

INTRODUCTION

Statement of Purpose

The Fallon County Noxious Weed Management Plan is a guide for the Fallon County Weed Board, and the Fallon County Weed Coordinator to carry out a noxious weed program in said county. In addition, it serves as an understanding devise for the landowners and the taxpayers of Fallon County. It serves government officials as the support noxious weed control in the county.

This revised management plan places Fallon County in compliance with the Montana County Noxious Weed Control Act 7-22-2101 through 7-22-2153.

The Fallon County Weed Board places the primary responsibility for noxious weed control on the landowner. The board will assist within the limits of this management plan, funding and time available.

Landowners who are found to have a noxious weed infestation and do not have a Weed Management Plan acceptable to the Fallon County Weed Board will be notified by Certified Mail. The letter shall quote section 7-22-2116 ("It is unlawful to permit noxious weeds to propagate. It is unlawful for any person to permit any noxious weed to propagate or go to seed on his land, except that any person who adheres to the noxious weed management program of his district or who has entered into and is in compliance with a noxious weed agreement is considered to be in compliance with this section.") of the County Weed Management Act. Landowners so notified will be given the opportunity to develop an acceptable weed management plan with the assistance of the Fallon county Weed Board or their representatives.

The following pages outline the Fallon County Weed Board's plan.

II. Situation:

Fallon County contains 1,045,120 acres of which approximately 80 percent is range or grassland. The ownership pattern of the county is shown on the landownership map provided in this plan. The approximate ownership of the land is as follows:

Private Land	847,257acres	81%
State Lands	68,094acres	7%
B.L.M	122,621acres	12%
Fallon County	7,148acres	Less than 1%

Private land accounts for approximately 81 percent of the land in Fallon County.

The Bureau of Land Management administers about 12 percent of the land and is scattered fairly evenly throughout the county.

State lands, which make up about 7 percent, are commonly found in sections 16 and 36 of each township. These lands are normally leased to an adjacent farmer or rancher on a 10-year contract.

Major drainages (creeks): 1) **Little Beaver** in the southeast part of the county flowing generally northeast; 2) **Sandstone** flows northwest across the central area of the county; 3) **Beaver** in the north portion of the county flows generally north; 4) **Cabin and Pennel Creeks** drain the northwestern part of the county flowing northwest; and 5) **O'Fallon** draining the western area of the county flowing north.

Climate: The climate of Fallon County is best described as continental with cold winters, warm summers and marked variations in seasonal precipitation. The average annual precipitation is 13.9 inches per year at Baker. June has historically been the wettest month, followed by May and July. Summer precipitation normally occurs in the form of thunderstorms.

The average growing season is from 110-130 days, but can vary considerably from year to year. Winds are prevailing from west or northwest, and are generally most severe in late winter and early spring. When the wind blows in Fallon County it is usually enough to hinder the application of herbicide, thus shortening the spray season.

Populated areas: Major towns in the county are Baker with a population around 2,000 in the eastern side of the county and Plevna with a population around 150 found in the center of Fallon County. Fallon County's overall population is about 3,500 people. There are approximately 911 miles of county roads, 85 miles of state highways and 35 miles of railroad in Fallon County.

III. WEED PROBLEM

Noxious weeds, as found in Fallon County, originated as a man-made problem. They were introduced to the area in most cases through feed, seed and road travel. Once established, they continued to be spread in this manner, as well as by domestic animals and various forms of wildlife. It is more than likely that wind and water have also contributed to the spread.

Leafy spurge was introduced in the cabin creek area in the 1920's arriving in seed. It was introduced in the Dugout Creek area in the 1930's with imported livestock and feed. In the western part of the county it was first introduced into Custer County in the 1930's on a WPA (Work Project Administration) project. Infestations of leafy spurge at this point in Fallon County would appear to have spread from these original infestations. Great efforts have been taken to keep the spurge contained to these areas. For the most part the leafy spurge in Fallon County is spreading slowly, and vast areas of the county have not ever seen the noxious weed.

Russian Knapweed first arrived in the upper part of Fallon Creek in the 1920's in alfalfa seed. In the 1930's, it showed up in grass seed in the lower area of Fallon Creek. Spotted and Diffuse knapweeds were introduced later in the 1970's and 1980's by the railroad and vehicle traffic. These infestations occur for the most part along roadways. The knapweeds in Fallon County have been contained for years. Though the occasional weed shows up in different areas, Fallon County contains less than 20 acres of knapweed. The Knapweed family is considered to be one of the county weed board's top priorities. It is the board's policy to pay for the first 200 dollars for control of knapweed.

Canada Thistle became a problem in the 1960's. Introduction is credited to vehicle traffic. Canada Thistle makes up about 50-60% of the departments summer workload. Timely rains, rapid spread, and abundance of this plant has made containing it a challenge.

As population in Fallon County grows, the threat of new invaders is always there. With the addition of Saltcedar to the state's noxious weed list in 2002, the County Weed Board; in conjunction with the Fallon County NRCS office, have discovered roughly 20 plants within the city limits of Baker, and a few others out in the country. In 2004, Yellow Toadflax was found in the city of Baker. It seemed to have escaped from an ornamental flowerbed.

IV. FALLON COUNTY NOXIOUS WEED LIST

- 1. LEAFY SPURGE**
- 2. RUSSIAN KNAPWEED**
- 3. SPOTTED KNAPWEED**
- 4. DIFFUSE KNAPWEED**
- 5. CANADA THISTLE**
- 6. WHITETOP**
- 7. FIELD BINDWEED**
- 8. DALMATION TOADFLAX**
- 9. YELLOW TOADFLAX**
- 10. YELLOWSTAR THISTLE**
- 11. DRYERS WOAD**
- 12. PURPLE LOOSESTRIFE**
- 13. SULFUR CINQUEFOIL**
- 14. RUSH SKELETONWEED**
- 15. COMMON CRUPINA**
- 16. SALTCEDAR**
- 17. COMMON TANSY**
- 18. OX-EYE DAISY**
- 19. ST. JOHNSWORT**
- 20. MEADOW HAWKWEED**
- 21. ORANGE HAWKWEED**
- 22. PERENNIAL PEPPER WEED**
- 23. TALL BUTTERCUP**
- 24. TANSY RAGWORT**
- 25. YELLOW FLAG IRIS**
- 26. HOUNDSTONGUE**

This list is subject to change, as the State of Montana or Fallon County adds weeds.

V. FALLON COUNTY PROBLEM AREAS

Leafy Spurge:

Dugout and Johnny Creek areas northeast of Baker.

Approximate area mapped:

a) Private Land	214 acres
b) County Land	90 acres
c) State Land	94 acres
d) B.L.M land	136 acres

Cabin Creek area northwest of Baker.

Approximate acres are mapped (1986 data) and estimated to be:

a) Private Land	2,013 acres
b) County Land	75 acres
c) State Land	517 acres
d) B.L.M. Land	194 acres

Scattered areas throughout Fallon County:

- a) Approximately 50 scattered acres
- b) Total estimated acreage 500 acres
- c) Located on private, BLM, State and right-of-ways

Knapweeds:

Scattered areas throughout the county, approximately 15-20 areas with less than 5 acres – private land, City of Baker, City of Plevna, railroads, and right-of-ways.

Canada Thistle:

294 areas mapped, less than one acre each. They are located on private, state, BLM, county and city lands.

VI. PURPOSE

There are several purposes of the Fallon County Weed Program. According to state law, a program must be carried out. Additionally, it is in the best interest of the public to assist in the maintenance of a productive, valuable land resource. This land resource can only remain productive over time if it is relatively noxious weed free. By remaining in this condition, the market value of the land resource can be maintained, produces economic benefits to the ownership, and provides a productive segment of the tax base. Land will not deplete as a resource if maintained and productive. The purpose for the Fallon County Weed Program is to educate the landowners of Fallon County and to assist them in the control of the noxious weeds on their land. Furthermore the program is in place to enforce the State and County Weed laws, within the limits of those laws.

VII. GOALS AND OBJECTIVES:

SHORT TERM GOALS

- 1) To involve all landowners in the control of noxious weeds on their land.
- 2) To encourage integrated noxious weed control. (Biological, Chemical, Cultural, Etc.)
- 3) To organize and initiate a project area control project in and around Cabin Creek.
- 4) To carry out the objectives of the Tri-County Leafy Spurge Project.
- 5) To organize and initiate a project area in and around Dugout Creek.
- 6) To maintain and elevate the number of acres mapped and controlled in the country.

LONG TERM GOALS

- 1) To achieve a level of noxious weed control where threats of noxious weeds and their spread are diminished, and a level at which all individual landowners control weeds on their own land.
- 2) To educate as many landowners in the control of noxious weeds as possible. To aid in the fight against said weeds.
- 3) To maintain and eliminate Knapweed from the county and to keep it from coming back.

VIII. PLAN OF ACTION

1. WEED BOARD POLICIES

Sale of chemical - The weed board will make available Tordon 22K and other chemicals for the control of noxious weeds in Fallon County. Price will be based on the board's purchase price. The board may cost-share any chemical if the situation warrants such an action, and will cost-share all Tordon 22K for the control of noxious weeds. (With the exception of noxious weeds found on cropland, this includes C.R.P. lands.)

General Statement – The weed board may share the cost of controlling designated noxious weeds on privately owned land with those who have filed a management plan that is acceptable to the Fallon County Weed Board. Financial assistance is subject to the availability of funds.

The weed board will control noxious weeds in the incorporated limits of Baker and Plevna. Nuisance weeds may be controlled at the landowners expense and in the availability of time.

The board will administer grants and grant monies, as approved by the Montana Noxious Weed Trust Fund.

Target Weeds “PRIORITIES” – Knapweeds and Whitetop – Infestations within the county will be treated by the weed board up to a cost of \$200.00 per farm/ranch. Costs above \$200.00 will be cost-shared as listed above.

Leafy spurge – Major infestations will be assisted with mapping and coordination of a total area control program. Cost-share is as written above.

Canada Thistle – producers with large infestations will be assisted with the sale of chemical, the county may spray if necessary, but will urge the landowner to rent the county equipment or to invest in their own.

It is not this board's policy to attempt control on Field Bindweed. However the board will cost-share the chemical if landowner chooses to pursue control on their own. The department will control Bindweed and other nuisance weeds on county right-of-ways.

Custom Work – The Fallon County Weed Department will perform custom herbicide applications when time and availability of manpower allows for such an application. The application cost will be set yearly and shall reflect a competitive market price. Custom applications are a large part of the department's seasonal work. However, it is important that the landowners of Fallon County understand that the Weed Board will not be able to get all of the jobs completed from year to year. Therefore it may fall on the landowner to control their weeds. Jobs will be done by priority (Chosen by the Weed Board or the Coordinator) and then on a first come first serve basis.

Equipment Rental – The board will make available for use, spray equipment that can be rented and used by county landowners to control weed infestations for a specified rate. This rate will be set yearly. Extensive abuse to the rental equipment will be charged to the user. Equipment will be lent out on a first come first serve basis.

Chemical Bids – The board will, if possible, schedule the asking of chemical bid dates to coincide with surrounding counties in an attempt to obtain the best chemical prices available.

Weed Map – The Fallon County Weed Department will maintain a master map in the County Extension Office in the basement of the courthouse in Baker, Montana, showing all known infestations of noxious weeds excluding field bindweed.

Extension Relation – The board will work closely with the Fallon/Carter Extension Service in the education of the landowners of Fallon County. The Coordinator will be responsible for communicating with the Agent and vice versa, in preparing educational material and credited classes for the producers. The Agent will assist with grant writing. The agent will act as the secretary to the weed board, offering his opinion and advice.

Bio-Control – Though chemical control is the staple of the Fallon County Weed Department, the board will not exclude other control measures when used properly. The Department will make insects available to the landowners of Fallon County or information on where to obtain them. However, the board will urge landowners to take an integrated approach to weed control.

Department of Ag. – The board will work closely with the state weed coordinator and the Montana Department of Ag, for maintaining pesticide credits, training, financial aid and expertise when possible.

Contracts – The board will enter agreements with BLM, DOT, Fish Wildlife and Parks along with the other county department for control of weeds on their lands.

Railroad – The board will coordinate and monitor control efforts for Burlington Northern on their right-of-way, and notify the controlling party if control measures need to be taken.

Commissioners – The board will call on the Fallon County Commissioners to aid in major decisions and will make available all information and meeting minutes that the board of commissioners may call for.

Non-Compliance – The board will implement the steps lined out by the Montana Weed Control Act in a situation where non-compliance may be an issue.

(The following pages contain the process in a non-compliance case)

7-22-2123

Procedure in case of non-compliance:

(1) When a complaint has been made or the board has reason to believe that noxious weeds described in this part are present upon a person's land within the district in violation of the law, that person **must be notified by mail or telephone of the complaint** and the board may request inspection of the land. **Note: the complaint is kept anonymous.** The board or its authorized agent and the landowner or the landowner's representative shall inspect the land at an agreeable time, within **10 days** of notification of the landowner. If, after reasonable effort the board is unable to gain cooperation of the person, the board or its authorized agent may enter and inspect the land to determine if the complaint is valid.

(2) If noxious weeds are found, the board or coordinator shall notify the person or the person's representative and seek voluntary compliance with the district weed management program. If voluntary compliance is not possible, notice of non-compliance must be sent to the person by certified mail.

(3) The notice must specify:

- a) The basis for the determination of non-compliance.
- b) The geographic location of the area of non-compliance, by legal description or other reasonably identifiable description.
- c) Measures to be undertaken in order to comply with the district's management criteria;
- d) A reasonable period of time, not less than **10 days**, in which compliance measures must be initiated; and
- e) The right of the person to request, within the time specified in subsection (3)(d), an administrative hearing as provided by 7-22-2110.

7-22-2110. Administrative hearing—appeals. (1) A person adversely affected by any notice, action, or order of the board may request an administrative hearing before the commissioners. The commissioners shall hold a hearing within 30 days of the request. Participants may be represented by legal counsel. The commissioners shall make a record of the proceeding and enter its order and findings within **7 days** after the hearing.

(2) Within **30 days** after the commissioners render their order and findings, the person adversely affected may file a petition in district court requesting that the order and findings of the commissioners be set aside or modified. The court may affirm, modify, or set aside the order complained of, in whole or in part.

(4) **A person is considered in compliance if the person submits and the board accepts a proposal to undertake specified control measures and is in compliance as long as the person performs according to the terms of the proposal.** If the proposed measures to be taken extend beyond the current growing season, the proposal and acceptance must be in writing.

(5) In accepting or rejecting a proposal, the board shall consider the economic impact on the person and the person's neighbors, practical biological and environmental limitations, and alternative control methods to be used.

7-22-2124. Destruction of Weeds by Board. (1) If corrective action is not taken and the proposal is not made and accepted or a request for an administrative hearing is not made within the time specified in the notice, the board may enter upon the person's land and institute appropriate control measures. In that case, the board shall submit a bill to the person, itemizing hours of labor, material, and equipment time, together with a **penalty not exceeding 50%** of the total cost incurred. Labor and equipment must be valued at the current rate paid for commercial management operations in the district. The bill must specify and order payment due date of 30 days from the date the bill is sent. The board may enter into an agreement with a commercial applicator, as defined in 80-8-102, to destroy the weeds. The commercial applicator shall agree to carry any insurance required by the board. (2) **A copy of the bill must also be submitted by the board to the county clerk and recorder.** (3) If a person receiving an order to take corrective action requests an administrative hearing, **the board may not institute control measures until the matter is finally resolved, except in a case of an emergency.** In that case, the person is liable for the costs as provided in subsection (1) only to the extent determined appropriate by the board, commissioners, or court that finally resolves the matter.

IX. PRIORITIES – CONTROL AGREEMENTS

- 1) COUNTY ROAD RIGHT-OF-WAY, AND OTHER COUNTY LAND**
- 2) CONTRACTED CONTROL OF STATE HIGHWAY RIGHT-OF-WAYS**
- 3) B.L.M. – CONTROL AS PER AGREEMENT**
- 4) CONTROL NOXIOUS WEEDS IN BAKER AND PLEVNA AS PER AGREEMENTS**
- 5) CONTRACTED CONTROL FOR FW&P (SOUTH SANDSTONE)**
- 6) APPLY CHEMICAL FOR PRIVATE LANDOWNERS AT COST FOR CHEMICAL AND AT A RATE SET ANNUALLY PER HOUR FOR TRUCK, CREW, EQUIPMENT (NOXIOUS WEEDS ONLY)**
- 7) ORGANIZE, MAP AND COORDINATE CONTROL PROJECTS IN MAJOR INFESTED AREAS**

X. WEED MANAGEMENT TECHNIQUES

FIVE GENERAL CATEGORIES

- A. PREVENTION – Preventative weed control is concerned with measures taken to prevent the introduction, establishment and/or spread of specified weed species in areas not currently infested with these plant species. Prevention is largely the responsibility of individuals and groups of people with common desire to prevent the introduction and spread of one or more noxious weed species. Prevention should be practiced through “Weed Districts”, county, city, and community maintenance departments, and through the efforts of individual farmers, ranchers, and landowners as well as state and federal land management agencies. Preventative measures that should be followed to prevent the spread of noxious weeds include the use of (1) WEED-FREE crop seed, (2) WEED-FREE manure and hay, (3) CLEAN (seed free) harvesting equipment, (4) the elimination of weed infestations in or near irrigation water and cultivated fields, (5) MONITORING of all lands prone to noxious weed infestation, and (6) monitoring of all road material pits for noxious weeds and use of weed-seed-free construction materials by contractors.
- B. CULTURAL WEED CONTROL – Cultural techniques utilize the practice common to good land and water management.
 - 1. CROP COMPETITION – Vigorous crop plants provide more competition to weeds.
 - 2. GRAZING MANAGEMENT – Good grazing programs stimulate good plants to be more competitive and provide more competition to the weeds. Graze uniformly.
 - 3. SMOTHER CROPS – Crops that are especially competitive with the weed species infesting an area for light, nutrients, and moisture are called smother crops.
 - 4. CROP ROTATION – This practice is used as a means of weed control to prevent or reduce the build up of high populations of certain weeds common to a particular crop. When the same cultural practices are followed year after year noxious weeds may and successfully compete with the crop plants, reducing yields, quality and economic return.
- C. MECHANICAL WEED CONTROL – (PHYSICAL) Any equipment used should be cleaned of noxious weed parts and seeds prior to leaving the infested site.

1. **HAND PULLING** – Hand pulling is an effective practice for the control of weed seedlings and young, established annual and biennial weed species. For perennial weed control, it must be practiced at intervals of two to three weeks during the growing season for two or more years. This is best adapted to small areas, low-density populations or where other practices are not possible.
 2. **HOEING** – A practice the same as pulling.
 3. **MOWING** – Mowing is a limited means of weed control. However, it is an effective means to reduce seed production and to restrict unsightly or rank weed growth. It is commonly used in meadows, pastures, along roadsides, and in waste places.
 4. **WATER MANAGEMENT** – Flooding is an effective means of weed control under certain conditions. It is effective only when the roots and/or shoots of the weeds are completely covered and surrounded by the water for a sufficiently long period of time.
 5. **SMOTHERING** – (Non-living material) This is effective if the light is completely excluded from the growing weed plants, thereby preventing photosynthesis and further growth. Materials used for this purpose include hay, grazing, clippings, straw, sawdust, wood chips, rice hulls, paper, and plastic film.
 6. **BURNING** – Burning or flaming is used in non-cropped areas, such as railroad right-of-ways, irrigation canals and ditches, drainage ditches, and roadsides. It is most effective against weed seedlings, annual, and biennial weeds.
 7. **MACHINE TILLAGE** – Tillage or cultivation will usually provide complete contact of annual, biennial, and simple perennial weeds. Cultivation must be practiced at intervals of two to three weeks during the growing season for two or more years on rhizomatous perennials like leafy spurge, Canada thistle and field bindweed. Tillage at the right stage of growth prevents the plant from building up food reserves, exposes the roots to hot, dry summer weather and freezing in the winter, and stops re-establishment from seed.
- D. **BIOLOGICAL WEED CONTROL** – This involves the utilization of natural enemies for the control of certain weeds. The objectives of biological control are not eradication but rather the reduction and regulation of the weed population below the level of economic injury. To be effective, a biotic agent need not kill the weed but only reverse its competitive advantage over the other plants.

E. CHEMICAL WEED CONTROL – Herbicides are recommended for the control of the noxious weeds listed on the county weed list. Types and rate of herbicide are recommended on a case-by-case basis, gathered from current information received by the County Weed District from the chemical companies, Montana Department of Agriculture, and the product label. Herbicides should be applied exercising caution, common sense, and following product label precautions and restrictions. Spray drift problems can be significantly reduced, or eliminated by spraying when wind is negligible or when wind direction is away from sensitive crops; by decreasing sprayer pressure; by lowering boom height; by changing nozzle tips that produce large droplets; and by using nonvolatile herbicide formulations. Special care must be exercised when applying herbicide with long-term soil persistence. Rainfall, soil type, topography, the location of sensitive desirable crops and other vegetation, irrigation ditches, surface water, and ground water to the application site must be considered.

RE-VEGETATION PROGRAMS

The Fallon County Weed Board will encourage Fallon County to have a re-vegetation program conducted by the road maintenance department in cooperation with the Fallon County Weed District. All right-of-ways that are disturbed through road maintenance, improvement, or by new construction are to be seeded or re-seeded to establish grass cover to prevent erosion and the infestation of weeds. Seed sources used must be certified seed, or seed that qualifies for certification. The Fallon County Weed District requires the State Department of Transportation to re-vegetate up to the edge of the pavement. IN NO CASE shall the use of sterilant be used before resurfacing highway road tops, to eliminate vegetation on the road edges. If vegetation is to be removed, it is recommended it be removed by blading the vegetation and topsoil away so it can be replaced and re-seeded. The weed district may reserve the right to require that construction equipment be washed before being moved to a new location or before entering the county. This is to prevent the spread of noxious weeds from machinery.

ROADSIDE POLICY

The Weed Board will attempt to control noxious and nuisance weeds along county roads in cooperation with the Fallon County Road Department and County Commissioners. Landowners adjacent to county roads may request prior to June 15th that chemical not be used next to their property. However they will be responsible for control of all noxious weeds on those rights-of-way. Weed control must be completed to the satisfaction of the weed board by August 15th.

SPECIFIC PROJECT AREAS

1. Dugout Creek – continue to monitor the control program and assist new ownership in developing a total weed control program.
2. Cabin Creek – Administer Tri-County Leafy Spurge Grant with Wibaux and Prairie e Counties in the Cabin Creek area.

BUDGET

1. Budget for weed board activities in Fallon County is adequate to meet planned activities.

2005-2006 BUDGET

Salaries & Wages	\$ 82,396.00
Office Supplies	\$ 300.00
Operating Supplies	\$ 45,000.00
Fuel & Oil	\$ 3,600.00
Purchased Services	\$ 11,000.00
Travel	\$ 3,500.00
Training	\$ 200.00
Capital Outlay	\$ 70,000.00
Utilities	\$ 500.00

* Approximately \$30,000 of this budget item is returned to the budget from sale of chemical and contract work. Actual operating budget is approximately \$101,283.

- 1) Payment terms for bills owed the Fallon County Weed District are as follows:
 - Bills for spraying and chemical sales will be sent following the spray season.
 - Bills are due and payable 30 days after the date on the original bill notice.
 - If payment is not received within 30 days, then a second notice will be sent.
 - If the bill is overdue for 60 days or more past the date of the original notices, the cooperators will forfeit any cost-share offered by the weed district.
 - Cooperators who are unable to pay can contact the weed district for special payment arrangements.
 - The board will act on these on a case-by-case basis. If payment arrangements are made to the satisfaction of the board, then cost-share will not be forfeited.

EQUIPMENT AND MANPOWER

- 1) Equipment needs are adequately fulfilled. Operating equipment consists of: (2) one ton 4-wheel drive trucks with two 300 gallon tanks with sprayers on each truck, a rental slide in sprayer with a 200 gallon tank pump and handgun, (3) 4x4 ATV's with a sprayer and 25 gallon spray tanks, (5) hand held GPS units to be used by the crew for mapping and to be lent out to landowners, (2) rental backpack sprayers, and (1) ATV sprayer for rental.
- 2) Manpower consists of one full-time coordinator and summer part-time help that will vary from year to year.

EVALUATION

The evaluation of a weed control program ultimately lies in analyzing the infestations of noxious weeds. This analysis must be made against a starting point, and must be made against a program of "doing nothing". Fallon County has known noxious weeds mapped on a map for 1983-84, and on additional maps for each two-year period from that point.

A noxious weed program must be evaluated in relation to known weeds that are being controlled under a management plan or program. Two areas remain in Fallon County to be brought into an acceptable management plan.