

632.954 National Forest  
U8LEnwf noxious weed  
1986 control

Call #



Canada Thistle



Spotted Knapweed



Leafy Spurge

Lewis and Clark  
National Forest

# NOXIOUS WEED CONTROL

Environmental  
Impact Statement  
Final

ERRATA to the DRAFT EIS

STATE DOCUMENTS COLLECTION

NOV 22 1991

MONTANA STATE LIBRARY  
1515 E. 6th AVE.  
HELENA, MONTANA 59620

July 1986

PLEASE RETURN



USDA Forest Service

**MONTANA STATE LIBRARY**  
S 632.954 U8LEnwf 1986 c.1  
Lewis and Clark National Forest noxious



3 0864 00074989 8

**FINAL ENVIRONMENTAL IMPACT STATEMENT  
LEWIS AND CLARK NATIONAL FOREST  
FIVE-YEAR NOXIOUS WEED CONTROL PROGRAM  
1986-1990**

Cascade, Chouteau, Judith Basin, Meagher, Wheatland,  
Golden Valley, Fergus, Lewis and Clark, Pondera, Teton,  
Glacier, Park, and Sweetgrass Counties of Montana

Type of Action: Administrative

Responsible Federal Agency: USDA - Forest Service  
Lewis and Clark National Forest

Responsible Official: John D. Gorman, Forest Supervisor  
Lewis and Clark National Forest  
P.O. Box 871  
Great Falls, Mt. 59403

For Further Information: H. Wayne Phillips, Ecosystem Coordinator  
Lewis and Clark National Forest  
P.O. Box 871  
Great Falls, Mt. 59403  
Telephone: (406) 727-0901

**ABSTRACT:** This Final Environmental Impact Statement describes the preferred alternative and four other alternatives, including a "no action" alternative, for controlling noxious weeds on the Lewis and Clark National Forest. The affected area involved is 1230 acres of National Forest System land in Central Montana impacted by noxious weeds.


The alternatives provide different approaches to weed management resulting in different levels of control. The environmental consequences for the preferred alternative and other alternatives are displayed. An analysis of the impacts of herbicide use on human health, using worst case assumptions, is included in the statement.

The preferred alternative provides for treating noxious weeds in an integrated pest management approach using the most effective combination of chemical, cultural, and biological methods. Chemical control would be by ground application of herbicide to target weeds by hand-held nozzle or solid pellets. Cultural control would include hand pulling or grubbing. Biological control would consist of releasing and monitoring insect bio-agents.

This Final Environmental Impact Statement consists of the Draft EIS published in March, 1986, and errata pages to the Draft. The Errata includes five addendum documents as follows:

1. Montana Noxious Weed List - expands on pages 8 and 9 of the Draft.
2. Forest Objectives for Noxious Weed Management- a new document.
3. Noxious Weed Inventory and Project Proposal/Report - A update of the site specific data base and reports in Appendix 5 and Table I of the Draft.
4. Management Constraints - An revision of Section E, page 22 of the Draft.
5. Content Analysis of Comments to the Draft EIS and copies of the Comments a new document based on comments to the Draft.

**Both the Draft EIS and Errata are required for the complete Final EIS.**



Digitized by the Internet Archive  
in 2017 with funding from  
Montana State Library

<https://archive.org/details/lewisclarknation1986lewi>

**ERRATA**  
TO THE DRAFT ENVIRONMENTAL IMPACT STATEMENT  
FIVE YEAR NOXIOUS WEED CONTROL PROGRAM  
LEWIS AND CLARK NATIONAL FOREST  
JULY 1986

TABLE OF CONTENTS

Addendum #1

Montana Noxious Weed List

Addendum #2

Forest Objectives for Noxious Weed Management

Addendum #3

Noxious Weed Inventory and Project Proposal/Report

- a. Definitions and Codes
- b. Noxious Weed Inventory - Detailed Listing by Weed Species and Site Type
- c. Summary of Pesticide Use
- d. Pesticide Use Application by Project
- e. Detailed Listing of Mechanical Treatments
- f. Detailed Listing of Biological Treatments
- g. Comparison of Alternatives by Treatment and Cost

Addendum #4

Management Constraints

Addendum #5

Content Analysis of Comments to the Draft EIS  
and Copies of Comments Received



ADDENDUM #1

MONTANA NOXIOUS WEED LIST  
Sub-Chapter 2  
Designation of Noxious Weeds

4.5.201 DESIGNATION OF NOXIOUS WEEDS (1) The department designates certain exotic plants listed in these rules as statewide noxious weeds under the County Weed Control Act 7-22-2101 (5), MCA. All counties must implement management standards for these noxious weeds consistent with weed management criteria developed under 7-22-2109 (2) (b) of the Act. The department established two categories of the noxious weeds. (History: Sec. 7-22-2101 MCA; IMP, Sec. 7-22-2101 MCA; NEW 1986, p. 337, Eff. 3/14/86.)

4.5.202 CATEGORY 1 (1) Category 1 noxious weeds are weeds that are currently established in many counties of the state. Management criteria for control of these weeds is necessary in all counties to contain or suppress existing infestations or to prevent, through eradication or other appropriate measures, new infestations of these weeds. All of these weeds render land unfit or greatly limit the beneficial uses.

(2) The following are designated as category 1 noxious weeds:

- (a) Canada Thistle (Cirsium arvense)
- (b) Field Bindweed (Convolvulus arvensis)
- (c) Whitetop (Cardaria draba)
- (d) Leafy Spurge (Euphorbia esula)
- (e) Russian Knapweed (Centaurea repens)
- (f) Spotted Knapweed (Centaurea maculosa)
- (g) Diffuse Knapweed (Centaurea diffusa)
- (h) Dalmation Toadflax (Linaria dalmatica)
- (i) St. Johnswort (Hypericum perforatum). (History: Sec. 7-22-2101 MCA; IMP, Sec. 7-22-2101 MCA; NEW 1986, p. 337, Eff. 3/14/86.)

4.5.203 CATEGORY 2 (1) Category 2 noxious weeds are weeds that have not been detected in the State of Montana or have recently been introduced into the State of Montana. These weeds have the potential for rapid spread and invasion of lands, thereby rendering them unfit for beneficial uses. County planning to prevent the spread or introduction of these weeds is necessary. Management criteria for detection and immediate action to eradicate or contain these weeds is necessary in all counties.

(2) The following are designated as category 2 noxious weeds:

- (a) Dyers Woad (Isatis tinctoria)
- (b) Yellow Starthistle (Centaurea solstitialis)
- (c) Common Crupina (Crupina vulgaris)
- (d) Tansy Ragwort (Senecio jacobaea)
- (e) Rush Skeletonweed (Chondrilla juncea). (History: Sec. 7-22-2101 MCA; IMP, Sec. 7-22-2101 MCA; NEW 1986, p. 337, Eff. 3/14/86.)





ADDENDUM #2  
FOREST OBJECTIVES FOR NOXIOUS WEED MANAGEMENT  
LEWIS AND CLARK NATIONAL FOREST  
JULY 1986

The Forest objectives for noxious weed management are as follows:

1. To prevent or reduce the invasion of noxious weeds on the Lewis and Clark National Forest with a prevention program that combines public information and education with good weed prevention practices, including the establishment and maintenance of beneficial plant cover.
2. To control and/or contain noxious weed populations on National Forest System lands in cooperation with State and County weed control organizations and individual permittees and cooperators, using safe and efficacious means for controlling weeds on a planned, priority basis.
3. To maintain a dynamic, on-going noxious weed inventory and program of monitoring noxious weed populations and the effectiveness of noxious weed control efforts.

The following implementation guidelines provide direction for accomplishing the Forest objectives for noxious weed management.

A. PREVENTION

1. Develop a public information and education program to emphasize practices that prevent resource degradation and spread of noxious weeds. The weed education program will include all Forest employees and the public, including back-country/wilderness visitors. Publications, posters, public service announcements, and other educational techniques will be used to inform and involve the public and Forest Service employees in the Forest weed management program.
2. Train workers treating noxious weeds on the Forest, both employees and contractors, in plant identification, application techniques, and safety. Plant identification training will include (a) target weeds, (b) other weeds on the State-wide noxious weed list in Addendum #1, (c) rare plants and (d) native species that may be mistaken for noxious weeds.
3. Maintain vegetative cover, preferably a closed plant community adapted to the site, to limit the encroachment of noxious weeds. Require prompt revegetation where mineral soil is exposed by activities, such as road construction. Apply seed for revegetation based on species adaptation to the specific site conditions, ease of establishment and seed availability.

4. Monitor travelways and staging areas, such as roads, trails, parking areas, campgrounds, summer home sites, administrative sites, airstrips, and trailheads for noxious weed invasion. Place a high priority on treating noxious weeds on these sites to prevent the spread to other areas of the Forest. Take special care to inspect construction sites, borrow pits and rock quarries for noxious weeds to insure that the material used for road construction and surfacing is weed free.

5. Consider weed infestations in designing travel plans to reduce the risk of spreading noxious weeds through off-road vehicle travel.

6. Apply best range management practices to minimize livestock damage to soils and streamsides. Maintain a healthy range ecosystem to help prevent the establishment of noxious weeds and to retard the spread of noxious weeds through natural competition. Develop the grazing system and best range management practices on an individual allotment basis, considering the specific ecosystem characteristics of each allotment.

7. Consider noxious weed control needs when developing timber sale area improvement plans. Include plans for the prompt revegetation of areas disturbed by roads construction and logging, including seeding as necessary. Schedule weed treatment in sale area improvement plans where noxious weed invasion following logging is likely.

8. Apply seed of competing species, adapted to the site, to areas treated for noxious weed control, where noxious weed treatment leaves soil and vegetation conditions vulnerable to reinvasion and reoccupancy by noxious weeds.

## B. CONTROL

1. Cooperate closely with other Federal, State and County agencies, private individuals, contractors and permittees in planning and implementing noxious weed control on the Forest.

2. Apply noxious weed control on a planned, priority basis, using the following priorities for stratifying noxious weed populations for control:

a. Small size (1.0 acre or less), scattered (less than 1% weed canopy cover), new infestations of any weed species on the Montana noxious weed list (see Addendum #1). Mechanical treatment by hand pulling or grubbing is the preferred treatment for individual plants and small patches. Larger populations and weed species with deep root systems should be chemically treated. Goal: Eradication.

- (1) Rights-of-way, occupancy sites (see A-4 above)
- (2) Riparian areas\*
- (3) General forest and range sites

b. Medium size (1.1 to 10.0 acres), low to moderate weed canopy cover (1-25%), well established populations. Chemical treatment is the preferred control method. Goal: Control and reduce the weed population.

- (1) Spotted knapweed and leafy spruce
  - (a) Rights-of-way, occupancy sites
  - (b) Riparian\*
  - (c) General forest and range sites
- (2) Other weeds on the Montana noxious weed list
  - (a) Rights-of-way, occupancy sites
  - (b) Riparian sites\*
  - (c) General forest and range sites

c. Large size (over 10 acres) infestations. Chemical treatment is applied to the periphery of the infestation to contain and prevent further spread. Biological control will be emphasized within the main body of the infestation if successful biological agents are available. Goal: Containment.

- (1) Spotted knapweed and leafy spruce
  - (a) Rights-of-way, occupancy sites
  - (b) Riparian sites\*
  - (c) General forest and range sites
- (2) Other weeds on the Montana noxious weed list
  - (a) Rights-of-way , occupancy sites
  - (b) Riparian sites\*
  - (c) General forest and range sites

\* Because of the possibility of contaminating surface water and groundwater in the riparian zone, special management constraints limit the use of chemical treatment (see Addendum #4, item 8 of the final EIS).

### C. MONITORING

1. Maintain the Forest noxious weed inventory and project proposal/report data base and report accomplishments to the FSRAMIS reporting system.
2. Solicit support from the public and all employees in locating and recording the location of noxious weed infestations.
3. Provide ocular pretreatment and post treatment evaluations of all sites treated, and document the evaluations in field records.
4. Establish permanent photo-points and ecosystem data plots on a select number of priority noxious weed infestations to quantify the evaluation and to demonstrate project effectiveness.



ADDENDUM #3a

NOXIOUS WEED INVENTORY AND PROJECT PROPOSAL/REPORT  
Definitions and Codes

A. INVENTORY

PROJECT NUMBER - a unique number assigned to each individual project, and ties the noxious weed inventory project proposal/report with the Forest Service Range Management Information System (FSRAMIS).

NAME

COUNTY

T,R,Sec - Location information, self explanatory

SITE TYPE CODES These are the four major environments in which the pests (noxious weeds) are found.

RIP - Riparian and wetlands

OCC - Occupancy site, such as campgrounds, summer home areas, and administrative sites.

GEN - General Forest and Rangelands.

ROW - Rights-of-way along Forest Roads and highways.

WEED SPECIES CODES

CADR - Cardaria draba - Whitetop  
CANU - Carduus nutans - Musk thistle  
CEDI - Centaurea diffusa - diffuse knapweed  
CEMA - Centaurea masculosa - Spotted knapweed  
CERE - Centaurea repens - Russian knapweed  
CESO - Centaurea solstitialis - Yellow starthistle  
CHJU - Chondrilla juncea - rush skeletonweed  
CIAR - Cirsium arvense - Canada thistle  
COAR - Convolvulus arvensis - field bindweed  
CRVU - Crupina vulgaris - Common crupina  
EUES - Euphorbia escula - Leafy spurge  
HYPE - Hypericum perforatum - St. Johnswort  
ISTI - Isatis tinctoria - Dyers woad  
LIDA - Linaria dalmatica - Dalmatian toadflax  
LIVA - Linaria vulgaris - Yellow toadflax  
SEJA - Senecio jacobaea - Tansy ragwort

TARGET PEST CODES

408 - Noxious weeds. See FSH 2109.11 -92.1--7 for additional codes

CANOPY COVER CODES This is the percent canopy cover of noxious weeds on the infested area.

- S - Scattered (less than 1%)
- L - Low (1 to 10%)
- M - Moderate (10 to 25%)
- H - High (greater than 25%)

INV ACRES

Inventoried acres in the project.

B. PESTICIDE TREATMENT

DILUENT CODE - This is the carrier for the pesticide.

- 1 - water
- 2 - oil
- 3 - talc
- 4 - kerosene

See FSH 2109.11-93--3

NUMBER PESTICIDES - the number of pesticides in the formulation that is proposed/applied to this project.

PESTICIDE TREATMENT UNIT CODE

- 1 - Acres

See FSH 2109.11-92.1--12 for additional codes.

METHOD CODE

- 100 - Aerial application
- 200 - Ground application as follows:
  - 201 - Backpack broadcast sprayer
  - 202 - Pressurized boom sprayer
  - 203 - Basal applicator
  - 204 - Herbie applicator
  - 205 - Wiper - roller wick
  - 206 - Spot applicator
  - 207 - Injection
  - 208 - Implant
  - 209 - Granular applicator

See FSH 2109.11-92.1--13 for additional codes.

PESTICIDE PROP ACRES - Acres proposed for pesticide treatment.

PESTICIDE ACTUAL ACRES - Acres actually treated with pesticide.

PESTICIDE #1, #2, #3

If there is more than one active ingredient in the pesticide formulation, they are specified by repeating the following columns of data for each pesticide.

REG. CODE - EPA Registration Number Codes:

- 1 = 39511-64-2935 for 2, 4-D Amine
- 2 = 464-323 for liquid picloram ( Tordon 22K)
- 3 = 464-M1-1 for solid picloram (Tordon 2K pellets)

AI CODE -Active Ingredients in the pesticide formulation as follows:

- 208 - 2, 4-D Amine
- 225 - Picloram (Tordon)

See FSH 2109.11-92.1--2 for additional codes

TYPE CODE - Pesticide Type:

- 1 - Fungicide, fumigants, nematicides
- 2 - Insecticides
- 3 - Herbicides, algicides, and plant growth regulators
- 4 - Rodenticides, repellants, other animal damage control agents

See FSH 2109.11-92.1--1

MEASURE CODE - Quantity measurement of active ingredient code.

- 1 - pound
- 2 - ounce
- 3 - gram
- 4 - BIU

See FSH 2109.11-92.1--7.

APPL. RATE - Application rate in pounds of active ingredient per net area of pesticide application.

See FSH 2109.11-93--3.

PROPOSED LBS - Quantity of active ingredient proposed for application in pounds.

See FSH 2109.11-92.1--7.

ACTUAL LBS - Quantity of active ingredient actually applied in pounds.

C. MECHANICAL TREATMENT

MECH TREAT TYPE - Type of mechanical treatment:

- 1 - handpulling and grubbing
- 2 - mowing

MECH PROP ACRES - Acres proposed for mechanical treatment.

MECH ACTURAL ACRES - Acres actually treated with mechanical methods.

D. BIOLOGICAL TREATMENT

BIOL AGENT - Biological Agent proposed/used.

- RHCO - Rhinocylus conicus on musk thistle
- URAF - Urophora affinis on spotted knapweed
- HYEU - Hyles euphorbiae on leafy spurge

Add codes as needed by using the biological agents scientific name as above.

BIOL PROP ACRES - Acres proposed for biological treatment.

BIOL ACTUAL ACRES - Acres actually treated with biological agents.



6/27/86

## ADDENDUM#3b

1

NOXIOUS WEED INVENTORY  
DETAILED LISTING BY WEED SPECIES AND SITE TYPE

FOREST:    LEWIS & CLARK N.F.                      DISTRICT    1

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	WEED SPECIES	SITE WEED	INV ACRES
110304	VOLCANO REEF	099	T26N	R09W	12	CEMA	GEN	1.0
112403	EAR MOUNTAIN	099	T24N	R08W	4	CEMA	GEN	5.0
121301B	SAWMILL CREEK	049	T18N	R08W	9,11	CEMA	GEN	1.0
					GEN	SITE TYPE	SUB-TOTAL	7.0
111008A	CAVE MOUNTAIN	099	T25N	R09W	26	CEMA	OCC	5.0
120903A	HOME GULCH	049	T22N	R09W	35	CEMA	OCC	4.0
121820C	FORD CR. RESORT	049	T19N	R09W	12	CEMA	OCC	10.0
122409A	WILLOW CR. ADMIN.	049	T20N	R09W	26,23	CEMA	OCC	0.1
					OCC	SITE TYPE	SUB-TOTAL	19.1
100002B	SUN RIVER	049	T21N	R09W	3,4	CEMA	RIP	96.0
100002C	SUN RIVER	049	T22N	R09W	35,36	CEMA	RIP	162.0
110414A	S. FORK TETON	099	T24N	R09W	2,4	CEMA	RIP	18.1
110414B	S. FORK TETON	099	T24N	R09W	2,4	CEMA	RIP	2.0
110801D	N. FORK TETON	099	T25N	R09W	25,36	CEMA	RIP	1.0
110801E	N. FORK TETON	099	T25N	R09W	25,36	CEMA	RIP	77.0
110922C	HWY 2-PIKE CR.	035	T30N	R13W	29,31	CEMA	RIP	20.0
121820D	FORD CR. RESORT	049	T19N	R09W	12	CEMA	RIP	40.0
					RIP	SITE TYPE	SUB-TOTAL	416.1
100002A	SUN RIVER RD.	049	T21N	R09W	2,3	CEMA	ROW	17.0
110801A	N. FORK TETON	099	T25N	R09W	7,8	CEMA	ROW	2.0
110922B	HWY 2-PIKE CR.	035	T30N	R13W	29,31	CEMA	ROW	20.0
111113B	BEAVER - WILLOW RD.	049	T20N	R09W	3,25	CEMA	ROW	0.5
121820A	BENCHMARK RD.	049	T19N	R09W	6,12	CEMA	ROW	10.0
122301A	HANNON GULCH	099	T22N	R09W	11,35	CEMA	ROW	19.0
					ROW	SITE TYPE	SUB-TOTAL	68.5
					CEMA	WEED SPECIES	SUB-TOTAL	510.7
110801B	N. FORK TETON	099	T25N	R09W	7,8	CIAR	GEN	40.0
110922A	HWY 2-PIKE CR.	035	T29N	R13W	8,5	CIAR	GEN	40.0
121301C	HORSE MOUNTAIN	049	T18N	R08W	9,11	CIAR	GEN	2.0
					GEN	SITE TYPE	SUB-TOTAL	82.0
111008B	CAVE MOUNTAIN	099	T25N	R09W	26	CIAR	OCC	0.1
120903B	HOME GULCH	049	T22N	R09W	35	CIAR	OCC	0.2
122409C	WILLOW CR. ADMIN.	049	T20N	R09W	26,23	CIAR	OCC	6.0
					OCC	SITE TYPE	SUB-TOTAL	6.3
110801C	N. FORK TETON	099	T25N	R09W	17,36	CIAR	RIP	7.0
					RIP	SITE TYPE	SUB-TOTAL	7.0
111113A	BEAVER - WILLOW RD.	049	T20N	R09W	3,25	CIAR	ROW	0.7
112204	PALLOKAVILLE RD.	035	T30N	R12W	25,35	CIAR	ROW	4.0
121820B	BENCHMARK RD.	049	T19N	R09W	6,12	CIAR	ROW	16.0
122301B	HANNON GULCH	099	T22N	R09W	11,35	CIAR	ROW	3.1
					ROW	SITE TYPE	SUB-TOTAL	23.8
					CIAR	WEED SPECIES	SUB-TOTAL	119.1

ADDENDUM #3b

6/27/86

2

NOXIOUS WEED INVENTORY  
 DETAILED LISTING BY WEED SPECIES AND SITE TYPE

FOREST: LEWIS & CLARK N.F. DISTRICT 1

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	WEED SPECIES	SITE WEED	INV ACRES
100001	DEARBORN R. TRAIL	049	T17N	R07W	6	EUES	GEN	1.0
112203	PALOOKAVILLE PAS.	035	T30N	R12W	25	EUES	GEN	1.0
121301A	HORSE MOUNTAIN	049	T18N	R08W	9,11	EUES	GEN	37.0
						GEN	SITE TYPE SUB-TOTAL	39.0
122409B	WILLOW CR. ADMIN.	049	T20N	R09W	26,23	EUES	OCC	0.1
						OCC	SITE TYPE SUB-TOTAL	0.1
100002D	SUN RIVER RD.	049	T21N	R09W	2	EUES	ROW	0.1
						ROW	SITE TYPE SUB-TOTAL	0.1
						EUES	WEED SPECIES SUB-TOTAL	39.2

D-1 District Total 669.0

6/27/86

NOXIOUS WEED INVENTORY  
 DETAILED LISTING BY WEED SPECIES AND SITE TYPE

FOREST: LEWIS & CLARK N.F. DISTRICT 4

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	WEED SPECIES	SITE WEED	INV ACRES
401032	YOGO CROSSING	045	T13N	R11E	27	CADR	GEN	10.0
						GEN	SITE TYPE SUB-TOTAL	10.0
401003B	JUDITH ROAD	045	T13N	R11E	35	CADR	ROW	1.0
						ROW	SITE TYPE SUB-TOTAL	1.0
						CADR	WEED SPECIES SUB-TOTAL	11.0
401037	WILLOW CR. MUSK	045	T14N	R10E	8	CANU	GEN	2.0
						GEN	SITE TYPE SUB-TOTAL	2.0
						CANU	WEED SPECIES SUB-TOTAL	2.0
401006	SHED CR.	015	T20N	R10E	8,29	CEMA	GEN	5.0
401014	HIGHWOOD G.S.	015	T20N	R9E	20	CEMA	GEN	1.0
401015	HIGHWOOD CR.	015	T20N	R9E	20	CEMA	GEN	1.0
401016	TIMBER CR.	015	T20N	R10E	27	CEMA	GEN	1.0
401017	N&S FORK HIGHWOOD	015	T20N	R9E	33,28	CEMA	GEN	1.0
401018	POSTIL CR.	015	T20N	R10E	17	CEMA	GEN	2.0
401020	COW CR. TRAIL	045	T19N	R9E	3	CEMA	GEN	3.0
401031	JUDITH STA. K.	045	T13N	R11E	35	CEMA	GEN	0.1
						GEN	SITE TYPE SUB-TOTAL	14.1
401007	SHONKIN	015	T20N	R10E	18,19	CEMA	ROW	5.0
401009	HIGHWOOD ROW	015	T20N	R9E	20	CEMA	ROW	5.0
401025B	HIGHWOOD BALDY RD.	013	T19N	R8E	13	CEMA	ROW	4.5
401029	LONE TREE ROAD	045	T16N	R9E	25	CEMA	ROW	0.1
						ROW	SITE TYPE SUB-TOTAL	14.6
						CEMA	WEED SPECIES SUB-TOTAL	28.7
401002	LITTLE BELT-PINE	013	T19N	R11E	11,12	EUES	GEN	67.0
401005	SPRING COULEE	045	T15N	R9E	24	EUES	GEN	1.0
401010	WOLF BUTTE	045	T15N	R10E	4	EUES	GEN	5.0
401019	BLACKTAIL HILLS	045	T15N	R10E	24	EUES	GEN	15.0
401021	L. BELT CR.-S.PEAK	013	T19N	R9E	25	EUES	GEN	25.0
401023	STARVATION CORNER	045	T19N	R9E	15	EUES	GEN	0.5
401024	DRY GULCH	045	T15N	R10E	35	EUES	GEN	5.0
401028	SOUTH PEAK	045	T19N	R9E	29	EUES	GEN	0.5
401030	DARK CANYON	045	T11N	R13E	2	EUES	GEN	0.3
401033	BUFFALO CANYON	045	T12N	R4E	32	EUES	GEN	5.0
401034	FRENCHIES GULCH	045	T16N	R9E	25,35	EUES	GEN	10.0
401038	LONE TREE SPURGE	045	T16N	R9E	26	EUES	GEN	2.0
						GEN	SITE TYPE SUB-TOTAL	136.3
401036	DRY POLE CMPGD.	045	T12N	R11E	23	EUES	OCC	5.0
						OCC	SITE TYPE SUB-TOTAL	5.0
401003A	JUDITH ROAD	045	T13N	R11E	35	EUES	ROW	1.0
401008B	YOGO CR.	045	T13N	R11E	20	EUES	ROW	1.0
401025A	HIGHWOOD BALDY RD.	013	T19N	R8E	13	EUES	ROW	0.5
401035	DIVIDE ROAD	045	T15N	R10E	26,25	EUES	ROW	2.0
						ROW	SITE TYPE SUB-TOTAL	4.5

6/27/86

ADDENDUM #3b

4

NOXIOUS WEED INVENTORY  
DETAILED LISTING BY WEED SPECIES AND SITE TYPE

FOREST: LEWIS & CLARK N.F. DISTRICT 4

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	WEED SPECIES	SITE WEED	INV ACRES
						EUES WEED SPECIES SUB-TOTAL		145.8
401001	RUSSELL-TRASK	045	T12N	R11E	12	LIVU	GEN	3.0
						GEN SITE TYPE SUB-TOTAL		3.0
401008A	YOGO CR.	045	T13N	R11E	20	LIVU	ROW	1.0
						ROW SITE TYPE SUB-TOTAL		1.0
						LIVU WEED SPECIES SUB-TOTAL		4.0
D-4 District Total								191.5

6/27/86

NOXIOUS WEED INVENTORY  
 DETAILED LISTING BY WEED SPECIES AND SITE TYPE

FOREST: LEWIS & CLARK N.F. DISTRICT 6

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	WEED SPECIES	SITE WEED	INV ACRES
606904A	PASTURE GULCH RD.	029	T09N	R10E	22,27	CEMA	ROW	5.0
606905	SPRING CR.	059	T09N	R10E	15,10	CEMA	ROW	5.0
606910	FAWN CR. RD.	059	T10N	R10E		CEMA	ROW	5.0
606911	CASTLES RD.	059	T09N	R09E		CEMA	ROW	3.0
606912	MILL CR. RD.	059	T10N	R09E	11	CEMA	ROW	3.0
						ROW SITE TYPE SUB-TOTAL		21.0
						CEMA WEED SPECIES SUB-TOTAL		21.0
606904B	PASTURE GULCH RD.	059	T09N	R10E		CIAR	ROW	1.0
606908	SPRING CR. RD.	059	T09N	R10E		CIAR	ROW	10.0
606909A	FOREST LAKE RD.	059	T06N	R10E		CIAR	ROW	5.0
606909B	FOREST LAKE RD.	059	T06N	R10E		CIAR	ROW	5.0
						ROW SITE TYPE SUB-TOTAL		21.0
						CIAR WEED SPECIES SUB-TOTAL		21.0
606901A	JUDITH GAP	107	T11N	R15E	19,20	EUES	GEN	37.0
606901B	JUDITH GAP	107	T11N	R15E	19,20	EUES	GEN	50.0
606901C	JUDITH GAP	107	T11N	R15E	19,20	EUES	GEN	25.0
606903A	LITTLE SNOWIES	027	T12N	R21E	24,15	EUES	GEN	10.0
606903B	LITTLE SNOWIES	027	T12N	R21E	24,15	EUES	GEN	15.0
606903C	LITTLE SNOWIES	027	T12N	R21E	24,15	EUES	GEN	1.0
606906	PORCUPINE	027	T11N	R18E	7	EUES	GEN	1.0
						GEN SITE TYPE SUB-TOTAL		139.0
606902	BIG SNOWIES	037	T11N	R19E	17	EUES	ROW	5.0
						ROW SITE TYPE SUB-TOTAL		5.0
						EUES WEED SPECIES SUB-TOTAL		144.0
						D-6 District Total		186.0

6/27/86

NOXIOUS WEED INVENTORY  
 DETAILED LISTING BY WEED SPECIES AND SITE TYPE

FOREST: LEWIS & CLARK N.F. DISTRICT 7

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	WEED SPECIES	SITE WEED	INV ACRES
777779	COPPER CR.	059	T11N	R06E	5,6	CEMA	GEN	5.0
						GEN	SITE TYPE SUB-TOTAL	5.0
777771A	US89 ROW CASCADE	013	T13N	R08E		CEMA	ROW	30.0
777772A	US89 ROW MEAGHER	059	T12N	R08E		CEMA	ROW	20.0
777772B	US89 ROW MEAGHER	059	T12N	R08E		CEMA	ROW	10.0
777773	MEAGHER CO. RD.	059				CEMA	ROW	38.0
						ROW	SITE TYPE SUB-TOTAL	98.0
						CEMA	WEED SPECIES SUB-TOTAL	103.0
777775	MCGEE COULEE	013	T16N	R08E	31	EUES	GEN	1.0
777776	MING COULEE	013	T16N	R05E	28	EUES	GEN	2.0
777777D	TENDERFOOT	059	T14N	R04E	30	EUES	GEN	5.0
777778	LOGGING CR. SPURGE	013	T15N	R05E	12	EUES	GEN	0.1
						GEN	SITE TYPE SUB-TOTAL	8.1
777777A	SMITH RIVER	013	T15N	R03E	30,31	EUES	RIP	35.0
777777B	SMITH RIVER	059	T14N	R03E	12,13	EUES	RIP	15.0
777777C	SMITH RIVER	059	T14N	R04E	6,18	EUES	RIP	10.0
						RIP	SITE TYPE SUB-TOTAL	60.0
777771B	US89 ROW MEAGHER	013	T13N	R08E		EUES	ROW	10.0
						ROW	SITE TYPE SUB-TOTAL	10.0
						EUES	WEED SPECIES SUB-TOTAL	78.1
777780	COOKS CORNER	059	T12N	R07E	28	LIDA	GEN	2.0
						GEN	SITE TYPE SUB-TOTAL	2.0
						LIDA	WEED SPECIES SUB-TOTAL	2.0

D-7 Kings Hill District Total 183.1

Forest Total

1229.6

NOXIOUS WEED INVENTORY  
SUMMARY OF PESTICIDE USE

DISTRICT: 1

PROPOSED ACRES TREATED	ACTUAL ACRES TREATED	NUMBER OF PESTICIDES = 2					NUMBER OF PESTICIDES = 1			
		PROPOSED POUNDS PEST.1 (208)*	ACTUAL POUNDS PEST.1 (208)*	PROPOSED POUNDS PEST.2 (225)*	ACTUAL POUNDS PEST.2 (225)*		PROPOSED POUNDS 208	ACTUAL POUNDS 208	PROPOSED POUNDS 225	ACTUAL POUNDS 225
		38.0	0.0	5.10	0.00		2.80	0.00		
58.1	0.0						37.00	0.00		
100.2	0.0								9.80	0.00
TOTAL		196.3								

DISTRICT: 4

PROPOSED ACRES TREATED	ACTUAL ACRES TREATED	NUMBER OF PESTICIDES = 2					NUMBER OF PESTICIDES = 1			
		PROPOSED POUNDS PEST.1 (208)*	ACTUAL POUNDS PEST.1 (208)*	PROPOSED POUNDS PEST.2 (225)*	ACTUAL POUNDS PEST.2 (225)*		PROPOSED POUNDS 208	ACTUAL POUNDS 208	PROPOSED POUNDS 225	ACTUAL POUNDS 225
		11.0	0.0							12.00
99.2	0.0								56.35	0.00
TOTAL		110.2								

DISTRICT: 6

PROPOSED ACRES TREATED	ACTUAL ACRES TREATED	NUMBER OF PESTICIDES = 2					NUMBER OF PESTICIDES = 1			
		PROPOSED POUNDS PEST.1 (208)*	ACTUAL POUNDS PEST.1 (208)*	PROPOSED POUNDS PEST.2 (225)*	ACTUAL POUNDS PEST.2 (225)*		PROPOSED POUNDS 208	ACTUAL POUNDS 208	PROPOSED POUNDS 225	ACTUAL POUNDS 225
		107.0	0.0	115.90	0.00		30.50	0.00		
47.0	0.0								6.75	0.00
TOTAL		154.0								

DISTRICT: 7

PROPOSED ACRES TREATED	ACTUAL ACRES TREATED	NUMBER OF PESTICIDES = 2					NUMBER OF PESTICIDES = 1			
		PROPOSED POUNDS PEST.1 (208)*	ACTUAL POUNDS PEST.1 (208)*	PROPOSED POUNDS PEST.2 (225)*	ACTUAL POUNDS PEST.2 (225)*		PROPOSED POUNDS 208	ACTUAL POUNDS 208	PROPOSED POUNDS 225	ACTUAL POUNDS 225
		63.0	0.0	36.00	0.00		18.00	0.00		
50.0	0.0						150.00	0.00		
48.1	0.0								14.50	0.00
TOTAL		161.1								

Forest Totals:

621.6 acres  
356.0 lbs. 2,4-D (code 208)  
138.7 lbs. picloram (code 225)

\* ASSUMING THAT FIRST PESTICIDE=208 AND SECOND PESTICIDE=225





ADDENDUM #3d

NOXIOUS WEED INVENTORY  
PESTICIDE USE APPLICATION BY PROJECT

FOREST: LEWIS & CLARK N.F. DISTRICT 1  
TARGET

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	SITE WEED TYPE SPECIES	PEST CODE	CANOPY COVER	INV ACRES	REG. CODE	AI CODE	TYPE CODE	MEASURE CODE	APPL. RATE	PROPOSED LBS.	ACTUAL LBS.
100001	DEARBORN R. TRAIL	049	T17N	R07W	6	GEN EUES	408	S	1.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 2		PESTICIDE #1		1	208	3	1	1.00	0.10	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2		2	225	3	1	5.00	0.30	0.00			
	PROPOSED ACRES = 1.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.00			
100002A	SUN RIVER RD.	049	T21N	R09W	2,3	ROW CEMA	408	S	17.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		2	225	3	1	0.25	2.00	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES = 17.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.00			
100002B	SUN RIVER	049	T21N	R09W	3,4	RIP CEMA	408	S	96.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		1	208	3	1	2.00	2.00	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES = 4.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.00			
100002C	SUN RIVER	049	T22N	R09W	35,36	RIP CEMA	408	S	162.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		1	208	3	1	2.00	4.00	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES = 6.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.00			
100002D	SUN RIVER RD.	049	T21N	R09W	2	ROW EUES	408	S	0.1							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		2	225	3	1	0.50	0.05	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES = 0.1		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.00			
110304	VOLCANO REEF	099	T26N	R09W	12	GEN CEMA	408	S	1.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		2	225	3	1	0.25	0.03	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES = 1.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.00			
110414A	S. FORK TETON	099	T24N	R09W	2,4	RIP CEMA	408	S	18.1							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		1	208	3	1	2.00	12.20	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES = 18.1		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.00			
110414B	S. FORK TETON	099	T24N	R09W	2,4	RIP CEMA	408	S	2.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		2	225	3	1	0.25	0.50	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES = 2.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.00			
110801A	N. FORK TETON	099	T25N	R09W	7,8	ROW CEMA	408	S	2.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		2	225	3	1	0.25	0.25	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES = 2.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.00			
110801D	N. FORK TETON	099	T25N	R09W	25,36	RIP CEMA	408	L	1.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		2	225	3	1	0.25	0.25	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES = 1.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.00			
110801E	N. FORK TETON	099	T25N	R09W	25,36	RIP CEMA	408	L	77.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		1	208	3	1	2.00	8.80	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES = 10.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.00			
110922B	HWY 2-PIKE CR.	035	T30N	R13W	29,31	ROW CEMA	408	S	20.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		1	208	3	1	2.00	10.00	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES = 20.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.00			

ADDENDUM #3d  
NOXIOUS WEED INVENTORY  
PESTICIDE USE APPLICATION BY PROJECT

		FOREST: LEWIS & CLARK N.F.				DISTRICT 1		TARGET									
PROJECT NUMBER	NAME	COUNTY	T	R	SEC	SITE TYPE	WEED SPECIES	PEST CODE	CANOPY COVER	INV ACRES	REG. CODE	AI CODE	TYPE CODE	MEASURE CODE	APPL. RATE	PROPOSED LBS.	ACTUAL LBS.
111008A	CAVE MOUNTAIN	099	T25N	R09W	26	OCC	CEMA	408	S	5.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.25	0.63	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	5.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
111008B	CAVE MOUNTAIN	099	T25N	R09W	26	OCC	CIAR	408	S	0.1							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.05	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	0.1	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
111113B	BEAVER - WILLOW RD.	049	T20N	R09W	3,25	ROW	CEMA	408	S	0.5							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.05	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	0.5	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
112203	PALOOKAVILLE PAS.	035	T30N	R12W	25	GEN	EUES	408	S	1.0							
	DILUENT CODE =	0	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.05	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
112204	PALOOKAVILLE RD.	035	T30N	R12W	25,35	ROW	CIAR	408	S	4.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		3	225	3	1	0.50	0.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	4.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
112403	EAR MOUNTAIN	099	T24N	R08W	4	GEN	CEMA	408	S	5.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.25	0.13	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	5.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
120903A	HOME GULCH	049	T22N	R09W	35	OCC	CEMA	408	L	4.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.25	0.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	4.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
120903B	HOME GULCH	049	T22N	R09W	35	OCC	CIAR	408	S	0.2							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.25	0.03	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	0.2	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
121301A	HORSE MOUNTAIN	049	T18N	R08W	9,11	GEN	EUES	408	S	37.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		2	PESTICIDE #1		1	208	3	1	1.00	5.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2		2	225	3	1	0.50	2.50	0.00			
	PROPOSED ACRES =	37.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
121301B	SAWMILL CREEK	049	T18N	R08W	9,11	GEN	CEMA	408	S	1.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.25	0.03	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
121301C	HORSE MOUNTAIN	049	T18N	R08W	9,11	GEN	CIAR	408	S	2.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.10	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	2.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
121820A	BENCHMARK RD.	049	T19N	R09W	6,12	ROW	CEMA	408	S	10.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	10.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			

NOXIOUS WEED INVENTORY  
PESTICIDE USE APPLICATION BY PROJECT

FOREST: LEWIS & CLARK N.F.      DISTRICT 1  
TARGET

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	SITE TYPE	WEED SPECIES	PEST CODE	CANOPY COVER	INV ACRES	REG. CODE	AI CODE	TYPE CODE	MEASURE CODE	APPL. RATE	PROPOSED LBS.	ACTUAL LBS.
121820B	BENCHMARK RD.	049	T19N	R09W	6,12	ROW	CIAR	408	S	16.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	1.25	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	16.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
122301A	HANNON GULCH	099	T22N	R09W	11,35	ROW	CEMA	408	L	19.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.25	1.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	19.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
122301B	HANNON GULCH	099	T22N	R09W	11,35	ROW	CIAR	408	S	3.1							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.25	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	3.1	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
122409A	WILLOW CR. ADMIN.	049	T20N	R09W	26,23	OCC	CEMA	408	S	0.1							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.25	0.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	0.1	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
122409B	WILLOW CR. ADMIN.	049	T20N	R09W	26,23	OCC	EUES	408	S	0.1							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.05	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	0.1	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
122409C	WILLOW CR. ADMIN.	049	T20N	R09W	26,23	OCC	CIAR	408	L	6.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.60	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	6.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			

## ADDENDUM #3d

NOXIOUS WEED INVENTORY  
PESTICIDE USE APPLICATION BY PROJECTFOREST: LEWIS & CLARK N.F. DISTRICT 4  
TARGET

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	SITE TYPE	WEED SPECIES	PEST CODE	CANOPY COVER	INV ACRES	REG. CODE	AI CODE	TYPE CODE	MEASURE CODE	APPL. RATE	PROPOSED LBS.	ACTUAL LBS.
401002	LITTLE BELT-PINE	013	T19N	R11E	11,12	GEN	EUES	408	H	67.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	1.00	12.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	15.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401003A	JUDITH ROAD	045	T13N	R11E	35	ROW	EUES	408	L	1.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		1	208	3	1	2.00	2.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401003B	JUDITH ROAD	045	T13N	R11E	35	ROW	CADR	408	L	1.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.25	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401005	SPRING COULEE	045	T15N	R9E	24	GEN	EUES	408	M	1.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	1.00	0.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401006	SHED CR.	015	T20N	R10E	8,29	GEN	CEMA	408	L	5.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	1.25	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	5.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401007	SHONKIN	015	T20N	R10E	18,19	ROW	CEMA	408	S	5.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	2.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	5.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401008A	YOGO CR.	045	T13N	R11E	20	ROW	LIVU	408	L	1.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.25	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401008B	YOGO CR.	045	T13N	R11E	20	ROW	EUES	408	L	1.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	1.00	0.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401009	HIGHWOOD ROW	015	T20N	R9E	20	ROW	CEMA	408	S	5.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	2.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	5.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401010	WOLF BUTTE	045	T15N	R10E	4	GEN	EUES	408	H	5.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	1.00	2.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	5.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401014	HIGHWOOD G.S.	015	T20N	R9E	20	GEN	CEMA	408	S	1.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.25	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401015	HIGHWOOD CR.	015	T20N	R9E	20	GEN	CEMA	408	S	1.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.25	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			

NOXIOUS WEED INVENTORY  
PESTICIDE USE APPLICATION BY PROJECT

FOREST: LEWIS & CLARK N.F.      DISTRICT 4  
TARGET

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	SITE TYPE	WEED SPECIES	PEST CODE	CANOPY COVER	INV ACRES	REG. CODE	AI CODE	TYPE CODE	MEASURE CODE	APPL. RATE	PROPOSED LBS.	ACTUAL LBS.
401017	N&S FORK HIGHWOOD	015	T20N	R9E	33,28	GEN	CEMA	408	S	1.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.25	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401018	POSTIL CR.	015	T20N	R10E	17	GEN	CEMA	408	L	2.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.25	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401019	BLACKTAIL HILLS	045	T15N	R10E	24	GEN	EUES	408	M	15.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	1.00	10.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	15.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401020	COW CR. TRAIL	045	T19N	R9E	3	GEN	CEMA	408	L	3.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.25	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401021	L. BELT CR.-S.PEAK	013	T19N	R9E	25	GEN	EUES	408	H	25.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	1.00	8.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	10.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401023	STARVATION CORNER	045	T19N	R9E	15	GEN	EUES	408	S	0.5							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	1.00	0.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	0.5	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401024	DRY GULCH	045	T15N	R10E	35	GEN	EUES	408	M	5.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	1.75	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	5.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401025A	HIGHWOOD BALDY RD.	013	T19N	R8E	13	ROW	EUES	408	M	0.5							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.25	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	0.5	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401025B	HIGHWOOD BALDY RD.	013	T19N	R8E	13	ROW	CEMA	408	L	4.5							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	2.25	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	4.5	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401028	SOUTH PEAK	045	T19N	R9E	29	GEN	EUES	408	S	0.5							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	1.00	0.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	0.5	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401029	LONE TREE ROAD	045	T16N	R9E	25	ROW	CEMA	408	S	0.1							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.05	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	0.1	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
401031	JUDITH STA. K.	045	T13N	R11E	35	GEN	CEMA	408	S	0.1							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	0.05	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	0.1	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			

6/30/86

ADDENDUM #3d

NOXIOUS WEED INVENTORY  
PESTICIDE USE APPLICATION BY PROJECT

FOREST: LEWIS & CLARK N.F. DISTRICT 4

TARGET

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	SITE TYPE	WEED SPECIES	PEST CODE	CANOPY COVER	INV ACRES	REG. CODE	AI CODE	TYPE CODE	MEASURE CODE	APPL. RATE	PROPOSED LBS.	ACTUAL LBS.
401032	YOGD CROSSING	045	T13N	R11E	27	GEN	CADR	408	L	10.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		1	208	3	1	2.00	10.00	0.				
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.				
	PROPOSED ACRES = 10.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.				
401033	BUFFALO CANYON	045	T12N	R4E	32	GEN	EUES	408	M	5.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		2	225	3	1	1.00	2.50	0.				
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.				
	PROPOSED ACRES = 5.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.				
401034	FRENCHIES GULCH	045	T16N	R9E	25,35	GEN	EUES	408	M	10.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		2	225	3	1	1.00	5.50	0.				
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.				
	PROPOSED ACRES = 10.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.				
401035	DIVIDE ROAD	045	T15N	R10E	26,25	ROW	EUES	408	L	2.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		2	225	3	1	0.50	0.50	0.				
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.				
	PROPOSED ACRES = 2.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.				
401038	LONE TREE SPURGE	045	T16N	R9E	26	GEN	EUES	408	M	2.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1		2	225	3	1	1.00	1.00	0.				
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2						0.00	0.00	0.				
	PROPOSED ACRES = 2.0		ACTUAL ACRES = 0.0		PESTICIDE #3						0.00	0.00	0.				

NOXIOUS WEED INVENTORY  
PESTICIDE USE APPLICATION BY PROJECT

FOREST: LEWIS & CLARK N.F. DISTRICT 6  
TARGET

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	SITE TYPE	WEED SPECIES	PEST CODE	CANOPY COVER	INV ACRES	REG. CODE	AI CODE	TYPE CODE	MEASURE CODE	APPL. RATE	PROPOSED LBS.	ACTUAL LBS.
606901A	JUDITH GAP	107	T11N	R15E	19,20	GEN	EUES	408	L	37.0							
	DILUENT CODE = 0		NUMBER OF PESTICIDES = 1		PESTICIDE #1			3	225	3	1	0.50	5.00	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 209		PESTICIDE #2								0.00	0.00	0.00		
	PROPOSED ACRES = 37.0		ACTUAL ACRES = 0.0		PESTICIDE #3								0.00	0.00	0.00		
606901B	JUDITH GAP	107	T11N	R15E	19,20	GEN	EUES	408	M	50.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 2		PESTICIDE #1			1	208	3	1	0.50	28.50	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2			2	225	3	1	1.90	7.50	0.00			
	PROPOSED ACRES = 50.0		ACTUAL ACRES = 0.0		PESTICIDE #3								0.00	0.00	0.00		
606901C	JUDITH GAP	107	T11N	R15E	19,20	GEN	EUES	408	H	25.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 2		PESTICIDE #1			1	208	3	1	1.90	47.50	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2			2	225	3	1	0.50	12.50	0.00			
	PROPOSED ACRES = 25.0		ACTUAL ACRES = 0.0		PESTICIDE #3								0.00	0.00	0.00		
606902	BIG SNOWIES	037	T11N	R19E	17	ROW	EUES	408	L	5.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 2		PESTICIDE #1			1	208	3	1	1.90	3.80	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2			2	225	3	1	0.50	1.00	0.00			
	PROPOSED ACRES = 5.0		ACTUAL ACRES = 0.0		PESTICIDE #3								0.00	0.00	0.00		
606903A	LITTLE SNOWIES	027	T12N	R21E	24,15	GEN	EUES	408	L	10.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 2		PESTICIDE #1			1	208	3	1	1.90	9.50	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2			2	225	3	1	0.50	2.50	0.00			
	PROPOSED ACRES = 10.0		ACTUAL ACRES = 0.0		PESTICIDE #3								0.00	0.00	0.00		
606903B	LITTLE SNOWIES	027	T12N	R21E	24,15	GEN	EUES	408	M	15.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 2		PESTICIDE #1			1	208	3	1	0.50	22.80	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2			2	225	3	1	0.50	6.00	0.00			
	PROPOSED ACRES = 15.0		ACTUAL ACRES = 0.0		PESTICIDE #3								0.00	0.00	0.00		
606903C	LITTLE SNOWIES	027	T12N	R21E	24,15	GEN	EUES	408	H	1.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 2		PESTICIDE #1			1	208	3	1	1.90	1.90	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2			2	225	3	1	0.50	0.50	0.00			
	PROPOSED ACRES = 1.0		ACTUAL ACRES = 0.0		PESTICIDE #3								0.00	0.00	0.00		
606904A	PASTURE GULCH RD.	029	T09N	R10E	22,27	ROW	CEMA	408	L	5.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1			2	225	3	1	0.25	0.75	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2								0.00	0.00	0.00		
	PROPOSED ACRES = 5.0		ACTUAL ACRES = 0.0		PESTICIDE #3								0.00	0.00	0.00		
606905	SPRING CR.	059	T09N	R10E	15,10	ROW	CEMA	408	L	5.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 1		PESTICIDE #1			2	225	3	1	0.25	1.00	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2								0.00	0.00	0.00		
	PROPOSED ACRES = 5.0		ACTUAL ACRES = 0.0		PESTICIDE #3								0.00	0.00	0.00		
606906	PORCUPINE	027	T11N	R18E	7	GEN	EUES	408	M	1.0							
	DILUENT CODE = 1		NUMBER OF PESTICIDES = 2		PESTICIDE #1			1	208	3	1	1.90	1.90	0.00			
	TREATMENT UNIT CODE= 1		METHOD CODE = 206		PESTICIDE #2			2	225	3	1	0.50	0.50	0.00			
	PROPOSED ACRES = 1.0		ACTUAL ACRES = 0.0		PESTICIDE #3								0.00	0.00	0.00		

NOXIOUS WEED INVENTORY  
PESTICIDE USE APPLICATION BY PROJECT

FOREST: LEWIS & CLARK N.F. DISTRICT 7  
TARGET

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	SITE TYPE	WEED SPECIES	PEST CODE	CANOPY COVER	INV ACRES	REG. CODE	AI CODE	TYPE CODE	MEASURE CODE	APPL. RATE	PROPOSED LBS.	ACTUAL LBS.
777771A	US89 ROW CASCADE	013	T13N	R08E		ROW	CEMA	408	S	30.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		1	208	3	1	3.00	90.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	30.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
777771B	US89 ROW MEAGHER	013	T13N	R08E		ROW	EUES	408	S	10.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		2	225	3	1	0.50	5.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	10.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
777772A	US89 ROW MEAGHER	059	T12N	R08E		ROW	CEMA	408	S	20.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		1	208	3	1	3.00	60.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	20.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
777772B	US89 ROW MEAGHER	059	T12N	R08E		ROW	CEMA	408	S	10.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		2	PESTICIDE #1		1	208	3	1	1.00	10.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2		2	225	3	1	0.50	5.00	0.00			
	PROPOSED ACRES =	10.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
777773	MEAGHER CO. RD.	059				ROW	CEMA	408	S	38.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		1	PESTICIDE #1		3	225	3	1	0.25	3.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	28.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
777775	MC GEE COULEE	013	T16N	R08E	31	GEN	EUES	408	M	1.0							
	DILUENT CODE =	0	NUMBER OF PESTICIDES =		1	PESTICIDE #1		3	225	3	1	1.00	1.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		209	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	1.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
777776	MING COULEE	013	T16N	R05E	28	GEN	EUES	408	L	2.0							
	DILUENT CODE =	0	NUMBER OF PESTICIDES =		1	PESTICIDE #1		3	225	3	1	1.00	1.99	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		209	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	2.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
777777A	SMITH RIVER	013	T15N	R03E	30,31	RIP	EUES	408	M	35.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		2	PESTICIDE #1		1	208	3	1	1.00	12.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2		2	225	1	1	0.50	6.00	0.00			
	PROPOSED ACRES =	30.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
777777B	SMITH RIVER	059	T14N	R03E	12,13	RIP	EUES	408	M	15.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		2	PESTICIDE #1		1	208	3	1	1.00	5.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2		2	225	3	1	0.50	2.50	0.00			
	PROPOSED ACRES =	10.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
777777C	SMITH RIVER	059	T14N	R04E	6,18	RIP	EUES	408	M	10.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		2	PESTICIDE #1		1	208	3	1	1.00	4.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2		2	225	3	1	0.50	2.00	0.00			
	PROPOSED ACRES =	8.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
777777D	TENDERFOOT	059	T14N	R04E	30	GEN	EUES	408	L	5.0							
	DILUENT CODE =	1	NUMBER OF PESTICIDES =		2	PESTICIDE #1		1	208	3	1	1.00	5.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		206	PESTICIDE #2		2	225	3	1	0.50	2.50	0.00			
	PROPOSED ACRES =	5.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
777778	LOGGING CR. SPURGE	013	T15N	R05E	12	GEN	EUES	408	S	0.1							
	DILUENT CODE =	0	NUMBER OF PESTICIDES =		1	PESTICIDE #1		3	225	3	1	0.50	0.01	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		209	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	0.1	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			



ADDENDUM #3d

NOXIOUS WEED INVENTORY  
PESTICIDE USE APPLICATION BY PROJECT

FOREST: LEWIS & CLARK N.F. DISTRICT 7  
TARGET

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	SITE TYPE	WEED SPECIES	PEST CODE	CANOPY COVER	INV ACRES	REG. CODE	AI CODE	TYPE CODE	MEASURE CODE	APPL. RATE	PROPOSED LBS.	ACTUAL LBS.
777779	COPPER CR.	059	T11N	R06E	5,6	GEN	CEMA	408	L	5.0							
	DILUENT CODE =	0	NUMBER OF PESTICIDES =		1	PESTICIDE #1		3	225	3	1	0.50	2.50	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		209	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	5.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			
777780	COOKS CORNER	059	T12N	R07E	28	GEN	LIDA	408	L	2.0							
	DILUENT CODE =	0	NUMBER OF PESTICIDES =		1	PESTICIDE #1		3	225	3	1	0.50	1.00	0.00			
	TREATMENT UNIT CODE=	1	METHOD CODE =		209	PESTICIDE #2						0.00	0.00	0.00			
	PROPOSED ACRES =	2.0	ACTUAL ACRES =		0.0	PESTICIDE #3						0.00	0.00	0.00			



NOXIOUS WEED INVENTORY  
DETAILED LISTING OF MECHANICAL TREATMENTS BY WEED SPECIES AND SITE TYPE

FOREST: LEWIS & CLARK N.F.

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	WEED SPECIES	SITE WEED	INV ACRES	TREAT TYPE	PROP ACRES	ACTUAL ACRES	
-----												
DISTRICT 1												
111008A	CAVE MOUNTAIN	099	T25N	R09W	26	CEMA	OCC	5.0	1	1.0	0.0	
120903A	HOME GULCH	049	T22N	R09W	35	CEMA	OCC	4.0		1.0	0.0	
100002C	SUN RIVER	049	T22N	R09W	35,36	CEMA	RIP	162.0	1	5.0	0.0	
111113A	BEAVER - WILLOW RD.	049	T20N	R09W	3,25	CIAR	ROW	0.7	1	0.7	0.0	
-----												
								TOTAL INV. ACRES	171.7	TOTAL TREAT ACRES	7.7	0.0
DISTRICT 4												
401016	TIMBER CR.	015	T20N	R10E	27	CEMA	GEN	1.0	1	1.0	0.0	
401018	POSTIL CR.	015	T20N	R10E	17	CEMA	GEN	2.0	1	1.0	0.0	
401020	COW CR. TRAIL	045	T19N	R9E	3	CEMA	GEN	3.0	1	2.0	0.0	
401036	DRY POLE CMPGD.	045	T12N	R11E	23	EUES	OCC	5.0	1	5.0	0.0	
-----												
								TOTAL INV. ACRES	11.0	TOTAL TREAT ACRES	9.0	0.0
DISTRICT 6												
606911	CASTLES RD.	059	T09N	R09E		CEMA	ROW	3.0	1	3.0	0.0	
606912	MILL CR. RD.	059	T10N	R09E	11	CEMA	ROW	3.0	1	3.0	0.0	
-----												
								TOTAL INV. ACRES	6.0	TOTAL TREAT ACRES	6.0	0.0
DISTRICT 7												
777773	MEAGHER CO. RD.	059				CEMA	ROW	38.0	1	10.0	0.0	
-----												
								TOTAL INV. ACRES	38.0	TOTAL TREAT ACRES	10.0	0.0

Forest Total      32.7



ADDENDUM 3f

NOXIOUS WEED INVENTORY  
 DETAILED LISTING OF BIOLOGICAL TREATMENTS BY WEED SPECIES AND SITE TYPE

FOREST: LEWIS & CLARK N.F.

PROJECT NUMBER	NAME	COUNTY	T	R	SEC	WEED SPECIES	SITE WEED	INV ACRES	BIOLOGICAL AGENT	PROP ACRES	ACTUAL ACRES	
DISTRICT 1												
121820C	FORD CR. RESORT	049	T19N	R09W	12	CEMA	OCC	10.0	URAF	10.0	0.0	
100002B	SUN RIVER	049	T21N	R09W	3,4	CEMA	RIP	96.0	URAF	92.0	0.0	
100002C	SUN RIVER	049	T22N	R09W	35,36	CEMA	RIP	162.0	URAF	151.0	0.0	
110801E	N. FORK TETON	099	T25N	R09W	25,36	CEMA	RIP	77.0	URAF	67.0	0.0	
121820D	FORD CR. RESORT	049	T19N	R09W	12	CEMA	RIP	40.0	URAF	40.0	0.0	
								TOTAL INV. ACRES	385.0	TOTAL TREAT ACRES	360.0	0.0
DISTRICT 4												
401037	WILLOW CR. MUSK	045	T14N	R10E	8	CANU	GEN	2.0	RHCO	2.0	0.0	
								TOTAL INV. ACRES	2.0	TOTAL TREAT ACRES	2.0	0.0
DISTRICT 6												
606910	FAWN CR. RD.	059	T10N	R10E		CEMA	ROW	5.0	URAF	5.0	0.0	
606904B	PASTURE GULCH RD.	059	T09N	R10E		CIAR	ROW	1.0	URAF	1.0	0.0	
606908	SPRING CR. RD.	059	T09N	R10E		CIAR	ROW	10.0	URAF	10.0	0.0	
606909A	FOREST LAKE RD.	059	T06N	R10E		CIAR	ROW	5.0	URAF	5.0	0.0	
606909B	FOREST LAKE RD.	059	T06N	R10E		CIAR	ROW	5.0	URAF	5.0	0.0	
								TOTAL INV. ACRES	26.0	TOTAL TREAT ACRES	26.0	0.0

FOREST TOTAL 388.0 acres



ADDENDUM 3g

TABLE I  
Comparison of Alternatives by Treatment and Cost

Treatment <u>1/</u>	Alternative 2 Biological Control <u>2/</u>	Alternative 3 Cultural Control <u>3/</u>	Alternative 4 Chemical Control <u>4/</u>	Alternative 5 Integrated Pest Mgt. <u>5/</u>
Biological treatment				
1986 Acres	1,230 ac.	0	0	388 ac.
Cost	15,000	0	0	\$2,000
5 year total		0	0	
Acres*	6,150 ac.	0	0	2,000 ac.
Cost	75,000	0	0	\$10,000
Mechanical treatment				
1986 Acres	0	1,230 ac.	0	33 ac.
Cost		\$252,400	0	\$3,000
5 year total				
Acres *		6,150 ac.	0	155 ac
Cost		\$1,260,000	0	\$15,000
Herbicide treatment				
1986 Acres	0		1,230 ac.	622 ac.
Herbicide lbs.	0		756 lb.	495 lb.
Cost	0		\$108,000	\$54,650
5 year total				
Acres*			3,650 ac.	1,991 ac.
Herbicide lbs.			2245 lbs.	1,395 lb.
Cost			\$320,800	\$170,000
Total - 1986 Ac.	1,230 ac.	1230 ac.	1,230 ac.	1043 ac.
1986 Cost	\$15,000	\$252,400	\$108,000	\$59,650
5 year total ac.	6,150 ac.	6,150 ac.	3,650 ac.	4,146 ac.
5 year total cost	\$75,000	\$1,260,000	\$320,800	\$195,000

\* including re-treated acres

1/ Alternative 1 would have no treatment, (biological, mechanical, or herbicide) and no direct treatment cost, therefore, Alternative 1 is not shown in the table. The environmental costs and benefits of all alternatives are displayed in Table II in D. Environmental Consequences.

2/ Alternative 2 assumes annual monitoring of existing populations of bio-agents and new releases as needed and available.

3/ Alternative 3 assumes hand grubbing and mowing of all infested acres annually during the planning period, with little or no reduction in area infested by weeds, because of regrowth and seed germination.

4/ Alternative 4 assumes a reduction in weed infested area each year as treatment effectively reduces the populations of weeds, especially spotted knapweed, whitetop, and thistles. All infested acres would be treated annually.

5/ Alternative 5 includes less acres of chemical treatment than Alternative 4 because of prescribed biological treatment, mechanical treatment, or deferment. On some large areas the weed management strategy is containment, with biological control applied to the major portion of the area and chemical treatment on the periphery. As in Alternative 4 it is assumed that there is a gradual reduction in weed infested area from year to year.





## MANAGEMENT CONSTRAINTS

This section lists the revised constraints that must be applied to approved projects.

1. All herbicide application workers must be advised explicitly of the hazards of these chemicals and instructed in the careful herbicide application techniques, so as to reduce dose levels below worst-case values assumed in the risk analysis.
2. Sensitization to 2,4-D and picloram mixtures has occurred in humans, and applicators may develop allergic reactions from repeated exposure. All supervisory field personnel responsible for herbicide application (both in service and contract applicators) are required to inform their workers of the possibility of allergic reactions to some mixtures of picloram and 2,4-D and to remove from their crews those workers that exhibit such reactions. Any instances of allergic reactions to pesticides must be reported to the Forest Supervisor.
3. Appropriate personal protective equipment will be considered in developing project safety and health analysis (FS 6700-7) for Forest Service applicators (see Health and Safety Code Chap. 9-10 FSH 6709.11.).
4. Pesticides must be applied under the supervision of a licensed pesticide applicator under the laws of the State of Montana. To apply picloram, the applicator must be licensed for restricted use herbicides. Pesticides must be applied consistent with the instructions on the label (see Appendix 9).
5. Personnel in charge of controlling noxious weeds must review state and federal regulations and Forest Service manual instructions (FSM 2157 and FSH 2109.12) concerning proper disposal of pesticides and pesticide containers. Federal and State regulations regarding the proper disposal of pesticide wastes must be complied with.
6. No herbicides will be applied within municipal watersheds, wilderness areas, proposed research natural areas, or areas occupied by rare plant species. Weed control in these areas will be by cultural methods only (hand grubbing, etc.). Sufficient buffer zones (at least 100 feet) will be established to prevent herbicide drift or subsurface movement into these areas.
7. The use of herbicide to control weeds in campgrounds will be restricted to 2,4-D only. Public notification and signing will precede the application of herbicide, and the treated area will be closed to public use for two weeks following treatment. Areas adjacent to water wells, and other selected areas within the campgrounds will be mechanically treated by hand-grubbing.
8. No herbicide will be applied directly to any standing or running water or where surface water from treated areas can run off into live water sources.

Picloram is a persistent herbicide which will carry over in the soil, with a half-life of approximately one month under highly favorable conditions to more than four years in arid regions (USDA Forest Service. 1984). It is water soluble and can move with water in streams and irrigation or drainage ditches. Do not use picloram where a sandy porous surface and substrate overlies ground water 10 feet or less below the surface. Do not apply directly to standing or running water. Do not apply where surface water from treated areas can run off to adjacent cropland, streams, irrigation ditches, ponds or wells. Do not apply to the banks or bottom of irrigation ditches or intermittent streams.

9. The location of the inventoried noxious weed infestations scheduled for mechanical treatment will be compared with the Forest cultural resource site atlas in consultation with the Forest Archeologist prior to treatment. If it is determined that there is a probability of cultural resource disturbance, then, on-site cultural inventory will be conducted prior to treatment. If cultural resources are noticed during mechanical treatment, the work will be stopped until the Forest Archeologist can conduct a cultural resource evaluation.

CONTENT ANALYSIS  
OF COMMENTS TO THE DRAFT ENVIRONMENTAL IMPACT STATEMENT  
FOR NOXIOUS WEED CONTROL ON THE LEWIS AND CLARK NATIONAL FOREST

On March 21, 1986 the Draft EIS for the 5-Year Program to control Noxious Weeds on the Lewis and Clark National Forest was mailed to 85 individuals, agencies, and organizations for public comment. A notice of the release of the Draft EIS appeared on the Federal Register on Friday April 4, 1986. A news release appeared in the Great Falls Tribune on February 24 and again on April 6, 1986 explaining the Noxious Weed analysis and comment procedures.

The original comment period was scheduled to end on May 7, 1986. The Environmental Protection Agency requested that the comment period be extended until May 19, 1986 to allow interested individuals a full 45 days to review the Draft after its appearance on the Federal Register. The request was accepted and the comment period extended. Anyone who had received a copy of the Draft EIS received a follow-up letter informing them that the comment period had been extended to May 19. All comments received through May 29 were analyzed and considered in developing the final EIS.

The Forest received 19 written comments on the Draft EIS. The comments were categorized by representing group and location as follows:

- 9 comments coded - G - Government Agencies (State and Federal)
  - 5 comments coded - I - Individuals (Not representing any organization)
  - 1 comment coded - T - Blackfeet Tribe
  - 4 comments coded - O - Organizations (Stockgrowers, Environmental, Educational)
- M - In Montana  
O - Outside Montana

Comments were sorted into the following categories:

- I. NEPA Process
- II. Health and Safety (Risk Analysis)
- III. Control Priority
- IV. Management (Future Developments) - Roads, Timber, Oil and Gas
- V. Economics
- VI. Integrated Approach
- VII. Revegetate/Reseeding
- VIII. Education/Training Applicators
- IX. Rare Plants
- X. Biological Controls
- XI. Monitoring/Inventory/Effectiveness
- XII. Application Techniques
- XIII. Wilderness/Backcountry/Weed Free Hay

# I. NEPA PROCESS

## A. Extend Comment Period

1. Concern that the comment period should be extended so that comments would be accepted a full 45 days after the notice of release appeared on the Federal Register.

RESPONSE: The comment period for reviewing the Draft EIS was extended from May 7, 1986 to May 19, 1986. In late April a letter was sent to all recipients of the Draft EIS informing them of the extended comment period. The notice appeared on the Federal Register on Friday, April 4. The extension to May 19 allowed a full 45 day comment period after the notice of release appeared. All comments received through May 29 were considered in developing the final EIS.

## B. Document Additions/Corrections/Clarifications

1. Concern that the individual be informed of the final decision.

RESPONSE: Anyone who commented on the Draft EIS will receive notification of the final decision.

2. Concern that the documents include the worst case analysis by Ed Monnig.

RESPONSE: Ed Monnigs' health risk analysis (including the worst case analysis information) is included in the Draft EIS as Appendix 8B.

3. Concern that the final EIS list policy items of preventive or passive types of control that can be used under any of the alternatives. Suggested that the list should be at the beginning of 'B. Alternatives Considered.'

RESPONSE: We agree that certain preventive control measures would be used under any of the alternatives. We have included a list of these measures as a part of the selected alternative in Addendum #2 Forest Objectives for Noxious Weed Management of the final EIS.

4. Suggestions that the noxious weed list should include all weeds listed by the Montana Department of Agriculture for the state. Also wants these weeds addressed in the management plan. See attached list.

RESPONSE: The weeds listed in the draft EIS were only the weeds known to occur on the Lewis and Clark National Forest. We are aware that there are other noxious weed species in Montana, and adjacent states, and will remain vigilant for their occurrence on the Forest. The noxious weed list in the Montana County Noxious Weed Control Act, is included in the final EIS as Addendum #1 Montana Noxious Weed List.

5. Feels that the affected acreages are under estimated.

RESPONSE: The inventory of noxious weeds occurring on the Forest is dynamic and revised to include populations of weeds as we become aware of them. We encourage anyone that has knowledge of weeds on the Forest to contact us so we can include them in our inventory. The inventory has been revised since the draft EIS was written, and is included in Addendum #3 Noxious Weed Inventory and Project Proposal/Report.

6. Correction - Leafy spurge roots and buds have been found much deeper than 5 feet, which is the depth that was mentioned in the DEIS.

RESPONSE: True, leafy spurge roots can grow as deep as fifteen feet with vegetative buds to depths of ten feet, according to The Distribution, Biology, and Control of Leafy Spurge (Montana State University, February, 1985). The point of this information, whether five or fifteen feet, is that leafy spurge roots and vegetative buds grow too deep for hand grubbing to be effective. Mechanical treatment, to be effective, requires intensive cultivation repeated several times during the growing season for several years.

7. Additions - References should be cited to document how noxious weeds reduce big game forage production and lower wildlife, recreation and esthetic values.

RESPONSE: Reference to reduction of big game forage and wildlife habitat and recreation value can be found in the publications by Montana State University, 1983 "Knapweed..." circular 307, Kelsey, Richard G. 1984 "Living with Spotted Knapweed...", and Spoon, Charles W. 1983 "Noxious Weed on the Lolo...." (see Appendix 1a of draft EIS).

8. Additions - DEIS discussed deer and elk eating young knapweed plants but did not cite a reference. If wildlife eat the seed heads, managers should be more concerned about the potential spread of knapweed than with its forage value or importance as a food source.

RESPONSE: Our information on the use of knapweed seedheads by big game animals was from personal communication with Don Bedunah, Assistant Professor of Range Management at the University of Montana, based on information gathered during an ongoing research project. Reference to wildlife eating of plants and seed heads can be found in Spoon, Charles W. 1983 "Noxious Weeds on the Lolo...." The Forest recognizes that there is very little value in noxious weeds for wildlife and that preventing the spread of noxious weeds is our goal. That is why the Forest has entered into a noxious weed control program and why good range management practices to prevent the spread of noxious weeds is emphasized.

9. Correction - The DEIS implies that left unchecked, noxious weeds will continue to spread on the Forest. Statement implies that weeds will eventually dominate all vegetation in the Forest. Noxious weed species will only spread unchecked to the extent that natural conditions and land management practices will allow.

RESPONSE: It is true that these noxious weed species are not expected to invade undisturbed dense coniferous forests, rockland, alpine turf, etc. However, they are adapted to a wide variety of grassland, shrubland, and forest habitats, especially under disturbed conditions resulting from human activity and/or natural factors such as wildfire.

10. Additions - Cite references for statements that allelopathic toxins are produced by leafy spurge and spotted knapweed.

RESPONSE: The draft EIS (page 8) cites Kelsey, 1984 (Appendix 1a of draft EIS), as the reference for allelopathic toxins in knapweed. Another good reference for this property of knapweed is Fletcher, R.A. and A.J. Renney, 1963, A Growth Inhibitor found in Centaurea spp. Can. J. Plant Sci. 43: 475-481.

Reference to allelopathic properties of leafy spurge is found in Messersmith, C.G., 1983 (Appendix 1a of draft EIS).

11. Correction - Chemical control methods that are proposed in the DEIS have shown 99 to 100 percent **suppression** of weeds during the first year, not **control** as indicated in the DEIS.

RESPONSE: By 'control' we mean the reduction of a pest problem to a point where it causes no significant economic damage. See definitions in Appendix 1d-Glossary of the draft EIS.

12. Clarification - Rates in Appendix 5b is confusing - the rates shown may be adequate for spot treatments of scattered, low-density infestations within the acreage that is listed, but many treatments would be at less than recommended rates if the entire acreage is treated. The proposed application rate for each target weed and area should be listed in the DEIS. Suggest that herbicides not be applied at less than recommended rates because the treatments may not be effective and because resistant or tolerant weed populations may develop.

RESPONSE: Correct. The acres infested with noxious weeds vary in their weed density by canopy cover class, as is indicated in Appendix 5c of the draft EIS. The amount of chemical proposed to treat each infested area is based on the weed density and species present on that site. The application rates are within the recommended rates on the label and guidelines developed from the latest research. The actual application rate of pesticide proposed per treated area is shown in Addendum #3 Noxious Weed Inventory and Project Proposal/Report of the final EIS.

13. Clarification - On page 'e' (summary) the last sentence..."The possible cumulative..." is unclear and suggestion that it be reworded.

RESPONSE: We do not expect any cumulative or synergistic impacts of the pesticide application proposed on the Lewis and Clark National Forest with pesticide application that may occur on adjacent lands.

14. Addition - On page 15, second paragraph, last sentence... "In the long term..." suggest that a similar statement be included in the discussion of Alternative 5.

RESPONSE: Yes, it was intended that this statement apply to biological control in Alternative 5 as well. The first paragraph of the description of the environmental consequences of Alternative 5 on page 18 explains this.

15. Clarification - In Appendixes 4 and 5, a, b, c is there a method of tracking specific spray projects between these tables?

RESPONSE: Yes, the projects can be tracked with the "project number" which appears in the first column of Appendix 4 and 5b, and in column 12 of Appendix 5c. Appendix 5b is a summary of the detailed listing of individual projects on Appendix 5c. The "project number" in column 12 of Appendix 5c is for the purpose of "lumping" individual projects in the same general geographic area to allow the summarization in Appendix 5b. The updated data in Addendum #3 of the final EIS carries the individual project number from inventory of noxious weeds through the proposal for treatment by pesticide, mechanical, or biological methods.

16. Clarification - In Appendixes 5c and 6, what do 'H', 'M', 'L', and 'S' mean in the column "Canopy Cover?"

RESPONSE: The canopy cover class of the noxious weed on the infested area as follows:

S = Scattered (less than 1%)

L = Low (1 to 10%)

M = Moderate (10 to 25%)

H = High (greater than 25%)

This has been included in Addendum #3 Noxious Weed Inventory and Project Proposal/Report of the final EIS.

17. Analysis of site-specific impacts would have been better accomplished by discussing the impacts by type of project (open-range, right-of-way, riparian, potentially occupied site).

RESPONSE: Sites to be treated on the Forest with herbicides are classified into four environmental site types as discussed below. Herbicide treatment proposed for each type is displayed in Addendum #1 of the final EIS. The human health risk analysis for proposed herbicide treatment in each site type is contained in Appendix 8a of the draft EIS.

1. Rights-of-way - Treatment occurs near a road right-of-way. Often soils along rights-of-way are recently disturbed. Treatment of weeds will provide existing grass species the opportunity to spread and thrive. Herbicide application involves spot applications within 10-30 feet of the road in most cases. About 226 acres, or 35% of the area to be treated are rights-of-way type.

2. Riparian - This indicates treatment occurs near a stream, lake, wetland, etc. Mitigation measures in Addendum #4 of the final EIS are prescribed to prevent herbicide application to any surface water and to prevent ground water contamination. About 109 acres, or 17% of the area to be treated with herbicides are in riparian areas.

3. Occupancy sites - These sites consist of campgrounds, summer home areas, and Forest Service administrative sites that are associated with concentrated human activity. Mitigation measures for herbicide application in this type are discussed in Addendum #3 of the final EIS. This is a minor site type. Only about 16 acres, or 3% of the proposed herbicide treatment is proposed in this type.

4. General Range and Forest Lands - Areas classified in this category span a wide environmental gradient from grasslands and shrublands to timber and parklands. There is generally less environmental and human health hazard from herbicide treatment in this zone than the other three site types. The majority of the proposed herbicide treatment is in the general range and forest site type. About 291 acres, or 45% of the herbicide treatment proposed is in this type.

## II. HEALTH AND SAFETY (RISK ANALYSIS)

- A. Concern that the amount of water intake to reach ADI is directly proportional to the size of the reservoir of water which is contaminated by x amount of herbicide. The amount of water consumed is of secondary importance. Question: Wouldn't it be reasonable to assume that a truck accident and resulting spill is a "major spill?"

RESPONSE: We agree that a truck accident resulting in the spill of herbicides into reservoirs would be potentially a major concern. As discussed in Section 3 of the Human Health Risk Analysis contained in Appendix 8b of the draft EIS, the extent of damage caused by such a spill is dependent on site specific variables such as the size of the reservoir, flushing rate of the reservoir, size of the spill, use of the reservoir, etc. The Human Health Risk Analysis contained in Appendix 8b and summarized in Appendix 8a examines in detail the potential effects of large spills into reservoirs of various sizes.

- B. DEIS states that picloram will not be applied within 100 feet of water or to the inner banks of ditches or water channels. The DEIS should address whether the same constraints apply to 2,4-D and other herbicides, and the reasons for this policy. An arbitrary buffer zone of 100 feet may preclude herbicide use where it may be beneficial. Appropriate buffer zones should be determined on case-by-case basis considering the geography of the area, application method, and equipment. The hazard of the herbicides to fish depends on fish size, the amount of exposure and the toxicity of the product. Applicators must choose the most appropriate herbicide for each individual site; follow label directions and precautions. When choosing herbicides, their persistence and mobility in the environment, and their toxicity and hazard to fish and wildlife should be considered. If two or more herbicides are equally effective against weeds, the product with the least potential for environmental damage should be used. Clarification that picloram would not be used on riparian areas (within 100 feet of water) would be useful here. In Appendix 8a, Table 3 - This table indicates the use of picloram on riparian areas. Clarification on where in the riparian area it is to be used would be helpful.



RESPONSE: We agree that a 100 foot buffer zone for picloram is arbitrary, and should instead be determined on a case by case basis, according to site conditions. We are replacing the 100 foot buffer with the following requirement statement, developed largely from the label, in the revised Management constraints of Addendum #4 of the final EIS.

"Picloram is a persistent herbicide, it will carry over in the soil, with a half-life of approximately one month under highly favorable conditions to more than four years in arid regions (USDA Forest Service. 1984). It is water soluble and can move with water in streams and irrigation or drainage ditches. Do not use picloram where a sandy porous surface and substrate overlies ground water 10 feet or less below the surface. Do not apply directly to standing or running water. Do not apply where surface water from treated areas can run off to adjacent cropland, streams, irrigation ditches, ponds or wells. Do not apply to the banks or bottom of irrigation ditches or intermittent streams".

The same precautions do not apply to 2,4-D Amine, because it is not nearly as persistent in the environment as picloram. Soil microorganisms readily metabolize 2,4-D, especially under conditions of warmth and moisture that also promote growth of microorganism populations. In soils, 2,4-D generally has a short (one month or less) persistence. Plants metabolize 2,4-D readily by a variety of pathways to various degradation products (USDA Forest Service. August 1984). Although the label allows application of 2,4-D amine to aquatic weeds in water, the Lewis and Clark National Forest will restrict its use to land surfaces only. 2,4-D will not be applied to any water surface, including canals, ditches, streams, lakes, ponds, seeps or marshes.

- C. Concern that if the use of herbicides are restricted to 2,4-D in campgrounds there will be less effective control of noxious weeds in these important areas. Where picloram use restricted, the DEIS should clarify whether picloram is restricted by the product label or by the Forest Service. It should also describe the types of areas where the use of picloram is restricted.

RESPONSE: As explained in B above, the revised restrictions were developed from the label, with additional margins of safety added by the Forest Service. The use of picloram is restricted from the campgrounds because of the possibility of ground water and well contamination based on the specific site conditions in the campgrounds proposed for treatment.

- D. Potential problems associated with spills and application of herbicides near water should be considered before a project begins. Labeling precautions that prevent contamination of ground water must be observed.

RESPONSE: We agree that potential problems associated with spills and the application of herbicides near water require serious consideration. In many cases the Forest Service will go beyond label precautions to minimize potential for contamination of water. For example, picloram is restricted from campgrounds for the reasons described in B and C above.

- G. Campground closures following treatment with either 2,4-D or picloram are unnecessary. There are no re-entry intervals and people may enter treated areas without protective clothing or equipment after sprays have dried. It should be sufficient to post the treated areas and notify the public that the areas have been sprayed and why they have been sprayed.

RESPONSE: Although the labels and use restrictions for the herbicides 2,4-D and picloram do not require reentry intervals, the Lewis and Clark National Forest has elected to close the treated areas of campgrounds for two weeks following treatment to further minimize the possibility of general public exposure to herbicide residues.

### III. CONTROL PRIORITY

- A. Concern that Canada thistle on forest lands and roads will be controlled by nature without the use of man-induced controls. A lot of money would be wasted spraying Canada thistle on the Forest.

RESPONSE: We agree that Canada thistle is a low priority weed on the Forest when compared to spotted knapweed and leafy spurge. These latter two weeds are the main target weeds in the Lewis and Clark National Forest weed control program. Control of Canada thistle is only a secondary objective for chemical treatment where it is associated with the main target weeds. As you have stated, Canada thistle populations often decline as forest trees and associated vegetation advance along roadsides and in timber harvest areas during the natural process of forest succession. Also, in controlling Canada thistle care must be taken to distinguish the noxious weed from the several native thistle species which occur in the ecosystem. For example, Cirsium longistylum is a Montana endemic, which occurs only in the Little Belt and Big Belt Mountains of Montana.

Where Canada thistle occurs on the Forest adjacent to agricultural cropland, and is an economic problem, we may consider this weed a higher priority for control in cooperation with adjacent landowners. We will continue to monitor Canada thistle populations and rely on biological control agents, as they are developed and become available, for most Canada thistle control.

- B. Concern that the Forest should direct action to first halt the spread by eradicating new outbreaks and small infestations, and second, reduce or contain large existing infestations.

RESPONSE: We agree with these control priorities, and have clarified this in Addendum #2 Forest Objectives for Weed Prevention and Control of the final EIS.

#### IV. MANAGEMENT (FUTURE DEVELOPMENTS) - ROADS, TIMBER, OIL AND GAS

##### A. Management (General)

1. Concern that the Forest should consider the potential for noxious weed infestation in management decisions...land management decisions conducive to the introduction of weeds should be eliminated.

RESPONSE: The Forest Plan has standards that will be followed in the decision making process. An important factor in the prevention of noxious weeds is the reseeding and rapid establishment of vegetation on disturbed sites, such as road cuts and fills, rock quarries and gravel pits. If considerations are given to the spread of noxious weeds in the planning and execution of management activities, the spread of noxious weeds will be reduced. However, we cannot eliminate all activities that are conducive to the introduction of weeds.

2. The DEIS suggests the weed problem is mainly along public thoroughfares. Weed prevention techniques should be used in all areas of the Forest.

RESPONSE: We agree that weed prevention techniques should be used in all areas of the Forest. However, for efficiency and cost effectiveness, control will be applied on a priority basis as outlined in Addendum #2 Forest Objectives for Noxious Weed Management of the final EIS.

##### B. Vehicles and Roads

1. Concern that vehicles from logging equipment, oil and gas operators, road construction, mining, and hunters have the potential for spreading noxious weed problem. Recommended washing equipment to remove weed seeds before entering the National Forest. Concern that parking lots for Forest Service and industry vehicles be weed free. Concern that the Forest Service work with counties to identify weed-infested areas (gravel pits) that are potential sources of infestation to the National Forest. Concern that any oil and gas project include a concise and comprehensive reclamation plan regarding weed control on all roads being built to an exploration site and at the site itself.

RESPONSE: The Forest has the same concern about the spreading of noxious weed seed. Currently, there are no contract clauses that provide for that requirement. Also we have no control over the recreationist that travel the roads throughout the forest, except for the use of road closures. Weed free parking lots will be one of the items in a management section of the EIS. We have cooperated with the counties in the past in inventory and treatment and will continue to do so. It has been and will continue to be standard practice to include reclamation of disturbed sites when dealing with gas and oil development.

2. Concern that the Forest Service should close newly-constructed roads and eliminate off-road vehicle travel until permanent vegetative cover is established. ORV use in weed-infested areas and weed-free areas should be prohibited.

RESPONSE: The Forest's goal is to establish vegetation promptly on roadsides and borrow pits following new road construction. The establishment of a good seed-bed is essential. The Forest will try to reseed roadsides immediately after construction. Closing the roads permanently to ORV use in weed-infested or conversely in weed-free areas, would essentially mean closing the Forest to motorized use. Motorized vehicle use is a recreational pastime for many Forest visitors, and we feel that the Forest should continue to provide the opportunity to ORV users on suitable sites of the Forest.

### C. Range Management

1. Suggestion that if proper range management, cattle disbursement practices and recreation use development are being required and enforced there should be little opportunity for noxious weeds to "control out" desirable vegetation.

RESPONSE: Best range management practices and the maintenance of good range vegetative conditions will help to prevent establishment and may tend to retard the spread of weeds through natural competition. However, these introduced noxious weeds have some competitive advantages over native plants because of the lack of natural parasites and diseases that effect native plant species. Although noxious weeds usually establish on bare soil that is often associated with disturbance by man's activities, weeds also may establish on the bare soil resulting from gopher activity and other natural processes. The ability of spotted knapweed to expand into an excellent condition range area can be seen in the Blackfoot-Clearwater Game Range of Western Montana (Morris, Melvin S. and Don Bedunah. 1984. Some Observations on the Abundance of Spotted Knapweed in Western Montana in Proceedings of the Knapweed Symposium, Montana State University Bulletin 1315).

2. The DEIS does not mention that riparian areas are also disturbed by livestock grazing. It should address ways to reduce disturbance of riparian zones to minimize invasion by noxious weeds. The possibility of using grazing management to improve range condition and to provide increased plant competition with noxious weeds on all areas should be investigated. The improved grazing practices should be specified in the plan.

RESPONSE: All environmental site types discussed in the draft EIS (riparian, road rights-of-way, occupancy sites, and general range and forest) may be disturbed by livestock grazing if they are in allotments where livestock graze under permit. The opportunity for improved grazing practices depends on the site specific conditions on each range allotment. Alternative grazing systems and practices for each allotment are developed during the range environmental analysis process that results in an allotment management plan. Weed prevention and control is one objective, among several, that are used in developing allotment management plans. Grazing practices, developed to meet the objectives for each allotment, are specified in the allotment management plans.

#### D. Timber Management

1. Noxious weed control should be incorporated into all timber harvesting plans.

RESPONSE: Timber sale area improvement plans are developed during the planning for each timber sale. This plan displays treatments needed within the timber sale area. Weed control is often scheduled in these sale area improvement plans and is recognized as a legitimate treatment for the collection and expenditure of improvement funds under the Knutson-Vandenberg Act of 1930.

The Forest often includes the seeding of grasses and legumes on roads, skid trails and other disturbed sites for erosion and weed prevention. Provision for this seeding is incorporated into plans for the timber sales either through the timber sale contract or the sale area improvement plan. This direction is provided for in the Forest Plan and is also highlighted in Addendum #2 Forest Objectives for Noxious Weed Management of the final EIS.

#### V. ECONOMICS

- A. Concern that the cost of weed control should be included in the cost of timber sales, oil leases/exploration, and mining.

RESPONSE: We agree. The stabilization and revegetation of disturbed areas with suitable species is a legitimate cost of these activities. This will be further highlighted in Addendum #2 Forest Objectives for Noxious Weed Management of the final EIS.

- B. Statement that money spent in weed control now will be only a fraction of what it would cost later if the weeds were not controlled now.

RESPONSE: Yes, and cost effectiveness is a major consideration in the rationale for developing the Forest noxious weed program in this EIS.

- C. Concern that the industry that brought the problem of noxious weeds to the Forests is not bearing a substantial portion of the fiscal burden for treating the problem. Grazing industry specifically mentioned.

RESPONSE: Actually, we have found that noxious weeds on the Forest usually originate and spread along roadsides from seed transported by vehicle travel. Public recreation travelers, along with other taxpayers, are paying for weed control through appropriations from Congress. The livestock grazing permittees, through the use of range betterment funds from grazing fees, have also supported noxious weed control efforts. Individual livestock permittees on allotments with noxious weed problems have contributed additional funds in weed control by entering into cooperative projects with the Forest Service.

- D. The benefits and costs of weed control to wildlife, recreation and watershed resources need to be more thoroughly documented and discussed in the DEIS, so that reviewers can determine if the program is truly cost effective.

RESPONSE: We have not found cost multipliers for the effects of noxious weed control on wildlife, recreation and watershed values. Further research is needed in this regard. Whether the program is truly cost effective is related to the assumptions concerning the rate of spread of noxious weeds if not controlled, and the resource loss or the future cost of control as discussed in B above. Some of these assumptions are discussed in the Environmental Consequences section of the draft EIS. When additional information on other values becomes available we will utilize them in further analysis.

- E. DEIS suggests that the costs must be applied annually over a very long period of time. If the proposed weed control measures are this ineffective in reducing weed occurrence, Forest Service planners should develop a more effective weed control program.

RESPONSE: The integrated pest management approach, selected as the preferred alternative, provides for flexibility in applying the most effective control measure available for each noxious weed infestation. Weed science research in Montana and adjacent states is active in the universities and the state and federal government. The Forest intends to respond to advances in technology by applying the most effective practices available.

## VI. INTEGRATED APPROACH

- A. Concern that admitting that Alt. 5 emphasizes chemical control as the primary method weakens the application of other control methods and does not allow proper side boards for "Go-No Go" conditions for the use of chemical control, and emphasis on biological & mechanical control over chemical. A realistic control program should consist of more than one approach (ie. biological, cultural, or chemical) and alternatives should reflect a combination of control techniques at different levels or intensities.

RESPONSE: After evaluating all of the alternatives, it is our decision to adopt alternative #5, integrated pest management. The integrated pest management approach provides for a combination of treatments based on the most appropriate prescription for the specific conditions at each site. The mix of treatments in any one year will depend on a number of factors, including: (a) the success of the previous years treatment, (b) the discovery of new noxious weed infestations and the rate of spread of existing populations, (c) advances in technology, including the development and availability of successful biological control agents, (d) funds available from Congress and other sources, etc. The combination treatments described for Alternative #5 in the draft EIS are estimated for the five-year period, but may vary depending on the factors discussed above. The integrated pest management approach selected provides the flexibility to adjust to these changes from year to year.

## VII. REVEGETATE/RESEEDING

- A. Concern that the Forest should consider an active program to revegetate exposed sites and use certified weed-free seed.

RESPONSE: The prompt revegetation of land disturbed by activities, such as road construction, is a Forest-wide Management Direction in the Forest Plan (Soil and Water F-3 11,12). Forest seeding guidelines specify certified seed in the recommended seeding mixtures for revegetation projects. We consider prompt revegetation of disturbed areas to be a key component of our integrated weed management program.

- B. Concern that chemical control that leaves the infected area less than fully stocked or with less than 90% crown closure is of little value because the site is open to reinvasion. Measures should be taken to ensure site occupancy of all types of treatment, particularly mechanical and herbicidal by beneficial vegetation to prevent reinfection. Reseeding should be part of the program.

RESPONSE: We agree that seeding competing vegetation into the treated area may help control the weeds as well as minimize erosion from the treated area. Hard fescue, for example, where seeded for revegetation and erosion control, has been observed to form a dense stand that resists spotted knapweed invasion (Morris, Melvin S. and Donald J. Bedunah. 1984.). We are including the seeding of treated areas with competing vegetation as a component of our biological control efforts, where residual vegetation density following chemical or mechanical treatment is insufficient.

## VIII. EDUCATION/TRAINING APPLICATORS

### A. Train Herbicide Applicators

Concern that herbicide applicators should be thoroughly trained for proper application techniques and safety precautions. The whole program is no better than the person with the sprayer in their hand. Applicators should be state certified. Herbicide applicators should take a plant identification course and pass a test which would insure that they can competently identify not only target weed species, but also rare plant species.

RESPONSE: Supervision by a licensed pesticide applicator and training of workers is required in the management constraints section of the draft EIS (page 22). We will expand the training required to include plant identification of: (a) target weeds, (b) other weeds on the State wide noxious weed list, category 1 and 2, (c) rare plants and (d) native plant "look-a-likes" that may be mistaken for noxious weeds. Training will also include the label requirements in the use of the herbicides, environmental constraints included in the draft and final EIS, and health and safety precautions to keep worker dose levels below worst-case values assumed in the risk analysis.

## B. Weed Education Program

1. Suggestion that the Forest Service establish a strong weed education program for all employees and the public, including back-country and other users of the Forest. All field personnel should be made aware of the weed problem so they can help with manual control and inventory. Publications, posters, public service announcements, meetings, and other educational techniques could be used to help educate the general public.

RESPONSE: We recognize the importance of a weed education program and the Forest is planning to conduct a training workshop for employees working in the noxious weed program. We are also developing ways to inform backcountry users (through the trailhead signing) to assist us in the identification and location of infestations. An information and education plan will be developed for the noxious weed program.

2. Public notification of herbicide applications in developed recreation areas should be expanded to emphasize the weed problem.

RESPONSE: Again, we recognize that Forest visitors may be our best source of information for identifying locations of infestations. The public notification plans can be expanded to include information on noxious weed identification and emphasis on the noxious weed problem.

## IX. RARE PLANTS

A. Concern that rare plant species may possibly be impacted by the actions proposed. Inventoried rare plant species include known populations near the project areas. Additional field surveys may reveal additional unrecorded special plant sites at risk.

RESPONSE: The Management Constraints section of the draft EIS (page 22) provides for protecting known rare plant populations from herbicide application. We are in close contact with the Montana Heritage Program and the Nature Conservancy in keeping our rare plant inventory current. Workers applying herbicides for weed control will be trained to identify rare plants that are known to occur near the project area.

B. Concern that the risk of affecting rare plants is not necessarily lower using only cultural methods. The weed infestation itself, if allowed to spread, will also affect or eliminate rare plants from the area of infestation.

RESPONSE: We recognized the threat of noxious weeds to rare plants on page 13, paragraph 4 of the draft EIS. We feel that hand pulling or grubbing weeds adjacent to rare plants jeopardizes the survival of rare plants less than applying herbicide. We will be guided by Management Constraint #4, in Addendum #4 of the final EIS, when treating noxious weeds in areas occupied by or adjacent to rare plants.



## X. BIOLOGICAL CONTROLS

A. Concern that biological control, in addition to insects, should also include:

1. range stocking and grazing manipulation (T-M-1)
2. introduction or encouragement of competing plant species (T-M-1)
3. natural plant compounds that can be used as herbicides (T-M-1)
4. the potential use of plant pathogens, such as Sclerotinia fungus on spotted knapweed and Canada thistle.

RESPONSE: We agree and intend to use all available biological control technology, that is proven effective by research, in our integrated pest management approach to noxious weed control.

## XI. MONITORING/INVENTORY/EFFECTIVENESS

A. Concern that a complete on-going inventory and monitoring program of all known weed infested areas, treated and untreated, be implemented. Suggest program modifications from evaluation results, as needed.

RESPONSE: We have updated our inventory since the draft EIS and it is displayed in Addendum #1 of the final EIS. This computer data base includes the inventory of noxious weeds and the proposals for chemical, mechanical and biological control. As additional information becomes available, the data base will be updated. Monitoring of selected projects to evaluate the effectiveness of the control measures applied is a part of the Forest Objectives in Addendum #2 of the final EIS.

## XII. APPLICATION TECHNIQUES

A. Consider additional application techniques

1. Suggestion that wick applicators and controlled droplet applicators be considered for herbicide application in sensitive environments, such as campgrounds and riparian areas.

RESPONSE: All available application techniques will be considered in applying herbicide in this program, including wick applicators and controlled droplet applicators. However, the restrictions on picloram in campgrounds and riparian areas are because of its persistence in the environment and the possibility of groundwater contamination, rather than drift of the chemical during application.

2. Suggestion that hand pulling be used to control weeds where there are just a few plants.

RESPONSE: Hand pulling can be very effective on spotted knapweed, and other tap-rooted species, when the soil is wet. These weeds are frequently pulled by our field personnel when isolated individual weeds or small patches are encountered. Where the draft EIS refers to hand "grubbing" for cultural (mechanical control) we also mean hand "pulling" when soil conditions are favorable.

3. Concern that emphasis be placed on use of nonchemical methods where applicable.

RESPONSE: In selecting alternative #5 Integrated Pest Management as the preferred alternative, we intend that nonchemical methods be applied where applicable. However, because chemical control provides the most cost-effective means for controlling our most troublesome noxious weeds, spotted knapweed and leafy spurge once established, chemical control will continue to be a major control technique applied within our integrated approach to weed management.

B. Concern that aerial application of herbicides should be prohibited on Forest Service lands.

RESPONSE: Aerial application of herbicides was not included in any of the alternatives considered in developing our noxious weed program, and is not proposed in the program selected.

C. Concern that the option of mowing weeds be discussed more fully, since mowing is not generally effective because most target weeds will develop flowers below the mowing height.

RESPONSE: As was stated, mowing has limited application in controlling most weeds because the technique does not usually stop the production of seed. We do not plan to use mowing in our mechanical control program.

C. Concern that Dow Chemical Company may be planning to withdraw their Tordan 2K (solid beads) picloram formulation from the market this year.

RESPONSE: We are aware of this decision, but have included picloram beads in our program because of supplies that are still available from distributors, etc. We will substitute liquid picloram when solid beads are no longer available.

### XIII. WILDERNESS/BACKCOUNTRY/WEED FREE HAY

A. Use of herbicides in Wilderness

1. Concern that herbicides should be used in wilderness only as a last resort. Suggestion that the use of chemical control in wilderness should be reconsidered, as it would allow a longer term control, without requiring repetition of mechanical treatment over an ever increasing area.

RESPONSE: We agree that chemical control of noxious weeds in the Wilderness be used only as a last resort. The Draft EIS does not propose to use chemical controls in the Wilderness because the infestations are small and can be controlled using mechanical (hand-pulling) techniques.

- B. Concern to control noxious weeds along roadsides and trailheads to prevent weed introduction into wilderness and backcountry.

RESPONSE: The Forest will be treating noxious weeds along the access routes (roadsides and trailheads) to prevent the spread of noxious weeds to the backcountry and Wilderness. Again, as part of the education program, Forest visitors will be encouraged to notify us if they encounter infestations on the Forest.

- C. Concern that the Forest Service should require the use of certified weed-free hay and supplement feed for use in the backcountry and all forest lands.

RESPONSE: There is no weed-free certification program in the state of Montana, and therefore no "certified weed-free" hay available. We will continue to urge commercial outfitters and recreation riders in the wilderness and backcountry to bring clean supplemental feed that is free of weed and weed seed. Personal responsibility for the purchase of hay from weed-free sources and careful inspection is stressed as a part of the "wilderness ethic" for backcountry wilderness visitors. We will include this information in our trailhead information and education program.

- D. Concern that on page 22, paragraph 4, sentence 1..."No herbicides will be..." the statement 'areas near units of the National Park System' should be added.

RESPONSE: The only project proposed for herbicide treatment near Glacier National Park is Highway 2-Pike Creek along the highway over Marias Pass. We feel that it is important to control spotted knapweed and other noxious weeds along this source of weed seed to prevent the spread of noxious weeds into the Park.



COMMENTS RECEIVED  
ON THE  
DRAFT ENVIRONMENTAL IMPACT STATEMENT





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460



APR 8 1986

Mr. John Gorman  
Forest Supervisor  
Lewis and Clark National Forest  
P.O. Box 871  
Great Falls, Montana 59403

Dear Mr. Gorman:

On March 24, 1986 this office received and officially filed the draft Environmental Impact Statement (EIS) entitled: Lewis and Clark National Forest, 1986-1990 Noxious Weed Control Program, Montana.

Your agency requested comments on the EIS be received by May 7, 1986 (see enclosed). Section 1506.10 of the Council on Environmental Quality regulations requires that the Environmental Protection Agency publish a weekly Notice of Availability in the Federal Register (FR) of the EISs filed during the preceding week. Due to the FR publication cycle, NOAs are published on Friday of each week and notice only those EISs filed Monday through Friday of the preceding week. The regulations further require that the minimum review periods be calculated from the NOA FR publication date.

Therefore, based on the official filing of this EIS, the following dates apply:

Date NOA published in the <u>FR</u>	April 4, 1986
Due Date/Closure of the minimum <u>45-day</u> review period	May 19, 1986.

I strongly urge you to send a letter to all parties reviewing the EIS informing them of the correct date. If you have any questions please contact Jan Lott Shaw of my staff on area code 202 or FTS 382-5074.

Sincerely,

Allan Hirsch  
Director  
Office of Federal Activities

Enclosure

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be clearly documented, including the date, amount, and purpose of the transaction. This ensures transparency and allows for easy reconciliation of accounts.

In the second section, the author outlines the various methods used to collect and analyze data. This includes direct observation, interviews with key personnel, and the use of specialized software tools. The goal is to gather comprehensive information that can be used to identify trends and areas for improvement.

The third section provides a detailed overview of the findings from the data analysis. It highlights several key areas where performance is strong, as well as specific challenges that need to be addressed. Recommendations are provided for each area, focusing on process optimization and resource allocation.

Finally, the document concludes with a summary of the overall project goals and the expected outcomes. It reiterates the commitment to continuous improvement and the importance of regular communication and collaboration among all team members.



**DRAFT ENVIRONMENTAL IMPACT STATEMENT**  
Lewis and Clark National Forest  
Five Year Noxious Weed Control Program  
1986-1990  
Cascade, Chouteau, Judith Basin, Meagher,  
Wheatland, Golden Valley, Fergus, Lewis and Clark,  
Pondera, Teton, Glacier Counties, Montana

Type of Action: Administrative

Responsible Federal Agency: USDA - Forest Service - Lewis and Clark  
National Forest

Responsible Official: John D. Gorman, Forest Supervisor  
Lewis and Clark National Forest  
P.O. Box 871  
Great Falls, MT. 59403

For Further Information Contact: H. Wayne Phillips, Ecosystem Coordinator  
Lewis and Clark National Forest  
P.O. Box 871  
Great Falls, MT 59403  
Telephone: (406) 727-0901

**Abstract:** This Draft Environmental Impact Statement describes the preferred alternative and four other alternatives, including a "no action" alternative, for controlling noxious weeds on the Lewis and Clark National Forest. The land area involved is 825 affected acres of National Forest land in Central Montana.

The alternatives provide different approaches to weed management resulting in different levels of control. The environmental consequences for the preferred alternative and other alternatives are displayed. An analysis of the impacts of herbicide use on human health, using worst case assumptions, is included in the statement. The preferred alternative provides for treating noxious weeds in an integrated pest management approach using a combination of chemical, cultural, and biological methods. Chemical control would be emphasized, using herbicides applied on the ground to target weeds by handheld nozzle or solid pellets.

Please retain your copy of this Draft Environmental Impact Statement (EIS). If changes to the Draft EIS in response to comments are minor and are confined to factual corrections, or explanations of why the comments do not warrant further agency response, then only the comments, the responses and the changes will be circulated back to you and not the complete Final EIS. (40 CFR 1503.4(c)).

Comments must be sent to: Forest Supervisor  
Lewis and Clark National Forest  
Noxious Weeds  
Box 871  
Great Falls, Mt. 59403

Comments must be received by May 7, 1986.



# United States Department of the Interior

OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20240

FOREST SERVICE  
Lewis & Clark National Forest  
Great Falls, Montana

APR 14 1986

RECEIVED

APR - 8 1986

In Reply Refer To:  
ER-86/534

Mr. John D. Gorman  
Forest Supervisor  
Lewis and Clark National Forest  
P.O. Box 871  
Great Falls, Montana 59403

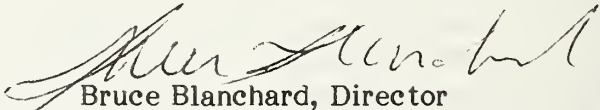
Dear Mr. Gorman:

This is in regard to your transmittal of March 21, 1986, requesting the Department of the Interior's review and comments on the draft environmental statement concerning the Noxious Weed Control Program in Lewis and Clark National Forest, Montana.

This is to inform you that the Department will have comments but will be unable to reply within the allotted time as we have just received your transmittal. Please consider this letter as a request for an extension of time in which to comment on the statement.

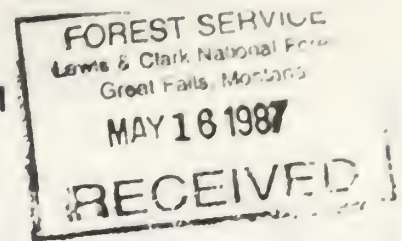
Our comments should be available about May 16, 1986.

Sincerely yours,

  
Bruce Blanchard, Director  
Environmental Project Review

**CASCADE COUNTY  
CONSOLIDATED PESTICIDE PROGRAM**

521 - 1st Avenue N.W.  
Great Falls, Montana 59404  
Phone 727-2804



Douglas L. Johnson  
Administrator

G-M-3

**BOARD MEMBERS**

Walter H. Savoy, Chairman  
Fort Shaw  
Jody Cox, Vice Chairman  
Milligan Route, Great Falls  
Rev. Francis McInnis  
College of Great Falls  
Dale Johnson  
Belt  
Eugene Suek  
Bootlegger Trail, Great Falls

Mr. John D. Gorman  
Forest Supervisor  
Lewis and Clark National Forest  
Box 871  
Great Falls, MT 59403

May 15, 1986

Dear Mr. Gorman:

The Cascade County Weed District wishes to go on record as generally supporting the concepts and methods of Alternative 5 Integrated Pest Management (Preferred Alternative) as presented in the Draft Environmental Impact Statement concerning noxious weed control on the Lewis and Clark National Forest.

I would suggest reconsidering the use of only hand grubbing in the wilderness areas and including the other possible control methods as well. In areas of difficult access, chemical control would allow a longer term control without requiring regular repetition of a mechanical method over an ever increasing area of infestation, at least for certain weeds such as Leafy Spurge.

I would also suggest that the risk of affecting rare plants is not necessarily lower using only cultural methods. If the proximity of the rare plants to the noxious weeds is so close that proper application of herbicides will affect them, then the noxious weed infestation itself, if allowed to spread, will also affect if not eliminate them from the area of the infestation. A deep rooted rhizomatous perennial weed will not be reduced by pulling or shallow surface grubbing and unless the mechanical treatment is repeated at 2-3 week intervals throughout the growing season, the infestation will continue to develop and spread.

I would also suggest reducing the 100 foot buffer required between Pickloram applications and water to a distance that more realistically reflects the actual hazzard involved.

We appreciate having the opportunity to review and comment on the Lewis and Clark National Forest E.I.S..

Sincerely,

James S. Freeman  
Cascade County Weed Supervisor



Mosquito  
Abatement

**MOSQUITO ABATEMENT • WEED CONTROL**



Weed  
Control

# MONTANA NATURAL HERITAGE PROGRAM



TED SCHWINDEN, GOVERNOR

MONTANA STATE LIBRARY BUILDING

## STATE OF MONTANA

1515 EAST 6TH AVENUE

HELENA, MONTANA 59620  
(406) 444-3009

2 May 1986

John D. Gorman  
Lewis and Clark National Forest  
P.O. Box 871  
Great Falls, MT 59403



Dear Mr. Gorman:

This letter, and the enclosed printout from our data base, are in response to your request for comments on the Draft EIS for the treatment of noxious weeds on the Lewis & Clark National Forest. The printout lists those species and their locations which may possibly be impacted by the actions proposed, and which are currently contained in the data base. It is always possible that additional field surveys would reveal previously unrecorded special plant sites. This is not a list of all the special plant locations on the Forest; there are many high elevation/alpine species which I have not included, since they are not likely to be in the areas to be treated. A few specific comments are as follows:

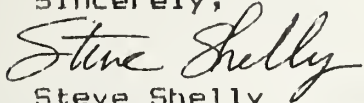
1. Of particular concern is the Green Timber Basin-Beaver Creek area, where two orchid species on the Heritage special plant list are known to occur (Amerorchis rotundifolia (3 populations), Cypripedium passerinum). This is a fragile and botanically significant area, in which spraying operations could be potentially harmful.
2. Although I didn't find any areas listed in Appendix 2B (pp. 1-4) which match the legals for Cirsium longistylum, it is important to be aware of locations for it. This is a species which is endemic to Montana, and it does in some instances occur near/along roadsides.
3. There are some ambiguities in the location information which is available for Botrychium paradoxum, which has been recorded near Hwy. 2 on Marias Pass. I hope to be looking for this site this summer with Wayne Phillips and others. This area is near some of those listed in Appendix 2B: 110922A & B, 112203, 112204.
4. The site for Erigeron flagellaris is the only one known in Montana; a portion is near one weed inventory site: Dearborn R. Trail (100001; T17N, R07W, Sec. 6).

Hopefully this additional information will be of use to you in

drawing up the final EIS. It might be useful for Wayne Phillips to review this information.

Thank you very much for the opportunity to comment on this draft EIS. If there are any questions, or if you need more information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Steve Shelly". The signature is written in dark ink and is positioned above the typed name.

Steve Shelly  
Botanist

SPECIAL PLANT OCCURRENCES - LEWIS AND CLARK NATIONAL FOREST (excluding those at high elevations or in alpine areas)

NAME: CIRSIUM LONGISTYLUM GRANK: 620 SRANK: 920  
 COMMON NAME: LONG-STYLED THISTLE  
 COUNTY: MTEAG QUADNAME: KINGS HILL  
 TOWNRANGE: @12N@08E SECTION: @3 TRSCOMM: NE4,2NW4  
 DIRECTIONS: @.4 MI. S. OF KINGS HILL CAMPGROUND ALONG HWY. 89, LITTLE BELT MOUNTAINS.

NAME: CIRSIUM LONGISTYLUM GRANK: 620 SRANK: 920  
 COMMON NAME: LONG-STYLED THISTLE  
 COUNTY: MTEAG QUADNAME: KINGS HILL  
 TOWNRANGE: @12N@08E SECTION: 32 TRSCOMM: NE4  
 DIRECTIONS: LITTLE BELT MOUNTAINS, 2@ MI. S. OF NEIHART, FOREST GREEN RESORT.

NAME: CIRSIUM LONGISTYLUM GRANK: 620 SRANK: 920  
 COMMON NAME: LONG-STYLED THISTLE  
 COUNTY: MTCASC QUADNAME: MONARCH  
 TOWNRANGE: @15N@07E SECTION: @3 TRSCOMM: NE4NE4  
 DIRECTIONS: FROM MONARCH ON HWY. 89, GO EAST 1 MILE ON DRY FORK RD. (#12@); SITE IS ON N. SIDE OF ROAD.

NAME: CIRSIUM LONGISTYLUM GRANK: 620 SRANK: 920  
 COMMON NAME: LONG-STYLED THISTLE  
 COUNTY: MTCASC QUADNAME: BARKER  
 TOWNRANGE: @15N@08E SECTION: 23 TRSCOMM: NE4  
 DIRECTIONS: ALONG TRAIL #318 (BENDER CR. TRAIL) NEAR RD. #12@ (DRY FORK BELT CR. RD.)

NAME: CIRSIUM LONGISTYLUM GRANK: 620 SRANK: 920  
 COMMON NAME: LONG-STYLED THISTLE  
 COUNTY: MTEAG QUADNAME: MOOSE MOUNTAIN  
 TOWNRANGE: @12N@07E SECTION: 36 TRSCOMM: NE4  
 DIRECTIONS: JUMPING CREEK CAMPGROUND (U.S. HWY 89, CA. 17.5 MI. S. OF NEIHART).

NAME: CIRSIUM LONGISTYLUM GRANK: 620 SRANK: 920  
 COMMON NAME: LONG-STYLED THISTLE  
 COUNTY: MTCASC QUADNAME: BELT PARK BUTTE  
 TOWNRANGE: @14N@07E SECTION: 25 TRSCOMM: S2  
 DIRECTIONS: NEIHART (LEGAL DESCRIPTION PLACES LOCATION IN GRAVEYARD GULCH DRAINAGE, NEAR CONFLUENCE WITH HARLEY CREEK, CA. 2 AIR MI. WNW. OF NEIHART).

## SPECIAL PLANT OCCURRENCES - LEWIS AND CLARK NATIONAL FOREST

NAME: CIRSIUM LONGISTYLUM GRANK: 620 SRANK: 520  
 COMMON NAME: LONG-STYLED THISTLE  
 COUNTY: MTJUDI QUADNAME: YOGO PEAK, NEIHART  
 TOWNRANGE: 014N009E SECTION: 19 TRSCOMM:  
 DIRECTIONS: "LONG BALDY, LITTLE BELT MOUNTAINS" (SEE EODATA).

NAME: ERIGERON FLAGELLARIS GRANK: 64 SRANK: 51  
 COMMON NAME: RUNNING FLEABANE  
 COUNTY: MTLERT QUADNAME: BEAN LAKE, BLOWOUT MOUNTAIN  
 TOWNRANGE: 017N007W SECTION: 03 TRSCOMM: 10;T18NR7W:34  
 DIRECTIONS: ALONG FALLS CREEK, FROM CA. 0.4-2.2 MILES SOUTH OF ITS  
 CONFLUENCE WITH THE DEARBORN RIVER, S. OF THE DIAMOND BAR X  
 RANCH; ALONG EAST & WEST SIDES OF THE CREEK.

NAME: PHLOX MISSOULENSIS GRANK: 620 SRANK: 520  
 COMMON NAME: MISSOULA PHLOX  
 COUNTY: MTNEAG QUADNAME: KINGS HILL  
 TOWNRANGE: 012N008E SECTION: 02 TRSCOMM: NW4  
 DIRECTIONS: SWITCHBACK, KINGS HILL (U.S. HWY. 89, CA. 0.5 MI. S. OF  
 KINGS HILL PASS).

NAME: AMERORCHIS ROTUNDIFOLIA GRANK: 64 SRANK: 51  
 COMMON NAME: ROUND-LEAVED ORCHIS  
 COUNTY: MTLERI QUADNAME: PATRICKS BASIN  
 TOWNRANGE: 021N009W SECTION: 16 TRSCOMM: NE4, 9SE4, 15W2  
 DIRECTIONS: GREEN TIMBER BASIN, HEAD OF DRAINAGE OF TRIBUTARY OF BEAVER  
 CREEK, CA. 1.7 AIR MI. S. OF GIBSON DAM.

NAME: AMERORCHIS ROTUNDIFOLIA GRANK: 64 SRANK: 51  
 COMMON NAME: ROUND-LEAVED ORCHIS  
 COUNTY: MTLERI QUADNAME: SAWTOOTH RIDGE  
 TOWNRANGE: 021N009W SECTION: 15 TRSCOMM: NW4  
 DIRECTIONS: EAST SIDE OF BEAVER CREEK, CA. 1.6 AIR MI. SSE. OF GIBSON  
 DAM, 2.0 AIR MI. S. OF NORTH FORK SUN RIVER.

NAME: AMERORCHIS ROTUNDIFOLIA GRANK: 64 SRANK: 51  
 COMMON NAME: ROUND-LEAVED ORCHIS  
 COUNTY: MTLERI QUADNAME: SAWTOOTH RIDGE, PATRICKS BASIN  
 TOWNRANGE: 021N009W SECTION: 22 TRSCOMM: SW4  
 DIRECTIONS: MAINLY ALONG W. SIDE OF BEAVER CREEK, ADJACENT TO SAWMILL  
 FLAT; FRONT RANGE, ROCKY MOUNTAINS.

## SPECIAL PLANT OCCURRENCES - LEWIS AND CLARK NATIONAL FOREST

NAME: CYPRIPEDIUM PASSERINUM GRANK: G4 SRANK: S1  
COMMON NAME: SPARROW'S-EGG LADY'S-SLIPPER  
COUNTY: MLEWI QUADNAME: PATRICKS BASIN  
TOWNRANGE: 021N007W SECTION: 16 TRSCOMM: NE4  
DIRECTIONS: GREEN TIMBER BASIN, 2 MI. S. OF GIBSON DAM.

NAME: BOTRYCHIUM PARADOXUM GRANK: G1 SRANK: S1  
COMMON NAME: PECULIAR MOONWORT  
COUNTY: MTFLAT MTGLAC QUADNAME: SUMMIT  
TOWNRANGE: 032N014W SECTION: 36 TRSCOMM: NEAR BORDER 36 & 25  
DIRECTIONS: CA. 1 MI. W. OF MARIAS PASS, PONDERA AND FLATHEAD COUNTY  
LINE (NOTE: CO. LINE WEST OF MARIAS PASS IS FLATHEAD-GLACIER  
CO. LINE; IT IS WNW. OF THE PASS.).



United States  
Department of  
Agriculture

Soil  
Conservation  
Service

Federal Building, Room 443  
10 East Babcock Street  
Bozeman, MT 59715

April 9  
FOREST SERVICE  
Lewis & Clark National Forest  
Great Falls, Montana  
APR 14 1986  
RECEIVED

John D. Gorman  
Forest Supervisor  
Lewis & Clark National Forest  
P.O. Box 871  
Great Falls, MT 59403

Dear Mr. Gorman:

Appropriate SCS staff have reviewed the draft environmental impact statement for "Noxious Weed Control". No technical comments were made as a result of the review. In our opinion, the EIS represents a thorough discussion of the program.

Thank you for the opportunity to review and comment on this draft EIS.

Sincerely,



Glen H. Loomis  
State Conservationist

cc: .  
James B. Newman, Director, Ecological Sciences Div., SCS, Washington DC  
Robert G. Lohmiller, State Resource Conservationist, SCS, Bozeman, MT



GEORGE TURMAN  
LIEUTENANT GOVERNOR

State of Montana  
Office of The Lieutenant Governor  
Helena 59620  
(406)444-3111



March 25, 1986

Mr. John Gorman, Forest Supervisor  
Lewis and Clark National Forest  
P.O. Box 871  
Great Falls, MT 59403

RE: Draft Environmental Impact Statement - Lewis and Clark National  
Forest Noxious Weed Control Program  
Montana State IGR Clearinghouse SAI No. MT860325-494-X

Dear Mr. Gorman:

The above-captioned document has been received. In order to provide notification to parties that may be interested in review and/or comment on the proposal, it will be listed in the next Intergovernmental Review Bulletin issued from this office.

Any inquiries or comments regarding the proposal will be directed to your office. Please provide copies of the enclosed suggested review form to potential reviewers - those you feel should be invited to comment, as well as to any who may request the opportunity to do so. We have asked that comments be returned by May 7, 1986 as requested, and that copies be sent to the Clearinghouse for our files.

The Clearinghouse intends to take no further action on this proposal.

Sincerely,

*Sue Heath*

SUE HEATH  
Clearinghouse Manager

Enclosure

MONTANA INTERGOVERNMENTAL REVIEW CLEARINGHOUSE  
REVIEW AND COMMENT FORM

Applicant: U.S. Department of Agriculture, Forest Service  
Lewis and Clark National Forest Phone: (406) 727-0901

Address: P.O. Box 871, Great Falls, MT 59403

Subject: Draft Environmental Impact Statement - Lewis and Clark National Forest  
Noxious Weed Control Program

Clearinghouse SAI No. MT860325-494-X

YOUR COOPERATION IS REQUESTED IN COMPLETING YOUR REVIEW AND RETURNING  
THIS FORM WITH YOUR COMMENTS TO THE ABOVE ADDRESS, WITH A COPY TO THE  
CLEARINGHOUSE, NO LATER THAN May 7, 1986

	YES	NO	COMMENTS
Is this proposal consistent with the plans, goals and objectives of your agency?	<input type="checkbox"/>	<input type="checkbox"/>	
Does the proposed action conflict with any applicable statute, order, regulation or rule with which you are familiar?	<input type="checkbox"/>	<input type="checkbox"/>	
Does this proposal overlap, conflict or duplicate other existing programs or agencies?	<input type="checkbox"/>	<input type="checkbox"/>	

Describe any suggestions or means of improving or strengthening the proposed plan.  
\_\_\_\_\_  
\_\_\_\_\_

Please convey your general conclusion by checking the appropriate response(s).

- Proposal is supported.
- Support only with conditions described below.
- Non-supportive for the reasons described below.
- Additional information is desired as described below.
- No comment on this proposal.

REMARKS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Reviewer: \_\_\_\_\_ Title: \_\_\_\_\_  
Address: \_\_\_\_\_ Phone: \_\_\_\_\_  
Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Return to Applicant listed above, with a copy to:

Montana IGR Clearinghouse  
Lt. Governor's Office, Attn: Room 210  
State Capitol  
Helena, MT 59620

G-M-7



REF: 8M0

MAY 1986



John D. Gorman  
Lewis & Clark National Forest  
Box 871  
Great Falls, Montana 59403

Re: Draft EIS -- Lewis & Clark  
National Forest Noxious Weed  
Control Plan

Dear Mr. Gorman:

In accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act, the Environmental Protection Agency (EPA) Region VIII Montana Office has reviewed the referenced document.

1. The document has been discussed with personnel in the Montana Department of Agriculture Environmental Management Division. EPA feels that their technical comments adequately reflect our general position on the proposed noxious weed treatment program.
2. All pesticide applications must be made by State-certified applicators or operators. This will help to ensure that the applications will be made safely and properly.
3. EPA supports the decision to use an integrated pest management alternative rather than selecting a strict chemical approach.

EPA rates this DEIS - EC-1 (Environmental concerns - statement adequate).

Thank you for providing this opportunity for our review and comment. If you have any questions regarding the above comments, please call me at 449-5432 or Richard Montgomery of my staff at 449-5486.

Sincerely,

John F. Wardell, Director  
Montana Office

cc: Dale Vodehnal, 8PM-EA



TED SCHWINDEN  
GOVERNOR

STATE OF MONTANA  
DEPARTMENT OF AGRICULTURE

ENVIRONMENTAL MANAGEMENT DIVISION

AGRICULTURE/LIVESTOCK BLDG.

CAPITOL STATION

HELENA, MONTANA 59620-0205

KEITH KELLY  
DIRECTOR  
(406) 444-3144

GARY GINGERY  
ADMINISTRATOR  
(406) 444-2944

May 20, 1986

Mr. John D. Gorman  
Forest Supervisor  
Lewis & Clark National Forest  
P. O. Box 871  
Great Falls, MT 59403

G-M-8  
FOREST SERVICE  
Lewis & Clark National  
Forest  
Great Falls  
MAY 23 1986  
RECEIVED

Dear Mr. Gorman:

The Montana's Interagency Planning Task Force has reviewed and made the enclosed comments on the Draft Environmental Impact Statement (DEIS) for the Lewis & Clark National Forest Noxious Weed Control Program. We support the use of all feasible methods, described in the preferred alternative, to control noxious weeds on the Lewis & Clark National Forest.

We look forward to your consideration of our comments and your response to them in the final EIS. We appreciate your agency's attempts to deal with the noxious weed problem on the Lewis & Clark National Forest.

Sincerely,

Keith Kelly  
Director

JEL/frmdeis.ws  
Enclosure

Thank you for the opportunity to review and comment on the Lewis and Clark National Forest Noxious Weed Treatment Program DEIS. The DEIS provided an objective discussion of environmental and economic impacts that may result from each of the alternatives. However, a realistic control program should consist of more than one approach (ie. biological, cultural or chemical), and alternatives should reflect a combination of control techniques at different levels or intensities.

We agree that the preferred alternative (Alternative 5), which emphasizes Integrated Pest Management (IPM) of noxious weeds, best meets the control needs of the Lewis and Clark National Forest. The IPM strategy should adequately contain noxious weed infestations while minimizing adverse environmental impacts.

Early detection and treatment of invading weed species is essential for successful weed management on forests and rangeland. Judicious use of herbicides will be required pending the development of more sophisticated biological and cultural control methods. Existing biological, mechanical and cultural control methods should be used where appropriate. The control of small infestations and containment of larger infestations are appropriate goals.

1. Prevention of weed infestations. The best method of weed management is to prevent the initial establishment of weeds. The Lewis and Clark National Forest is fortunate in having only 876

total forest area, and suggests that the problem weeds occur mainly along public thoroughfares. Nevertheless, weed prevention techniques should be used in all areas of the forest.

Forest planners and managers should incorporate noxious weed control into all timber harvesting plans and grazing management systems to reduce instances of noxious weed establishment and expansion. All heavy logging, road construction or oil exploration equipment (ie. skidders, yarders, tractors, drilling rigs, etc.) that operates on Forest Service land should be washed to remove weed seeds before entering the Lewis and Clark National Forest. Activities that disturb the soil should be minimized to reduce the spread of weeds, and all disturbed sites should be revegetated. Newly constructed roads should be closed to public use until permanent vegetative cover is established along roadsides. Off-road vehicle use should not be allowed on weed-free areas.

Immediate action should be taken to prevent noxious weeds from invading back country and wilderness areas. This includes controlling weeds along roadsides and trailheads, educating users about noxious weeds, and allowing only certified weed-free feed for stock animals to be taken onto Forest Service land.

2. Public information and education. The Forest Service should establish a strong, long-term weed education program and address this educational effort in the DEIS. Programs on weed

identification and control for all field personnel and a weed education and awareness program targeted at the general public are needed. Most outdoor recreationists do not distinguish between native and introduced species and therefore have little concern about noxious weeds. Some recreationists may enjoy the color provided by flowers of forbs, noxious or otherwise.

Public information and education activities might include weed identification publications, posters, meetings, public service announcements and other educational efforts to increase public awareness of the weed problem. Informed citizens could also provide information about weed infestations on Forest Service land.

3. Environmental concerns. We generally approve of constraints against herbicide applications where runoff is likely to enter state waters. The DEIS states that "picloram will not be applied within 100 feet of water or to the inner banks of ditches or water channels". The DEIS should, however, address whether or not the same constraints apply to 2,4-D and other herbicides, and the reasons for this policy. An arbitrary buffer zone of 100 feet may preclude herbicide use where it may be beneficial. Appropriate buffer zones should be determined on a case-by-case basis. Determination of any buffer zones should consider the geography of the area, the application method and the equipment.



The hazard of the herbicides to fish depends on fish size, the amount of exposure and the toxicity of the product. Forest Service applicators must choose the most appropriate herbicide for each individual site. All labeling directions and precautions must be carefully followed. When choosing among different herbicides, their persistence and mobility in the environment, and their toxicity and hazard to fish and wildlife should be considered. If two or more herbicides are equally effective against target weeds, the product with the least potential for environmental damage should be used.

The DEIS states that "2,4-D will be used in areas where picloram use is restricted". The DEIS should clarify whether picloram use in these areas is restricted by the product label or by Lewis and Clark National Forest policy. It should also describe the types of areas where the use of picloram is restricted. The use of other herbicides should also be considered.

Potential problems associated with spills and application of herbicides near water should be considered before a project begins. Labeling precautions that prevent contamination of ground water must also be observed. Low levels of 2,4-D, picloram, and other herbicides have been detected in the ground water in Teton County and elsewhere in the state.

Personnel charged with control of noxious weeds should review state and federal regulations concerning proper disposal of pesticides and pesticide containers. Any waste products should

be disposed of in accordance with applicable state regulations.

Legal definitions of noxious weeds or weeds do not necessarily reflect their impact on components of natural communities.

References should be cited to document how noxious weeds reduce big game forage production and lower wildlife, recreation and esthetic values.

4. Human health. The analysis of the effects of 2,4-D and picloram on human health was very thorough. The DEIS concludes that possible cumulative and synergistic effects of Forest Service spraying are not reasonably expected and cites a study that shows no sensitization to either 2,4-D or picloram. However, sensitization to 2,4-D and picloram mixtures has occurred in humans, and the DEIS should recognize that applicators may develop allergic reactions from repeated exposure.

5. Campground spraying. The rationale for using 2,4-D rather than picloram or other herbicides in campground areas should be explained. Picloram is less toxic to mammals than 2,4-D, although its metabolism is only partially understood. Picloram is very persistent in the soil and is more effective on certain weeds than 2,4-D. It may be more desirable to apply picloram on spotted knapweed once every three years rather than treating it every year with 2,4-D. High rates of picloram can cause injury to grasses, but these rates are not proposed for use. Herbicide application techniques are extremely important in

minimizing the impact of any herbicide in a sensitive environment. Wick applicators, controlled droplet applicators, and other hand-held equipment will minimize damage to non-target vegetation.

Campground closures following treatment with either 2,4-D or picloram are unnecessary. Since there are no re-entry intervals specified on the labels, people may enter treated areas without protective clothing or equipment anytime after the sprays have dried. It should be sufficient to simply post the treated areas and notify the public that the areas have been sprayed and why they have been sprayed. Public notification of herbicide applications in developed recreation areas should be expanded to emphasize the weed problem. If campgrounds are closed due to herbicide applications, the public should be made aware that the problem is associated with the weeds that require control rather than the control measure itself.

6. Grazing management. Although the preferred alternative proposes the use of improved grazing practices as range allotment management plans are implemented, more emphasis should be placed on range management as a weed control strategy. The DEIS does not mention that riparian areas are also disturbed by livestock grazing. It should address ways to reduce disturbance of riparian zones to minimize invasion by noxious weeds. The possibility of using grazing management to improve range condition and to provide increased plant competition with noxious weeds on all areas should be investigated. The improved grazing

practices should be specified in the plan.

We recognize that noxious weeds may not necessarily be detrimental to wildlife habitat, and some weeds may have nutrients that are beneficial to certain wildlife species. The DEIS discussed deer and elk eating young knapweed plants but did not cite a reference. However, if wildlife eat the seed heads, managers should be more concerned about the potential spread of knapweed than with its forage value or importance as a food source.

7. Effectiveness of control methods. In the discussion pertaining to biocontrol, plant pathogens are not mentioned. The potential use of Sclerotinia fungus on both spotted knapweed and Canada thistle should be considered if the host range can be narrowed to target weeds.

Although biocontrol of St. Johnswort by beetles has been successful in California, it has been less dramatic in Montana. St. Johnswort remains a problem in Montana despite successful establishment of the beetle. Similarly, the hawk moth has been successfully established on leafy spurge in Montana; but since it is a foliage feeder, it does not do much damage to the plant. Leafy spurge is particularly difficult to control due to its extensive root system. Leafy spurge roots and buds have been found much deeper than 5 feet, which is the depth that was mentioned in the DEIS. The cultural control section of the DEIS covers hand pulling but

needs more discussion of mowing. Mechanical treatments need to be repeated more than once a year to reduce seed production effectively. Mowing is not generally effective because most target weeds will develop flowers on short plants that are below the cutting height.

Chemical control methods that are proposed in the DEIS have shown 99 to 100 percent suppression of weeds during the first year, not control as indicated in the DEIS. However, chemical treatments aid in preventing seed set. We recommend that Forest Service personnel evaluate the effectiveness of individual treatments on the various species. Evaluations should help determine if or when program modifications are needed and identify which methods are most effective over the long term.

The DEIS states that, left unchecked, noxious weeds will continue to spread on the Lewis and Clark National Forest. Without clarification, this statement implies that noxious weeds will eventually dominate all vegetation in the forest. Noxious weed species will only spread unchecked to the extent that natural conditions and land management practices will allow. The DEIS should also cite references for statements that allelopathic toxins are produced by leafy spurge and spotted knapweed.

8. Application rates. The DEIS indicates that Lewis and Clark National Forest officials have a good grasp of the weed problem since they list the target weeds and location of each proposed project. However, the herbicide amount that is listed in

Appendix 5b is somewhat confusing. The rates shown may be adequate for spot treatments of scattered, low-density infestations within the acreage that is listed, but many treatments would be at less than recommended rates if the entire acreage is treated.

The proposed application rate for each target weed and area should be listed in the DEIS. We suggest that herbicides not be applied at less than recommended rates because the treatments may not be effective and because resistant or tolerant weed populations may develop. Recommended rates for spotted knapweed are 2 pounds active ingredient (a.i.) of 2,4-D per acre and .25 to .375 pounds a.i. of picloram per acre. Recommended rates for leafy spurge control are 1 pound a.i. of 2,4-D plus .25 to .5 pounds a.i. of picloram per acre or .5 to 2 pounds a.i. of picloram per acre, with yearly retreatments based on this rate.

9. Cooperative weed control. The noxious weed list should be expanded to include those weeds listed by the Montana Department of Agriculture in ARM 4.5.202-203. Although all weeds on the list need not be considered high priority or targeted plants, criteria for detection and management of all these species should be addressed. This will help coordinate the Lewis and Clark National Forest noxious weed treatment program with county noxious weed management plans.

Leafy spurge and spotted knapweed are of primary concern to landowners. Since 81 percent of the affected acres on the Lewis

and Clark National Forest involve these species, a cooperative control program emphasizing these weeds should be implemented. Coordinated weed control projects involving all adjoining landowners are essential. We appreciate the emphasis on coordinated weed control efforts involving adjacent landowners and local weed boards.

10. Economics. Estimated costs of the noxious weed control program range from \$58.26 to \$64.63 per acre under the preferred alternative, but the only benefits mentioned are an additional 70 AUMs of livestock forage. The benefits and costs of weed control to wildlife, recreation and watershed resources need to be more thoroughly documented and discussed in the DEIS, so that reviewers can determine if the program is truly cost effective.

The DEIS suggests that the costs must be applied annually over a very long time period. If the proposed weed control measures are this ineffective in reducing weed occurrence, Forest Service planners and managers should develop a more effective weed control program.



# United States Department of the Interior

OFFICE OF THE SECRETARY  
OFFICE OF ENVIRONMENTAL PROJECT REVIEW  
Denver Federal Center, Building 67, Room 488  
P.O. Box 25007  
Denver, Colorado 80225-0007

6-0-9  
MAY 23 1986

IN REPLY  
REFER TO

ER 86/534

MAY 23 1986

John D. Gorman  
Forest Supervisor  
Lewis and Clark National Forest  
P.O. Box 871  
Great Falls, Montana 59403

Dear Mr. Gorman:

We have reviewed the Draft Environmental Impact Statement (DEIS) concerning the Noxious Weed Control Program in the Lewis and Clark National Forest, Montana, and offer the following comments.

We concur with the endangered and threatened species aspects of the document and concur with the "no effect" determination.

Page "e" - Summary - last sentence ("The possible cumulative...")  
This sentence is unclear and we suggest it be reworded.

Page 15 - Second full paragraph - last sentence ("In the long term...")  
We suggest that a similar statement be included in the discussion of Alternative 5.

Page 17 - Dow Chemical Company may be planning to withdraw their picloram formulations from the market this year.

Page 22 - Paragraph 4 - Sentence 1 - ("No herbicides will be ....")  
We would like to see added to this list "areas near units of the National Park System."

Page 22 - Item No. 6 - The Tordan label requirements include a prohibition against using the chemical where the water table on sandy soils is within 10 feet of the surface.

Appendixes 4 and 5, a, b, c - Is there a method of tracking specific spray projects between these tables?

Appendixes 5 a, b, c - Clarification that picloram would not be used on riparian areas (within 100 feet of water) would be useful here.

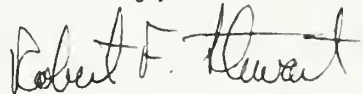


Appendixes 5c and 6 - What do "H", "M", "L", and "S" mean in the column "Canopy Cover"?

Appendix 8a, Table 3 - This table indicates the use of picloram on riparian areas. Clarification on where in the riparian area it is to be used would be helpful.

We appreciate the opportunity to comment on this DEIS.

Sincerely,

A handwritten signature in black ink that reads "Robert F. Stewart". The signature is written in a cursive style with a large, sweeping initial "R".

Robert F. Stewart  
Regional Environmental Officer



United States  
Department of  
Agriculture

Forest  
Service

R-1

*In Service - M-*

REPLY TO: 2250

Date: **MAY 20 1986**

SUBJECT: Draft EIS on your Noxious Weed Program

TO: Forest Supervisor, Lewis & Clark NF

RECEIVED  
LEWIS & CLARK  
MAY 29 1986  
OFFICE

Enclosed are comments on your draft EIS. One thing that would be of value is to document the location of the sites that will be treated with methods other than herbicides. This looks like a good site specific document to us.

*Michael P. Goggin*  
RONALD L. HAAG  
Director of Range, Air  
Watershed & Ecology

Enclosures



LEWIS & CLARK NOXIOUS WEED DEIS  
PP&B

Chapter I, page 4 lists several issues. All of these need to be addressed in one form or another in the EIS. Most appear to be addressed, but item h, soil erosion associated with cultural treatment resulting from cultivating or grubbing for weed control. A look at Chapter IV, page 16, only says "soil disturbance and erosion would increase more under mechanical weed control than other alternatives." More is needed to describe based on the sites treated whether the eroded soil sediment will reach streams, have an effect on fish, water quality, etc. If it won't happen, say so.

Chapter IV, page 17, paragraph 6 (fish). The term "LC<sub>50</sub>" needs to be referenced to the glossary to help reader find what it means.

Chapter IV. I agree with OGC's comments. I suggest the L&C use the Deerlodge EIS for some ideas on additional impacts. Obvious oversights are discussion of the impacts of herbicides on permitted livestock grazing in the Forest. Impacts of herbicide use on actual campground, recreation sites, heavy use areas, page 22, provides mitigation in recreation sites, but gives no indication of the impact to people that requires this mitigation.

REPLY TO: \*

Date: April 17, 1986

SUBJECT: Lewis and Clark Draft EIS Noxious Weed Control

TO: Bill Hardman, R&W

Our office has reviewed the Lewis and Clark Draft EIS - Noxious Weed Control and we have the following brief comments.

Alternatives Considered - In our opinion this section could be improved in providing a better comparison of alternatives as required by NEPA. Often, a table similar to Table II, on page 23, is used to provide a clear and concise comparison of the impacts of the alternatives. The discussion and the table should attempt to meaningfully explain the different impacts between the alternatives.

Environmental Consequences of Alternatives - In our opinion this section provides a very minimal discussion of the impacts to the alternatives. This section, in compliance with NEPA, is to thoroughly discuss the environmental impacts of the alternatives and to form the scientific and analytic basis for the previous comparisons of alternatives. Impacts for all evaluation factors should be discussed in detail with appropriate reference to any appendices where additional information is provided. In our opinion, analysis of site-specific impacts would have been better accomplished by discussing the impacts on each resource by type of project (open-range, right-of-way, riparian, potentially occupied site) in addition to type of treatment method. (Such discussions of project type would also appear in the alternatives considered and affected environments sections as well.)

Our office would be pleased to discuss these comments with you at your convenience.

Christine T. Reck

TO: Lewis and Clark National Forest Weed Control Team

FROM: Montana Wilderness Association

RE: Noxious Weeds on public lands

March 26, 1986

Dear Lewis and Clark National Forest Weed Control Team;

Thank you for the opportunity to comment on your National Forest Noxious Weed Control Treatment Program and Draft Environmental Impact Statement. I make these comments on behalf of the Montana Wilderness Association as well as myself.

The Montana Wilderness Association's main concern is keeping noxious weeds out of wilderness and other backcountry areas. This can only be done by getting the weed problem along roads and adjacent areas under control. We therefore support an integrated weed control program, which uses chemical, manual, mechanical, biological, and other effective methods to control weeds. Emphasis should be placed on use of nonchemical methods where applicable.

One important addition we would like to see put into the EIS is a listing of items which will be a part of your weed control program. Each of these policy items are preventive or passive types of control and can be used under any of the alternatives. By listing these items, your control program will be much better understood by both the public and the Forest Service. With this straight forward emphasis and discussion in the final document,

the treatment program will have a much greater chance of success.

Listed below are those items which should be included in your Noxious Weed Treatment Program. A good place to list them would probably be the start of ~~Chapter B~~. *Alternatives Considered Page 50*

1. The Forest Service should direct action to first halt the spread by eradicating new outbreaks and small infestations, and second, reduce large existing infestations.
2. The Forest Service should emphasize eradication of weed infestations at trailheads since these are the major source of spread of noxious weeds into the backcountry.
3. The Forest Service should consider the potential for noxious weed introduction and infestations in management decisions. Land use activities which are conducive to the introduction and spread of noxious weeds should be eliminated.
4. The Forest Service should establish a strong weed education program, both internal and external. In particular, all field personnel should be made aware of the weed problem and the Forest's weed control program. Trail crews and survey crews could especially help with manual control of the weeds, as well as, helping with the inventory.
5. A complete on-going inventory and monitoring program of all known weed infested areas, treated and untreated, must be implemented in order to have a successful program.
6. The Forest Service should work with counties to identify non-forest weed infested areas (gravel pits, etc.) that are potential sources of infestation to Forest Service lands.
7. Forest Service vehicles, private road construction, logging,

mining, and oil development vehicles should be cleaned regularly to prevent attachment of noxious plant parts or seeds.

8. Parking lots for Forest Service and industry vehicles should be weed free.

9. The cost of weed control should be included in the cost of timber sales, oil leases/exploration, mining activities, and other disturbances.

10. The Forest Service should undertake an active program to revegetate exposed sites and use of certified weed-free seed should be required.

11. The Forest Service should require the use of certified weed-free supplement feed for use in the backcountry.

12. The Forest Service should close roads and eliminate off-road vehicular travel in weed infested areas.

13. Herbicide applicators should be thoroughly trained for proper application techniques and safety precautions.

14. Use of herbicides only as a last resort in wilderness areas.

15. Aerial application of herbicides should be prohibited on Forest Service lands.

Also, we feel a wick applicator should be used in riparian areas.

We complement you on your commitment to initiate a weed control program and hopefully it will be a success.

Sincerely,



Charles H. Ruzicka

May 9 - 1986

John D Gorman  
Forest Supervisor

Dear Sir

We think that the weed control work done last year in good stands and we would like to see it continued if at all possible, as we have a few bad weeds. We think it is important to follow up on the spraying to find weeds that were missed or are growing back

Sincerely

Matt Nevada, Mr.

Little Belt creek stock association

P.S. we will be checking to see how the cut kill is from last years spraying

FOREST SERVICE  
Lewis & Clark National Forest  
Great Falls, Montana  
MAY 14 1986  
RECEIVED



MARIAS RIVER BASIN WEED CONTROL, INC.  
COURTHOUSE  
SHELBY, MONTANA 59474

April 6, 1986



TO: Forest Supervisor  
Noxious Weeds  
Box 871  
Great Falls, Montana 59403

FR: Kathy Aspevig  
MRBWC, INC., Project Coordinator  
102 Second St. S.E.  
Cut Bank, Montana 59427  
(406) 873-4960

I have read the draft Environmental Impact Statement regarding the 5-year weed control plan. I completely agree that alternative number 5 (IPM) is the most sound and comprehensive approach to weed control. This EIS appears to be complete and thorough.

The MRBWC, INC. Project is slated to end in Dec. 1987. Because one of our most important target areas has been the Blackfeet Reservation below Lewis & Clark Nat'l. Forest, we are concerned about the proposed gas and oil exploration near this target area. We feel all gas/oil exploration proposals must include a concise and comprehensive reclamation plan regarding weed control on all roads being built to an exploration site and at the site itself.

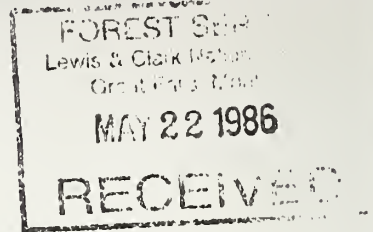
Thank you for this opportunity to comment on your Environmental Impact Statement.

Sincerely,

A handwritten signature in cursive script that reads "Kathy Aspevig".

Kathy Aspevig

O-M-4



5-19-86



Terry L. Albrecht, President  
137 Old Ft. Shaw Rd.  
Ft Shaw, Mt. 59443

Mr. John D. Gorman  
Lewis & Clark National Forest  
P.O. Box 871  
Great Falls, Mt. 59403

Dear John:

Unfortunately, our group has no expertise concerning the weed situation of the forest. We wish to rely heavily on the professionalism of the Service and ask that you consider these points:

1. Definition of infestation may account for the fact that we feel the affected acreages are considerably under estimated.
2. Replant vegetative cover immediately after disruption of the surface and make this a requirement of any private enterprise on the forest.
3. Road closures and public awareness of how weeds are spread by vehicular travel.
4. Cooperation with the back-country horsemen and outfitters to enlist their aid in early detection of infestation. Require pelletized feed on the forest for all.
5. Emphasize biological and cultivative control over chemical.

Sincerely,

Terry L. Albrecht, President

# BLACKFEET NATION

P.O. BOX 850  
BROWNING, MONTANA 594  
(406) 338-7179



EXECUTIVE COMMITTEE

EARL OLD PERSON, CHAIRMAN  
JOHN BUSTER YELLOW KIDNEY, VICE CHAIRMAN  
MYRNA J. GALBREATH, SECRETARY

ELOUISE C. COBELL, TREASURER  
EX-OFFICIO MEMBER

May 12, 1986

John D. Gorman  
Forest Supervisor  
Lewis & Clark National Forest  
P.O. Box 871  
Great Falls, Montana 59403

Dear Mr. Gorman:

Enclosed is the Blackfeet Tribe's comments on the Lewis & Clark National Forest Draft Environmental Impact Statement for the treatment of noxious weeds on National Forest System lands.

We would appreciate it if a copy of the Final EIS, or any response directly to us, be made available to:

Dave Broberg, Forester  
Blackfeet Agency  
Bureau of Indian Affairs  
Browning, Montana 59417

Jim Claar, Biologist  
BIA - Wildlife  
P.O. Box A  
Pablo, Montana 59855

Thank you for the opportunity to comment.

Very Truly Yours,

  
EARL OLD PERSON, Chairman  
Blackfeet Tribe

enclosure:

cc: Dave Broberg  
Jim Claar

COMMENTS ON NOXIOUS WEED CONTROL

LEWIS & CLARK DRAFT EIS

Alt #5 - Integrated Pest Management (p.b.)

Admitting that 5 emphasizes chemical control as the primary method weakens the application of other control method and does not allow proper side boards for "go - no go" conditions for the use of chemical control.

Any chemical control which leaves the infected area less than fully stocked or with less than 90% crown closure is of little value because the site is open to reinvasion.

Affected Environment (TT 3. Q. C. ± p. 12)

What precautions and identification training programs are going to be put in place to insure against chemical applications of rare plant populations occurring in noxious weed infection sites?

Alternative 1 No Action (TT 2. p.c.)

Knapweed and leafy spurge are primary invaders on disturbed sites and have little ability to invade established sod or sites with close to 100% crown covers. If proper range management, cattle disbursement practices, road and recreation use development are being required and enforced there should be little opportunity for noxious weeds to "control out" desirable vegetation.

Alternative 2. Biological Control (p.c.)

Insects are but one facet of biological control. This section should also include range stocking and grazing manipulation to increase noxious weed control as well as plans for introduction or encouragement of motive species that would be site competitors and occupiers so that little opportunity is presented for a noxious weed to become established. Natural plant compounds that can be extracted and used as herbicides or growth exhibitors should also be discussed here.

3. Control Efforts to Date (p. 3)

The ratio of user funds to appropriated funds is appaling. It would seem only fair and reasonable that the industry that brought us the problem of noxious weeds should also bear the substantial portion of this fiscal burden for treating the problem. It is inappropriate for the general tax payer to shoulder 93% of the burden as they did in 85 when the users (grazing industry) derive a very direct benefit. To subsidize the grazing industry with artificially low land use permit costs is one thing, but to balance the range improvement and protection work on the backs of the tax paying public is wrong.

The amount of water intake to reach ADI is directly proportional to the size of the reservoir of water which is contaminated by x amount of herbicide. The amount of water consumed is of secondary importance.

Wouldn't it be reasonable to assume that a truck accident and resulting spill is a "major spill"?

E. Management Constraints (p. 22)

It would seem important to make mandatory for the laborers who apply herbicide to take a plant identification course and pass a test which would require that they can competently identify not only target weed species but also rare plant species.

General Comments:

It would seem prudent to take measures to ensure site occupancy for all types of treatment, particularly mechanical and herbicidal, by beneficial vegetation to prevent reinfection. Wouldn't reseeding areas in conjunction with weed control practices be warranted?

FOREST SERVICE  
Lewis & Clark National Forest  
Great Falls, Montana  
APR 24 1986  
RECEIVED

RICK TORRE  
321 POPHAM CANY  
CORVALLIS MT  
59828.

Dale Gorman  
Forest Supervisor  
Lewis and Clark National Forest  
P.O. Box 871  
Great Falls, Montana 59403

Dear Mr. Gorman:

Thank you for keeping me informed of your herbicide ~~and insecticide~~  
~~class~~ program's progress.

Please notify me of all decisions regarding these programs.

Please also indicate if your documents include the worse case ana-  
lysis by Ed Monnig in Region One. Please also indicate the date of  
that document and the date of the decision notice, or its provision for  
your use (e.g., accompanying correspondence from regional offices to  
forest offices).

Thank you,

Rick Torre

- Rick Torre

FOREST SERVICE  
Lewis & Clark National Forest  
Great Falls Montana  
APR 22 1986  
RECEIVED

I-M-2

April 20, 1986

Celestine Lacey  
P.O. Box 9055  
Helena, MT 59604

John D. Gorman  
Lewis and Clark Natl. Forest  
Box 871  
Great Falls, MT 59403

Re: Noxious Weed Treatment Program - Draft EIS

Dear Mr. Gorman,

Thank you for the opportunity to comment on the Lewis and Clark National Forest Noxious Weed Control Draft Environmental Impact Statement. Overall, I believe your DEIS provides an objective discussion of environmental and economic impacts that would result from each of the five alternatives.

An integrated pest management approach is important in managing noxious weeds on forestland and grazeable woodland. I support alternative 5 (the preferred alternative) which provides the best solution for weed control on the Lewis and Clark National Forest.

There are several items that I would like to see included in your DEIS.

1. Integrated pest management must include weed prevention techniques. This includes implementing educational programs on weed identification and control for all forest service employees and users of forest lands. Publications, posters, public service announcements, meetings, and other educational techniques could be used to help educate the general public. The use of certified weed free hay on all forest lands would help prevent introduction of noxious weeds. Closure of newly constructed roads (especially logging roads) until permanent vegetative cover is established along roadsides. Require all logging, oil exploration, and construction equipment to be cleaned before entering a site.

Immediate action must also be taken to keep noxious weeds from invading back-country and wilderness areas. This includes controlling weeds along roadsides, trailheads, and educating back-country users on noxious weeds.

2. The noxious weed list should include all weeds listed by the Montana Department of Agriculture for the state. These weeds should be addressed in the management plan.

3. Page 22 (5). Why is herbicide use within campgrounds restricted to 2,4-D only? Based on current information, other herbicides may be less toxic and more effective on certain noxious weed species. Herbicide application techniques are extremely important in minimizing the impact of any herbicide in a sensitive environment. Wick applicators, controlled droplet applicators, and other hand held equipment will minimize damage to non-target vegetation.

I hope these suggestions will improve your noxious weed management program on the Lewis and Clark National Forest. If you have any questions, please contact me.

Sincerely,



Celestine Lacey



COUNTY NOXIOUS WEED LIST  
(Rules for the County Weed Control Act  
Section 7-22-2101)

4.5.201 DESIGNATION OF NOXIOUS WEEDS (1) The department designates certain exotic plants listed in these rules as statewide noxious weeds under the County Weed Control Act 7-22-2101 (5), MCA. All counties must implement management standards for these noxious weeds consistent with weed management criteria developed under 7-22-2109 (2) (b) of the Act. The department established two categories of the noxious weeds. (History: Sec. 7-22-2101 MCA; IMP, Sec. 7-22-2101 MCA; NEW 1986, p. \_\_\_\_\_ Eff. 3/14/86.)

4.5.202 CATEGORY 1 (1) Category 1 noxious weeds are weeds that are currently established in many counties of the state. Management criteria for control of these weeds is necessary in all counties to contain or suppress existing infestations or to prevent, through eradication or other appropriate measures, new infestations of these weeds. All of these weeds render land unfit or greatly limit the beneficial uses.

(2) The following are designated as Category 1 noxious weeds:

- (a) Canada Thistle (Cirsium arvense)
- (b) Field Bindweed (Convolvulus arvensis)
- (c) Whitetop (Cardaria draba)
- (d) Leafy Spurge (Euphorbia esula)
- (e) Russian Knapweed (Centaurea repens)
- (f) Spotted Knapweed (Centaurea maculosa)
- (g) Diffuse Knapweed (Centaurea diffusa)
- (h) Dalmation Toadflax (Linaria dalmatica)
- (i) St. Johnswort (Hypericum perforatum). (History: Sec. 7-22-2101 MCA; IMP, Sec. 7-22-2101 MCA; NEW 1986, p. \_\_\_\_\_ Eff. 3/14/86.)

4.5.203 CATEGORY 2 (1) Category 2 noxious weeds are weeds that have not been detected in the State of Montana or have recently been introduced into the State of Montana. These weeds have the potential for rapid spread and invasion of lands, thereby rendering them unfit for beneficial uses. County planning to prevent the spread or introduction of these weeds is necessary. Management criteria for detection and immediate action to eradicate or contain these weeds is necessary in all counties.

(2) The following are designated as category 2 noxious weeds:

- (a) Dyers Woad (Isatis tinctoria)
- (b) Yellow Starthistle (Centaurea solstitialis)
- (c) Common Crupina (Crupina vulgaris)
- (d) Tansy Ragwort (Senecio jacobaea)
- (e) Rush Skeletonweed (Chondrilla juncea). (History: Sec. 7-22-2101 MCA; IMP, Sec. 7-22-2101 MCA; NEW 1986, p. \_\_\_\_\_ Eff. 3/14/86.)



May 1, 1987

John D. Jensen  
Lewis and Clark National Forest  
Box 171  
Great Falls, Mt. 59403

Dear John,

In regards to the Environmental Impact Statement for the treatment of noxious weeds for the District-- I'm very pleased to see more interest in the control of noxious weeds. A few dollars spent now will be just a drop in the bucket compared to what it could cost later.

I personally have seen how fast spotted knapweed took over the Missoula and Sun Lake areas. No one cared at that time and now it is totally out of hand. We have too beautiful an area for that to happen.

Where there is a lot of Canada Thistle acreage listed. Having ranched there at Sheep Creek for forty years, I've had a lot of experience with that, where there is farm land involved or adjoining them.

I'm for control by spraying. At my ranch or on all of our land, I wouldn't spend a penny for control! This may not sound like me, John, but I've seen a lot of big problems there and nature to take care of it. I shall go into further details as to my reasons.

I came to Sheep Creek the fall of 1945-- We let the Forest Service put in the Adams Creek Road in 1946. Within two to four years, all of the areas that were torn up came into Canada Thistle. This also included all the cut over areas next to my ranch and any place that was logged.

By 1950, I tried to get the Forest Service to spray for Canada Thistle. Each time I was informed there was no money, and there was no interest either. The old timers in the area said just wait ten years and nature will take care

of this Canada Thistle problem. It so happened that way. Even along the road through my ranch. A lot of money could have been wasted. Time has taught me a lot because I've been very interested to learn some of the finer points of nature.

As I said before,, where there is no farm and involved, nature will take care of this Canada Thistle problem on the forest lands and roads. I've seen it happen, so much for that!

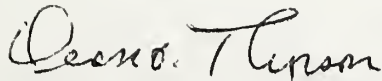
These other noxious weeds you have listed need a lot of watching and effort. You get a lot of logging equipment from infested areas along with hunters from far and wide that can infest an area in a short time.

I'm in favor of using a good spray to spot spray just where the weeds are. I think that where there are just a few plants, a person can pull them up by the roots and get the job done, too.

By allowing people to fish at the Whitetail Reservoir. They have brought us a lot of Knapweed. If it is scattered, we pull it out by the roots when the ground is wet and for heavier amounts we spray--at the present time, it is under control.

I want to thank you for the chance to participate in this, and in closing, I would like to mention the most important part of any spraying program. It doesn't make any difference how much time is spent on meetings or information but but--the whole program is no better than the man or woman that has the sprayer in their hand. They must be well trained as to what they are supposed to spray and dedicated to the job. There would be a lot less problems with the environment if that were the case. Thanks again.

Yours Truly,



Dean W. Fuerson

Forest Supervisor  
Lewis and Clark National Forest  
Noxious Weeds  
Box 871  
Great Falls, Montana 59403



Sir;

The following are my comments regarding the Draft Environmental Impact Statement on Noxious Weed Control dated March 1986:

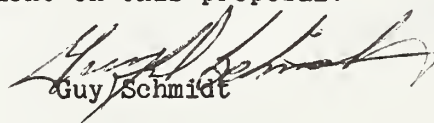
Of the alternatives considered in this impact statement, No. 5--Integrated Pest Management would be the most cost effective and successful in control and eradication, I would urge this type of approach to control of noxious weeds. However, two points are made in Section E, Management Constraints, on which I would like to comment briefly.

Constraint Item 5 limits herbicide useage in campgrounds to 2,4-D. Such a limitation will result in less effective containment and eradication success with weeds for which 2,4-D is not the optimum control formula. Since campgrounds are focal points of human, vehicular, and animal activities (as noted in Sect. C, 2d.), non-eradication in these areas could result in infestation of adjacent clean or previously treated forest areas.

Constraint Item 4 provides for Cultural control only in wilderness areas. Such limitations are probably not the most cost effective. Table II EVALUATION OF ALTERNATIVES notes that Cultural control has the highest Soil Erosion impact and is the most costly both short and long term of any of the action alternatives. Soil Erosion from grubbing weeds should certainly be a consideration within areas delicate enough to merit Congressional action.

Infestations of weeds result from both natural occurances and through human related activities (i.e. weed seeds transported with feed grains and hay for pack horses). Unless herbicide use is specifically prohibited by law, spot spray applications together with appropriate mechanical treatment should be evaluated for effective eradication at all appropriate sites--including those within wilderness areas.

Thank you for the opportunity to comment on this proposal.

  
Guy Schmidt

I-M-5

May 19, 1986

Dale Gorman  
Supervisor  
Lewis & Clark National Forest  
Great Falls, Montana 59401



Dear Mr. Gorman:

In reference to the noxious weed control plans, I wish to make the recommendation as follows: to use every tool available to you to effectively stop the spread of noxious weeds and the eventual eradication of same in the Lewis & Clark National Forest.

Sincerely,

A handwritten signature in cursive script that reads "Ted Lucas".

C.E "Ted" Lucas  
Highwood, Montana 59450





1870

1871

1872

1873

1874

1875

1876

1877

1878

1879

1880

1881

1882

1883

1884

1885

1886

1887

1888

1889

1890

1891

1892

1893

1894

1895

1896

1897

1898

1899

1900