Noxious Weed List w/ acreages	13

**I. Introduction**

Meagher County has had a weed management plan in effect since 1997. This plan was written to comply with the requirement of MCA 7-22-2101 through 7-22-2153, the “Montana County Noxious Weed Act”.

The purpose of this plan is to guide weed management through cooperative planning among public and private landowners and managers of Meagher County. This plan also supports the Montana Weed Management Plan to strengthen, support, and coordinate private, county, state, and federal weed management efforts in Montana, and promote implementation of ecologically-based noxious weed management programs. This plan will be evaluated and revised every two years.

The Meagher County Noxious Weed Management Plan includes an integrated weed management (IWM) approach. An integrated weed management plan incorporates education, prevention, early detection, and cultural, biological, mechanical, and chemical controls that have minimum impacts to the environment. Mapping, evaluation, and re-vegetation are also components of an IWM plan. This weed management plan is designed to evaluate and adapt management actions to improve the chances of long-term weed management success.

**A. Goals and Objectives**

The goals of the Weed District are:

- 1) To provide management of noxious weeds on all lands located within Meagher County and to prevent establishment of any new noxious weed species.
  
- 2) To work cooperatively with private, state, and federal land managers to control noxious weeds and maintain native rangeland ecosystems; and
  
- 3) To provide weed education and outreach materials, workshops, and meetings for the county and public.

The following weed management objectives are measurable and time based:

- 1) Locate and eradicate new invasive plants and patches over the next two years using acceptable control methods;
  
- 2) Continue an active biological program with a minimum of 5 new releases annually; and
  
- 3) Reduce size and density of selected noxious weed infestations by 25% over the next two years using integrated weed management methods.

## B. Statement of the Weed Problem

A noxious weed is defined as any exotic plant species established or that may be introduced in the state that may render land unfit for agriculture, forestry, livestock, wildlife, or other beneficial uses or that may harm native plant communities. However, a **native plant may not be listed** on the State Noxious Weed list or be listed as a county designated noxious weed. Currently Meagher County recognizes the State Noxious Weed list with 46 noxious weeds (including Meagher County Listed Weeds) as the county's weed list (see Appendix A & B), in addition to the county designated noxious weeds.

### 1) Land Administration

Meagher County contains approximately 2350 square miles or 1,506,000 acres of land under multiple landownership. The following is a breakdown of the ownership in Meagher County:

US Forest Service & BLM	452,000	acres
Water	1,600	acres
Private Lands, State and Local Govt.	1,052,400	acres

### 2) Impact of Weeds

Noxious weeds infest about 82,000 acres in Meagher County. Noxious weeds are reducing economic productivity and integrity of Meagher County's land and waters. The rate of introduction and spread of noxious weeds has increased significantly over the past several years as human activities, trade, and commerce has increased.

Noxious weeds are capable of rapid spread. Once infested, the value of property for recreation, wildlife, ranching and farming is greatly reduced.

Economic losses caused by some noxious weeds have been calculated for Montana. The cost of spotted knapweed to grazing lands and wild lands in Montana is estimated at \$42 million.

Increased funding to private land managers, the county weed district, and federal and state agencies will have a positive impact on weed management in Meagher County.

## C. Montana Weed Laws and Regulations

The first noxious weed legislation in Montana was passed in 1939. Since that time additional laws and rules have been enacted to strengthen weed management efforts. The eight laws currently affecting weed management in Montana are summarized below:

- 1) Montana County Weed Control Act (Title 7, Chapter 22 Part 21) provides for weed management activities at the county level. Local county government has the responsibility for the implementation and enforcement of weed management in

Montana.

2) Montana Weed Control Act (Title 80, Chapter 7 Part 7) provides for technical assistance, embargoes, and rearing and distribution of biological weed control agents (80-7-720 MCA). Pursuant to 80-7-712 MCA, The Montana Department of Agriculture can obtain federal funds and disburse these funds to local governments authorized to conduct noxious plant management programs.

3) Montana Noxious Weed Trust Fund Act is a grant-funding program designed to encourage and support local cooperative weed management programs, weed research, and public education, awareness, and outreach programs. Revenue for the current grants program comes from interest from a permanent Trust, vehicle weed fee, and state and federal funding.

4) Montana Noxious Weed Seed Free Forage Act establishes a certification program that provides for production of weed-seed-free forage and mulch used by individuals, agencies, and private corporations on public and private lands.

5) Montana Agricultural Seed Act lists prohibited and restricted weed seed levels that must be maintained in state certified seed.

6) Montana Commercial Feed Act prohibits noxious weeds in commercial feed.

7) Montana Environmental Policy Act must be addressed by state actions that have potential environmental or socioeconomic impacts.

8) Montana Nursery Law allows for inspections, certification, and embargo of all nursery stock for listed pests, including weeds.

## **II. Management Priorities for Noxious Weeds**

**A. Priority 1A:** Weeds not present in Montana. Management criteria will require eradication if detected; education and prevention

**Priority 1B:** Weeds have limited presence in Montana. Management will require eradication or containment and education.

**B. Priority 2A:** Weeds are common in isolated areas of Montana. Management criteria will require eradication or containment where less abundant. Management will be prioritized by weed districts.

**Priority 2B:** Weeds that are abundant in Montana and widespread in many counties. Management criteria will require eradication or containment where less abundant. Management will be prioritized by Weed Districts.

**C. Category 3:** These consist of regulated plants (not Montana Noxious Weeds). These

plants have the potential to have significant negative impacts. The plant may not be intentionally spread or sold other than as a containment in agricultural products. The State recommends research, education and prevention to minimize the spread of the regulated plant.

**D. Meagher County Designated Noxious Weeds:** Montana Code Annotated 7-22-2101 (8)(ii) gives a county the authority to list local invasive species of concern. These weeds are capable of rapid spread and invasion of lands, rendering lands unfit for beneficial uses. Management criteria include awareness and education, monitoring and containment of known infestations, and eradication where possible.

1) Meagher County Designated Noxious Weeds are listed in Appendix B

2) Meagher County has also designated State Listed Noxious Weeds in Priority 1A or 1B due to the weeds not being present or established in the County and list the control and management strategies that will be utilized. These changes are in Appendix B

### **III. Integrated Weed Management Strategies and Methods**

#### **A. Prevention:**

- Meagher County Weed District has an active prevention plan which supports and/or encourages:
  1. Education Program for all floaters and shuttle drivers at Camp Baker
  2. Washing of all construction and logging equipment entering Meagher County
  3. Encouraging recreation, and other land users to utilize existing roads and limit all traffic to the established roads
  4. Active program to reseed disturbed construction areas, road disturbances and eroded areas
  5. Work with all subdivisions and require active weed management plan

#### **B. Education**

- Weed Kiosk at Camp Baker and major campgrounds
- Active participation in: Meagher County Conservation District Range Tours, Conservation Banquet and Annual Meeting
- Weed Tours, with emphasis on treated areas from recent 'Weed Management Areas'
- Support school activities with weed information.
- Continue to provide 'Noxious Weed Calendars'.

### **C. Mapping**

- Continue to utilize GPS mapping of noxious weed infestations and spraying activities as time permits.
- Mapping will be completed with existing Delorme and Igage mapping software.
- Meagher County Weed District will cooperate with State Section Based Mapping.

### **D. Chemical**

- Chemicals utilized by Meagher County Weed District currently are: (but not limited to) Dow-Agro - Tordon, Milestone, Forefront, Curtail; DuPont - Escort, Cimarron, Krovar; BASF - Plateau, Overdrive, Harmony; Wilbur Ellis - 2,4D and surfactant (R11, Insist, and MSO); Monsanto - Roundup

### **E. Biological Control** (include a list of biocontrol used in your county's weed program)

- Meagher County Weed District will continue to implement an active biological program utilizing all available insects, fungus and pathogen control for: Leafy spurge, St. Johnswort, Musk Thistle, Canada Thistle, Diffuse Knapweed, Spotted Knapweed and Russian Knapweed.

### **F. Mechanical**

- Meagher County Weed District will continue to support roadside mowing by Meagher County and State Highway road crews.

### **G. Revegetation** (County Weed Control Act 7-22-2152)

- Meagher County Weed District requires a revegetation plan for all gravel pits, mines, subdivisions, road disturbances and quarries.

## **IV. Pesticide Management Goals and Procedures**

The Meagher County Weed District is in compliance with the Montana Pesticide Act (Title 80, Chapter 8 Section 80-8-101 through 80-8-405). The control of pesticides and their use is essential for the protection of humans and the environment. Pesticides are considered valuable and necessary to provide sufficient quantity of quality foods, protection of humans from vectorborne diseases, and invasive plant species.

The pesticide management goals for the Meagher County Weed District are:

1) to provide a safe work environment for the weed coordinator and all weed district staff; and

2) to ensure herbicides are safely applied and the pesticide label is followed to have a healthy environment.

Meagher County Weed District has the following procedures when dealing with pesticides:

1) Water Quality Protection – Insure that all label directions are followed. Extreme care will be utilized in all riparian areas, adjacent to any water and in areas with shallow

groundwater. Other sensitive areas include coarse-textured soils that are subject to the pesticide moving off the target area.

1a) Provide and utilize anti-siphon devices to insure that chemicals do not enter water sources during all fill operations.

2) Public and Worker Safety – Proper PPE's will be provided for all employees and will be worn. All employees will follow all label directions regarding wearing of PPE's. Any re-entry in sprayed area will be in accordance with label directions. Extreme care shall be taken to insure the public's safety

3) Equipment Selection and Maintenance –Equipment selection will be made keeping safety, efficiency and reliability in mind. A servicing and maintenance plan will be provided for each piece of equipment and adequate records kept of repairs and maintenance

4) Pesticide Selection – Selection will be based on safety, cost, risks, and effectiveness of the chemical. Consideration will also be given to actual amount of chemical used.

a) Application – Application will be made with suitable equipment and will be in accordance with correct weather conditions, wind, temperature, and humidity. An approved surfactant and adequate carrier will be utilized to insure good coverage. In all cases, application will be in accordance with label directions. Droplet size will be controlled to reduce drift.

b) Mixing and loading – All mixing and loading will be in pre-approved locations to insure there will be no offsite movement of chemical. Anti-siphon devices will be utilized to insure that water sources will not be contaminated by chemicals. Label directions will be utilized.

c) Storage and disposal – All storage of chemicals shall be in the approved Chemical Storage Facility located at the Meagher County Weed Department. Disposal of all containers will be in accordance with State, Federal and local laws and following label directions. All plastic containers will be rinsed a minimum of three times and the water utilized in the spray mix. Use of bulk containers that can be returned for refill is encouraged. An active container recycling program will be followed.

## **V. Special Management Zones and Requirements**

### **A. Gravel Pits**

1) Current Program: All gravel pits and sources shall have an approved reclamation program with signed and approved weed management plan.

2) Need for Action: Follow up with any needed modification to plan. Reseed and provide necessary weed control measures

### **B. Subdivisions**

1) Current Program: Meagher County Subdivision plan updated in September 2007. Plan requires an approved weed management plan.

2) Need for Action: Follow up on existing subdivisions and provide necessary

assistance where noxious weed problems exist. Provide assistance to any new subdivisions.

### **C. Utility Companies**

1) Current Program: Current utilities are limited to: Northwest Energy and Central Montana Communications. They provide adequate management and have their employees or contractors provide the reclamation and weed control.

2) Need for Action: Support existing program

### **D. Cities of White Sulphur Springs, Martinsdale and Ringling**

1) Current Program: Meagher County Weed District provides education and control activities for these three cities (and towns).

2) Need for Action: continue with present program

## **VI. Current Program and Program Needs**

### **A. Meagher County Weed District**

1) Current Program 7-22-2126 MCA subsection 1  
Meagher County Weed District shall:

- Administer Meagher County's Noxious Weed Program
- Establish management criteria for all noxious weeds on land within the district
- Make all reasonable efforts to develop and implement a noxious weed program an covering all land within the district owned or managed by State and Federal Agencies

2) Need for Action: Additional work with Federal Agencies with their program

### **B. Noxious Weed Seed Free Forage Program (7-22-2126 MCA subsection 2)**

1) Current Program

- Meagher County Weed District is the lead agency in developing and implementing the Noxious Weed Free Forage Program. The Supervisor shall retain certification to make inspections.

2) Need for Action: Expand program to include campgrounds on State managed lands and encourage hunting/fishing guides to implement program

### **C. Private Landowners**

1) Current Program

- Meagher County Weed District shall:
  - a. Provide assistance with identifying, mapping and controlling noxious weeds
  - b. Develop Weed Management Areas that have common problems and are willing to work on a common goal controlling the noxious weeds within the proposed area
  - c. Provide assistance with applying for cost-share through the Noxious Weed Trust Fund or similar State and Federal Programs.
  - d. Assist landowners with an Integrated Weed Management program that includes: biological, cultural, mechanical and chemical control
  - e. Provide follow-up with landowners to analyze effectiveness of their program.

2) Need for Action: Develop an adequate budget that permits a staffing level that permits additional employees to assist in this area.

#### **D. Cities and Towns**

##### 1) Current Program:

The towns of Martinsdale and Ringling are currently not incorporated towns, thus are managed by Meagher County. As such, Meagher County Weed District is responsible for all weed control efforts within the towns.

The City of White Sulphur Springs is an Incorporated City and has an agreement with the Meagher County Weed District to provide weed control on all streets and alleys. City Ordinances prohibit weeds of all types and requires their management and control.

- The Meagher County Weed District provides management and control to City owned property, (shops, gravel pits and storage, lagoon and vacant lots).
- Provide assistance to individual landowners with identification and control of noxious weeds

##### 2) Need for Action: Continued follow up

#### **E. Meagher County owned/managed lands:**

1) Meagher County Weed District shall be the lead agency in managing and controlling noxious weeds on Meagher County owned and managed lands (road right-of-ways, gravel pits, etc).

#### **F. Lands Administered by State Agencies**

##### 1) Current Program: Meagher County works with the following State Agencies:

1: Department of State Lands: All State owned lands leased to landowners are reviewed by the DNRC every 5 -10 years. If noxious weeds are found, the Lessee is required by DNRC to develop and implement a noxious weed management plan with the Meagher County Weed District

2: Department of Fish, Wildlife and Parks: The 'Department owns and manages the 'Smith River Fishing Access', Camp Baker, boat camps on the Smith River and manages Martinsdale Reservoir and Newlan Creek Reservoir.

- Meagher County Weed District has contracted weed control on these properties.

3. Department of Natural Resources and Conservation owns several Irrigation Reservoirs, South Side Canal, and North Fork Diversion Ditch.

- Meagher County Weed District works closely with the irrigation companies and assists with weed management and control efforts

4. Montana Department of Transportation:

- Meagher County Weed District assumes responsibility for spraying Right-of-Ways, gravel pits and borrow-areas.

2) Need for Action: Continue to work with the Various Stage Agencies

**G. Lands Administered by Federal Agencies**

1) Current Program: Meagher County will work with the U. S. Forest Service and the Bureau of Land Management with developing sound weed management plans and implementation of these plans.

2) Need for Action: Weed Control efforts on Federal Lands could use some improvement as they have significant weed problems that are not being adequately managed.

**VII. Estimated Budget for Weed Management Program**

**A. Personnel: \$43,000**

**B. Operations: \$67,000**

**C. Equipment: \$20,000**

**VIII. Plan Implementation and Evaluation**

The key to success of Meagher County’s Weed Management Plan is dependent on the ability of stakeholders to implement action items identified in the Plan. The below table identifies key action items within the plan, responsible entity for implementing the proposed action, and an estimated date for completion.

Evaluation of progress on action items is critical to determine whether modifications or additions to the plan are necessary to improve facilitation and implementation. Meagher County’s Weed Management Plan will be reviewed biennially by stakeholders in the Plan. Status of action items will be reviewed, updated as needed, and suggestions identified for facilitation of the Plan

<b>Action Item</b>	<b>Responsibility</b>	<b>Action Date</b>	<b>Action Required</b>	<b>Progress</b>
Prevention	<i>FWP, MCWD</i>	<i>2011</i>	<i>I.D and prevention weed brochure at Camp Baker</i>	
	<i>SMHP, FWP, MCWD</i>	<i>2011-12</i>	<i>Weed Kiosk @ Camp Baker</i>	
	<i>FWP, SMHP MCWD</i>	<i>2011-12</i>	<i>Reporting form for noxious weeds on Smith River</i>	

Education	MCWD	2011-12	1) Participate in Cons. Dist Range Tour 2) Develop Power Point presentation for Conservation District Annual Meeting 3) Presentation at Rotary 4) Participate in Outdoor Classroom and School tours at school system	
Mapping	MCWD	2011-12	1) Continue active GPS mapping system and transfer to IGage or Delorme mapping programs. 2) Support State Section Based Mapping	
Right-of-Way Control	MCWD	2011-12	1) Lead agency in responsibility for controlling noxious weeds on all right-of-ways	
Federal Agencies	MCWD	2011-12	Continue working with USFS in developing effective weed management plan and implementing on USFS administered lands within Meagher Co.	
Follow-up	MCWD	2011-12	Develop budget to provide funding to provide additional resources for completing follow-up with all management efforts	

## **IX. Appendices**

### **A. & B: State and Meagher County Noxious Weed List with Estimated Acreages**

## State and Meagher County Noxious Weed List

A & B. Noxious weed List, with estimated acreage, as adopted by Meagher County Commissioners, Updated by changes in 1998, 2000, 2006, and 2007 (last revision - April, 2011)							Est Co
Common Name	Scientific Name	State Designation (S)			County Designation ©		Acres
		Pr. 1A	Pr. 1B	Pr. 2A	Pr. 2B	Pr. 3	
Blueweed	<i>Echium vulgare</i>		C	S			0
Canada Thistle	<i>Cirsium arvense</i>				S, C		7500
Cheatgrass	<i>Bromus tectorum</i>					S	40,000
Common Tansy	<i>Tanacetum vulgare</i>				S, C		200
Curlyleaf pondweed	<i>Potamogeton crispus</i>		S				0
Dalmatian toadflax	<i>Linaria dalmatica</i>				S		5
Diffuse Knapweed	<i>Centaurea diffusa</i>				S		40
Dyer's Woad	<i>Isatis tinctoria</i>		S				0
Eurasian Watermilfoil	<i>Myriophyllum spicatum</i>		S				0
Field Bindweed	<i>Convolvulus arvensis</i>				S, C		800
Flowering Rush	<i>Butomus umbellatus</i>		S				0
Hawkweed, Orange	<i>Hieracium aurantiacum L.</i>			S			0
Hawkweed, Meadow	<i>Hieracium pratense, floribundum</i>			S			0
Hoary Alyssum	<i>Berteroa incana</i>			S			0
Hoary Cress (Whiteweed)	<i>Cardaria draba</i>				S, C		650
Houndstongue	<i>Cynoglossum officinale L.</i>				S, C		4400
Hydrilla	<i>Hydrilla verticillata</i>					S	0
Japanese Knotweed comp	<i>Polygonum cuspidatum, such., poly.</i>		S, C				2
Leafy spurge	<i>Euphorbia esula</i>				S, C		15,000
Oxeye Daisy	<i>Chrysanthemum leucanthemum L.</i>				S, C		330
Perennial pepperweed	<i>Lepidium latifolium</i>			S			0
Purple Loosestrife	<i>Lythrum salicaria, virgatum</i>		S, C				1
Rush Skeltonweed	<i>Chondrilla juncea</i>		S, C				0
Russian Knapweed	<i>Centaurea repens</i>				S, C		50
Saltcedar (tamarisk)	<i>Tamarix aphylla</i>				S, C		0
Scotch Broom	<i>Cytisus scoparius</i>		S				0
Spotted Knapweed	<i>Centaurea maculosa</i>				S, C		42,000
St. Johnswort	<i>Hypericum perforatum</i>				S, C		50
Sulphur Cinquefoil	<i>Potentilla recta</i>				S, C		200
Tall Buttercup	<i>Ranunculus acris L.</i>			S			0
Tansy Ragwort	<i>Senecio jacobaea L.</i>			S			0
Yellowflag iris	<i>Iris pseudacorus L.</i>				S		0
Yellow Toadflax	<i>Lanaria vulgaris</i>				S, C		750
Yellow Starthistle	<i>Centaurea solstitialis</i>	S					0
Absinth wormwood	<i>Artemisia absinthium</i>				C		500
Black Henbane	<i>Hyoscyamus niger</i>				C		460
Bladder campion	<i>Silene vulgaris</i>				C		275
Bull Thistle	<i>Cirsium vulgare</i>				C		50
Common Burdock	<i>Articum minus</i>				C		360
Common Mullein	<i>Verbascum thapsus</i>				C		900
Field Scabious	<i>Knautia arvensis</i>				C		75
Musk Thistle	<i>Carduus nutans</i>				C		2500
Perennial sowthistle	<i>Sonchus arvensis</i>				C		120
Poison Hemlock	<i>Conium maculatum</i>				C		80
Scentsless Chamomile	<i>Matricaria maritima va agrestis</i>				C		5
Scotch Thistle	<i>Onopordum acanthium</i>				C		150
Yellow mignonette	<i>Reseda lutea</i>				C		0
<b>Priority 1A</b> weeds are not present in Montana. Management criteria will require eradication if detected, education and prevention.							
<b>Priority 1B</b> weeds have limited presence in Montana. Management criteria will require eradication or containment and education.							
<b>Priority 2A</b> weeds are common in isolated areas of Montana. Management criteria will require eradication or containment where less abundant. Management shall be prioritized by weed districts.							
<b>Priority 2B</b> weeds are abundant in Montana and widespread in many counties. Management criteria will require eradication or containment where less abundant. Management shall be prioritized by weed districts.							
<b>Priority 3</b> are regulated plants: (NOT MONTANA LISTED NOXIOUS WEEDS). These plants have the potential to have significant negative impacts. The plant 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.							