



**BEAR DEN PROJECT**

**Plan of Development**

**APPENDIX K  
Weed Management Plan**





**BEAR DEN PROJECT**

**Plan of Development**

**Weed Management Plan**

**Prepared for:  
BUREAU OF LAND MANAGEMENT**

**June 2013**

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## **1.0 INTRODUCTION**

This plan was developed to identify noxious weed and invasive species control practices that will be implemented for the CenterPoint Energy Bakken Crude Services, LLC (CEBCS) Bear Den Project (Project). Pursuant to North Dakota Century Code § 4.1-47, North Dakota Law requires that measures be taken to control the spread of noxious weeds. Noxious weeds have the potential to invade areas disturbed by construction and may spread along the cleared areas of the pipeline right-of-way. Soil disturbance may also allow weed seed already present to germinate and grow.

Several laws, regulations, and policies govern the management of noxious weeds on public and private lands. Under the Noxious Weed Act, county, state, and federal agencies are charged with the responsibility to identify and control invasive plant species that are harmful to public health, crops, livestock, land, or other property. Weed boards may issue individual notices requiring control of noxious weeds on a particular property, and can cause weeds to be controlled with all expenses to be paid by the person in possession of the property. This plan is consistent with the Land and Resource Management Plan for the Dakota Prairie Grasslands Northern Region, the North Dakota Weed Control Guide, the North Dakota Prairie Grasslands Noxious Weed Management Project, and US Forest Service stipulations regarding herbicide use. The North Dakota Department of Agriculture's Noxious Weed Team controls noxious weeds by organizing the efforts of the county and city level Noxious Weed Boards.

### **1.1 Plan Purpose**

The purpose of this plan is to prescribe methods to prevent and control the spread of noxious weeds and invasive species (hereinafter referred to as weeds) during and following construction of the Bear Den Project. CEBCS and its contractors will be responsible for carrying out the methods described in this plan.

This plan is applicable to the installation of the pipeline and ancillary facilities within the temporary construction right-of-way, permanent operational right-of-way, staging areas, access roads, and any other disturbed areas associated with the Bear Den Project.

### **1.2 Goals and Objectives**

The goals of weed control are to implement preventative measures to eliminate the spread of weeds during construction of the pipeline and to implement prescribed treatments to eliminate, to the maximum extent possible, the invasion of weeds from surrounding lands. Monitoring during the construction and operational phases will ensure that these goals are achieved.

## **2.0 WEED INVENTORY**

CEBCS has conducted field studies, file searches, and weed consultations to identify existing weed infestations along the pipeline right-of-way and adjacent extra workspaces, along new or improved access roads, and within ancillary facility locations where clearing will be required. To identify weeds that potentially occur within the proposed project area and known locations of weed infestations crossed by the proposed project, CEBCS consulted with the Bureau of Land Management (BLM), U.S. Forest Service (USFS), and county weed control departments. Early identification of existing infestations is intended to help minimize the spread of weeds by identifying sites where preventative measures could be implemented. Information resulting from identification before, during, and after construction, including species identified within or adjacent to the project area, locations of infestations, and extent of infestations, will be coordinated with the BLM.

Table 2-1 lists the weeds that are known to occur or have the potential to occur along the proposed pipeline route as identified through agency consultations.

TABLE 2-1				
<b>Bear Den Project</b>				
<b>Federally and State-Designated Noxious Weeds Within North Dakota</b>				
Common Name	Scientific Name	USFS Designated Species	North Dakota Designated Species	Species Identified During Noxious Weed Surveys <sup>a</sup>
Russian knapweed	<i>Acroptilon repens</i>	X	X	
Creasted wheatgrass	<i>Agropyron cristatum</i>	X		X
Tall wheatgrass	<i>Agropyron elongatum</i>	X		
Intermediate wheatgrass	<i>Agropyron intermedium</i>	X		
Quackgrass	<i>Agropyron repens</i>	X		
Common burdock	<i>Arctium minus</i>			X
Absinth wormwood	<i>Artemisia absinthium</i>	X	X	X
Smooth brome	<i>Bromus inermis</i>	X		X
Japanese brome	<i>Bromus japonicus</i>	X		X
Downy brome	<i>Bromus tectorum</i>	X		
Hoary cress	<i>Cardaria draba</i>	X		
Spiny plumeless thistle	<i>Carduus acanthoides</i>	X		
Musk thistle	<i>Carduus nutans</i>	X	X	
Diffuse knapweed	<i>Centaurea diffusa</i>	X	X	
Spotted knapweed	<i>Centaurea maculosa</i>	X	X	
Yellow starthistle	<i>Centaurea solstitialis</i>	X		
Canada thistle	<i>Cirsium arvense</i>	X	X	X
Field bindweed	<i>Convolvulus arvensis</i>	X		X
Houndstongue	<i>Cynoglossum officinale</i>	X		
Leafy spurge	<i>Euphorbia esula</i>	X	X	X
Baby's breath	<i>Gypsophila paniculata</i>			
Halogeton	<i>Halogeton glomeratus</i>	X		
Black henbane	<i>Hyoscyamus niger</i>	X		
Dalmatian toadflax	<i>Linaria genistifolia</i>		X	
Yellow toadflax	<i>Linaria vulgaris</i>		X	
Purple loosestrife	<i>Lythrum salicaria, L. virgatum</i>	X	X	
Sweet clover	<i>Melilotus spp</i>	X		
Kentucky bluegrass, Canada bluegrass	<i>Poa pratensis, P. compressa</i>	X		X
Sowthistle	<i>Sonchus spp</i>	X		
Saltcedar	<i>Tamarix chinensis, T. ramosissima</i>		X	X

<sup>a</sup> Full results of the weed surveys including maps and specific locations are included in Attachment 1

### 3.0 WEED MANAGEMENT

Weeds are spread by a variety of means including pedestrian vectors (e.g., hiking, recreation, etc.), construction equipment, construction and reclamation materials, livestock, and wildlife. Implementation of preventative measures to control the spread of weeds is the most cost effective management approach. The Bear Den Project will implement weed control management measures that are consistent with the standards and guidelines included in the

Land and Resource Management Plan for the Dakota Priarie Grasslands regarding noxious weeds and invasive species.

### 3.1 Preventative Measures

The following preventative measures will be used to prevent the spread of weeds along the Bear Den Project right-of-way and within ancillary facilities:

- All Contractor equipment will arrive at the work site clean and weed-free. Prior to being allowed access to the right-of-way or ancillary facilities, all equipment will be power or high-pressure air washed. In addition, all equipment leaving an area infested with noxious weeds will first be cleaned with an air compressor to limit the spread of noxious weed seeds and propagules.
- An inspector will ensure that equipment is free of soil and debris capable of transporting weed seeds, roots, or rhizomes. An inspector will place a sticker on equipment determined to be free of weeds.
- The pipeline right-of-way and ancillary facility sites were inspected for weeds prior to the clearing of vegetation on the right-of-way and ancillary facilities. Infestations were recorded for reference in clearing the right-of-way and ancillary facilities for construction and for post-construction monitoring.
- In the construction ROW topsoil would be segregated and would not be mixed with spoil material before or during replacement. Once the disturbed areas have been de-compacted as needed, topsoil would be re-distributed over the entire disturbed area from which it was salvaged and re-contoured. Final revegetation would occur within the approved seeding window.
- The contractor will implement reclamation of disturbed lands following construction as outlined in CEBCS's project-specific *Construction, Reclamation, and Monitoring Plan* (Appendix E of the Plan of Development). Continuing revegetation efforts will ensure adequate vegetative cover to prevent the invasion of weeds.
- The contractor will ensure that straw bales, used on the project for sediment barrier installations, or mulch are certified weed-free.
- Equipment will not be sprayed with pre-emergent chemicals as a preventative measure as these chemicals target a wide range of vegetation. As a result, the use of such chemicals could affect the success of revegetation efforts.

Field wash stations with water are not proposed as a preventative measure as they have not proven to be an effective means of weed control. In order for a wash station to be effective, high-pressure steam cleaners and controlled drainage are essential. These criteria cannot be met in the field. As a result, field wash stations run the risk of creating conditions favorable to seed germination (e.g., presence of seeds or rhizomes, presence of disturbed soils, water from uncontrolled drainage).

### **3.2 Treatment Methods**

Weed controls will be used in accordance with existing regulations and landowner or agency agreements, including USFS's Dakota Prairie Grasslands Noxious Weed Management Project. During and after construction CEBCS proposes to periodically monitor the Project right-of-way during pipeline operations to allow for early detection of noxious and invasive weed species infestations. If such species are found in numbers that are significantly different from existing nearby off right-of-way locations, appropriate control measures will be implemented in an attempt to eradicate the identified weed infestations along the right-of-way and to reduce the spread or proliferation of weeds. Post-construction control measures may include one or more of the following methods:

- Mechanical methods reliant on the use of equipment to disk or excavate weed populations. If this method is used, subsequent seeding will be conducted to re-establish a desirable vegetative cover, which will stabilize the soils and slow the potential re-invasion of weeds. Seed selection will be based on site-specific conditions, and the appropriate seed mix identified for those conditions, as presented in the *Construction, Reclamation, and Monitoring Plan*.
- Herbicide application is an effective means of reducing the size of weed populations. Herbicide application and handling methods are described in section 5.0 below.

### **3.3 Education**

CEBCS and the contractor will provide information regarding weed identification, management, and impacts on agriculture, livestock, and wildlife to their appropriate employees. The critical importance of preventing the spread of weeds in areas not infested and controlling the proliferation of weeds already present will be explained. The importance of adhering to measures to prevent the spread of weeds (e.g., not driving off the cleared right-of-way, cleaning equipment that collect soil and plant seeds, and quickly identifying new infestations of weeds) will be stressed.

### **4.0 MONITORING**

CEBCS will annually monitor the right-of-way and ancillary facilities for weeds following construction and reclamation of the project for a period of five years. Locations of infestations, and extent of infestations, will be submitted to the BLM, USFS, or the local weed district, depending on the location of the infestation. If species or colonies of species are found in numbers which are significantly different from existing nearby off right-of-way locations, CEBCS will conduct spot eradication of those species.

### **5.0 HERBICIDE APPLICATION, HANDLING, SPILLS, AND CLEANUP**

Herbicide selection (if required) would be based on information gathered from local county weed control districts and the BLM, and would be consistent with the USFS' stipulations for herbicide use as found in the Dakota Prairie Grasslands Noxious Weed Management Project, if located on Forest Service land.

## 5.1 Herbicide Application and Handling

Prior to herbicide application, CEBCS' contractor will obtain any required permits from the local authorities (BLM or weed district). CEBCS or the contractor would submit a Pesticide Use Proposal to document their use of herbicide on federally administered lands, as well as a pesticide application report within 24 hours following application. The chemical application will be done by a licensed contractor in accordance with all applicable laws and regulations.

Herbicide label instructions and manufacture guidelines will be strictly adhered to. For example, manufacturer's guidelines recommend that herbicides only be applied under appropriate weather conditions (i.e., periods of low wind speeds, when precipitation is not imminent, etc.), that application sprayers be mounted low to the ground, and that sprayer booms incorporate specialized nozzles designed to produce large droplet sizes with limited drift potential. Adherence to these specifications and manufacturer label directions would minimize the potential for drift or transport of herbicides to off right-of-way areas.

Vehicle-mounted sprayers (e.g., handgun, boom, and injector) will be used primarily in open areas that are readily accessible by vehicle. Hand application methods (e.g., backpack spraying) that target individual plants will be used to treat small scattered weed populations in rough terrain. Calibration checks of equipment will be conducted at the beginning of spraying and periodically thereafter to ensure proper application rates are being achieved.

Herbicides will be transported daily to the project site with the following provisions:

- Herbicides will be premixed and delivered in returnable/refillable containers and transferred by closed system to application tanks to limit worker and environmental exposure and eliminate the need for disposal of herbicide containers in area landfills.
- Herbicides will be transported in a manner that will prevent tipping or spilling;
- Mixing of surfactants or other additives with water or other carriers and refilling of containers will typically be conducted at road crossings, and no mixing or filling will occur within 200 feet of open or flowing water, wetlands, or other sensitive resources; and
- Mixing and application procedures will be supervised by a licensed commercial applicator, and monitoring will be conducted to ensure that proper mixing, application, cleanup, personal protection and safety procedures are followed;
- All herbicide equipment and containers will be inspected daily for leaks.

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**BEAR DEN PROJECT**

**ATTACHMENT 1  
Weed Technical Memo**

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## TECHNICAL MEMORANDUM

**DATE:** December 13, 2012

**TO:** Cameron Young, NRG

**FROM:** Elizabeth Lack, Ann Dahl, & Clayton Derby, WEST, Inc.

**RE:** Weed Survey Results, Bear Den Project, McKenzie and Dunn Counties, ND

Western EcoSystems Technology, Inc. (WEST) was contracted by NRG to document the occurrence of weeds within the Bear Den project area in McKenzie and Dunn Counties, North Dakota (Figure 1). The project area includes the pipeline survey corridor (width is 200 feet, 100 feet either side of the centerline), access road survey corridor (width is 50 feet, 25 feet either side of centerline), five well pads (600 foot radius around the well), and two staging area. Portions of the project area cross federal lands, including both U.S. Forest Service (USFS) Little Missouri National Grasslands (LMNG) and Bureau of Land Management (BLM) lands (Figure 1). The federal lands occur as non-contiguous parcels and many of the project crossings occur on corners or along edges of a parcel, particularly on the BLM lands, whereas others are several miles in length on the larger USFS parcels (Figure 1).

The weed survey included documentation of plant species in the project area that are on the North Dakota noxious weed list (Table 1), available from the North Dakota Department of Agriculture website (<http://www.nd.gov/ndda/program/noxious-weeds>). In addition, on federal lands, plant species on the invasive/noxious plant species list provided by the USFS in their May 3, 2012 guidance letter were documented (Table 2). The BLM did not provide a list of invasive or noxious weed species, but USFS invasive/noxious plant species were also documented on BLM lands.

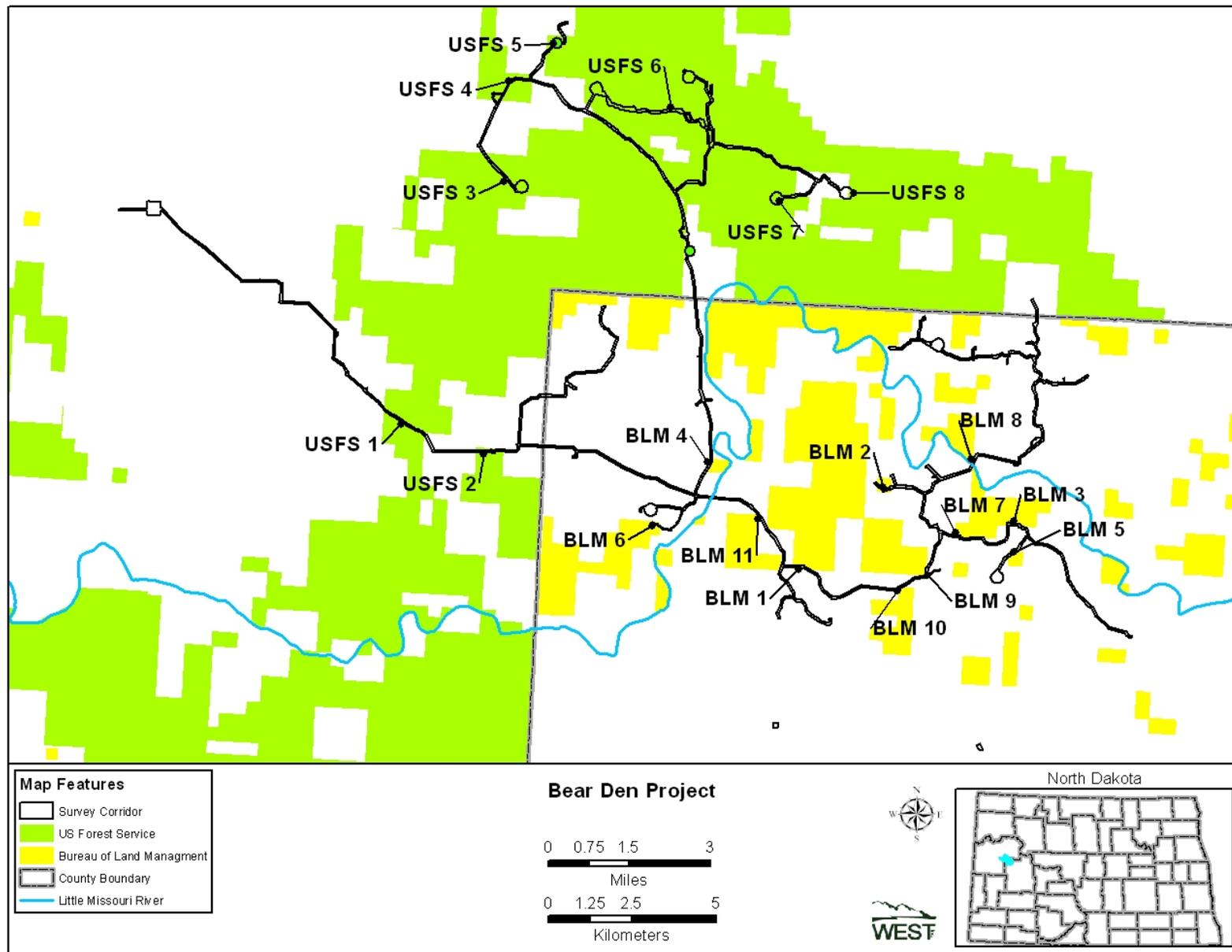


Figure 1. Location of Federal Lands – Bear Den Project

**Table 1. North Dakota Noxious Weeds**

Scientific Name	Common Name
<i>Acroptilon repens</i>	Russian Knapweed
<i>Artemisia absinthium</i>	Absinth Wormwood
<i>Carduus nutans</i>	Musk Thistle
<i>Centaurea diffusa</i>	Diffuse Knapweed
<i>Centaurea maculosa</i>	Spotted Knapweed
<i>Cirsium arvense</i>	Canada Thistle
<i>Euphorbia esula</i>	Leafy Spurge
<i>Linaria genistifolia</i>	Dalmatian Toadflax
<i>Linaria vulgaris</i>	Yellow Toadflax
<i>Lythrum salicaria</i>	Purple Loosestrife
<i>Tamarix chinensis, T. parviflora, T. ramosissima</i>	Saltcedar

**Table 2. Little Missouri National Grasslands Invasive/Noxious Plant Species**

Scientific Name	Common Name
<b>Forbs</b>	
<i>Artemisia absinthium</i>	Absinth Wormwood
<i>Cardaria draba</i>	Hoary Cress
<i>Carduus acanthoides</i>	Musk Thistle
<i>Carduus nutans</i>	Plumeless Thistle
<i>Centaurea diffusa</i>	Diffuse Knapweed
<i>Centaurea maculosa</i>	Spotted Knapweed
<i>Centaurea repens</i>	Russian Knapweed
<i>Centaurea solstitialis</i>	Yellow Starthistle
<i>Cirsium arvense</i>	Canada Thistle
<i>Convolvulus arvensis</i>	Field Bindweed
<i>Euphorbia esula</i>	Leafy Spurge
<i>Cynoglossum officinale</i>	Houndstongue
<i>Hyoscyamus niger</i>	Henbane
<i>Lythrum salicaria</i>	Purple Loosestrife
<i>Melilotus</i> spp.	Yellow or White Sweetclover
<i>Sonchus</i> spp.	Sowthistle
<i>Tamarix</i> spp.	Saltcedar
<b>Grasses</b>	
<i>Agropyron cristatum</i>	Crested Wheatgrass
<i>Agropyron elongatum</i>	Tall Wheatgrass
<i>Agropyron intermedium</i>	Intermediate Wheatgrass
<i>Agropyron repens</i>	Quackgrass
<i>Bromus inermis</i>	Smooth Brome
<i>Bromus japonicas</i>	Japanese Brome
<i>Bromus tectorum</i>	Downy Brome/Cheatgrass
<i>Poa pratensis</i>	Kentucky Bluegrass
<i>Poa compressa</i>	Canada Bluegrass

### *Methods*

Documentation of weeds species in the Bear Den project area was conducted in conjunction with rare plant surveys, conducted between August 25 and September 15, 2012, and wetland and waterbody surveys conducted from late August to early October 2012. When a plant species was encountered that was on the North Dakota noxious weed list, or the USFS invasive/noxious list when on federal lands, the location was recorded on a GPS, along with information on percent cover class (0 to 10%, 10 to 25%, 25 to 50%, 50 to 75%, and 75 to 100%), estimated number of plants (10 or less, 11 to 50, 51 to 100, 101 to 200, 201 to 500, and greater than 500), and phenology (vegetative, flower, or seed). Both GPS points and polygons were recorded. Points were recorded for one plant, or more than one plant when located in close proximity to each other. A radius around each recorded point was noted within which the species occurred. Polygons were recorded when the weed species was found throughout the width of the survey corridor and the length of the polygon was recorded. More than one weed species could occur in a polygon or point radius.

### *Results*

Three species on the North Dakota noxious weed list were documented within the Bear Den project area: *Cirsium arvense*, *Euphorbia esula*, and *Artemisia absinthium*. In addition, several USFS invasive/noxious species were documented on federal lands, including *Bromus inermis*, *Bromus japonicas*, *Poa pratensis*, *Agropyron cristatum*, and *Convolvulus arvensis*. The following table lists each weed occurrence found in the Bear Den project area, and the attached maps show the location of each occurrence.

Table 3. Weed Occurrences – Bear Den Project Area

Unique ID	Species	Data Type	Population Radius (ft)	Acreage	Percent Cover	Estimated Number	Phenology	Federal Land?
x-du-b-001	<i>Bromus inermis</i>	Polygon		5.27	0-10%	500+	Seed	BLM
x-du-b-002	<i>Cirsium arvense</i>	Point	150	1.27	10-25%	500+	Seed	BLM
x-du-b-011	<i>Cirsium arvense</i>	Point	30	0.06	25-50%	500+	Seed	
x-du-b-012	<i>Cirsium arvense</i>	Point	20	0.03	50-75%	500+	Seed	
x-du-b-013	<i>Cirsium arvense</i>	Point	100	0.69	25-50%	500+	Seed	
x-du-b-014	<i>Cirsium arvense</i>	Point	25	0.04	10-25%	201 - 500	Seed	
x-du-b-016	<i>Tamarisk</i>	Point	10	0.01	0-10%	11 - 50	Flower	
x-du-c-001	<i>Poa pratensis</i>	Polygon		6.04	0-10%	500+	Seed	BLM
x-du-c-002	<i>Cirsium arvense</i>	Point	50	0.16	10-25%	500+	Seed	BLM
x-du-c-005	<i>Artemisia absinthium</i>	Point	100	0.64	0-10%	51 - 100	Flower	
x-du-c-006	<i>Euphorbia esula</i>	Point	75	0.40	0-10%	51 - 100	Vegetative	
x-du-c-007	<i>Euphorbia esula</i>	Point	50	0.18	0-10%	51 - 100	Flower	
x-du-c-008	<i>Cirsium arvense</i>	Polygon		13.79	0-10%	500+	Seed	
x-du-c-009	<i>Euphorbia esula</i>	Point	50	0.18	0-10%	51 - 100	Vegetative	
x-du-c-011	<i>Poa pratensis</i>	Polygon		0.21	0-10%	500+	Seed	BLM
x-du-c-012	<i>Cirsium arvense</i>	Point	50	0.18	0-10%	51 - 100	Vegetative	
x-mc-b-001	<i>Agropyron cristatum</i>	Polygon		2.83	0-10%	500+	Vegetative	USFS
	<i>Poa pratensis</i>	Polygon		2.83	0-10%	500+	Vegetative	USFS
	<i>Bromus inermis</i>	Polygon		2.83	0-10%	500+	Vegetative	USFS
x-mc-b-002	<i>Poa pratensis</i>	Point	600	25.31	0-10%	500+	Vegetative	USFS
x-mc-b-003	<i>Poa pratensis</i>	Polygon		4.61	0-10%	500+	Vegetative	USFS
x-mc-b-004	<i>Agropyron cristatum</i>	Point	600	25.34	50-75%	500+	Seed	USFS
x-mc-b-005	<i>Poa pratensis</i>	Polygon		1.50	25-50%	500+	Seed	USFS
x-mc-b-006	<i>Poa pratensis</i>	Polygon		9.25	25-50%	500+	Seed	USFS
x-mc-b-007	<i>Poa pratensis</i>	Polygon		4.24	50-75%	500+	Seed	USFS
x-mc-b-008	<i>Agropyron cristatum</i>	Polygon		12.70	75-100%	500+	Seed	USFS
x-mc-b-009	<i>Cirsium arvense</i>	Polygon		2.01	25-50%	500+	Vegetative	
x-mc-b-010	<i>Cirsium arvense</i>	Point	30	0.06	50-75%	500+	Seed	
x-mc-c-001	<i>Cirsium arvense</i>	Point	5	0.01	50-75%	100	Seed	USFS
x-mc-c-002	<i>Agropyron cristatum</i>	Polygon		21.52	10-25%	500+	Seed	USFS

**Bear Den Project Weed Survey Results**

Unique ID	Species	Data Type	Population Radius (ft)	Acreage	Percent Cover	Estimated Number	Phenology	Federal Land?
	<i>Poa pratensis</i>	Polygon		21.52	0-10%	500+	Seed	USFS
	<i>Bromus inermis</i>	Polygon		21.52	1-10%	500+	Seed	USFS
x-mc-c-003	<i>Bromus inermis</i>	Polygon		17.77	10-25%	500+	Seed	USFS
	<i>Agropyron cristatum</i>	Polygon		17.77	10-25%	500+	Seed	USFS
	<i>Poa pratensis</i>	Polygon		17.77	10-25%	500+	Seed	USFS
x-mc-c-004	<i>Cirsium arvense</i>	Point	20	0.02	0-10%	11 - 50	Vegetative	USFS
x-mc-c-005	<i>Cirsium arvense</i>	Point	50	0.12	25-50%	201 - 500	Seed	USFS
x-mc-c-006	<i>Bromus inermis</i>	Point	200	1.61	0-10%	201 - 500	Seed	USFS
x-mc-c-007	<i>Bromus inermis</i>	Point	50	0.18	10-25%	51 - 100	Seed	USFS
x-mc-c-008	<i>Bromus inermis</i>	Point	20	0.03	10-25%	11 - 50	Seed	USFS
x-mc-c-009	<i>Cirsium arvense</i>	Point	200	1.67	25-50%	101 - 200	Seed	USFS
x-mc-c-010	<i>Bromus inermis</i>	Point	50	0.12	50-75%	201 - 500	Seed	USFS
x-mc-c-011	<i>Bromus inermis</i>	Point	20	0.03	25-50%	51 - 100	Seed	USFS
x-mc-c-012	<i>Bromus inermis</i>	Point	20	0.03	10-25%	51 - 100	Seed	USFS
x-mc-c-013	<i>Bromus inermis</i>	Point	200	1.77	10-25%	201 - 500	Seed	USFS
x-mc-c-014	<i>Cirsium arvense</i>	Point	50	0.18	0-10%	11 - 50	Flower	USFS
x-mc-c-015a-c	<i>Agropyron cristatum</i>	Polygon		80.65	0-10%	500+	Seed	USFS
	<i>Poa pratensis</i>	Polygon		80.65	0-10%	500+	Seed	USFS
x-mc-c-018	<i>Bromus inermis</i>	Point	30	0.06	10-25%	51 - 100	Seed	USFS
x-mc-c-019	<i>Bromus inermis</i>	Point	20	0.03	0-10%	51 - 100	Seed	USFS
x-mc-c-020	<i>Cirsium arvense</i>	Polygon		17.27	0-10%	500+	Seed	USFS
	<i>Poa pratensis</i>	Polygon		17.27	0-10%	500+	Seed	USFS
x-mc-c-021	<i>Poa pratensis</i>	Polygon		23.03	0-10%	500+	Seed	USFS
x-mc-c-023	<i>Agropyron cristatum</i>	Point	200	2.37	10-25%	500+	Seed	USFS
x-mc-c-024	<i>Agropyron cristatum</i>	Point	200	2.88	10-25%	500+	Seed	USFS
x-mc-c-025	<i>Bromus japonicus</i>	Point	50	0.18	10-25%	201 - 500	Seed	USFS
x-mc-c-026	<i>Agropyron cristatum</i>	Polygon		54.22	0-10%	500+	Seed	USFS
	<i>Bromus inermis</i>	Polygon		54.22	0-10%	500+	Seed	USFS
x-mc-c-027	<i>Cirsium arvense</i>	Point	50	0.18	0-10%	201 - 500	Vegetative	USFS
x-mc-c-030	<i>Cirsium arvense</i>	Point	50	0.18	0-10%	201 - 500	Vegetative	USFS
x-mc-c-032	<i>Poa pratensis</i>	Polygon		31.69	0-10%	500+	Seed	USFS

**Bear Den Project Weed Survey Results**

<b>Unique ID</b>	<b>Species</b>	<b>Data Type</b>	<b>Population Radius (ft)</b>	<b>Acreage</b>	<b>Percent Cover</b>	<b>Estimated Number</b>	<b>Phenology</b>	<b>Federal Land?</b>
	<i>Bromus inermis</i>			31.69	0-10%	500+	Seed	USFS
x-mc-c-033	<i>Cirsium arvense</i>	Point	100	0.52	10-25%	201 - 500	Vegetative	USFS
x-mc-c-034	<i>Cirsium arvense</i>	Point	100	0.72	0-10%	500+	Seed	USFS
x-mc-c-035	<i>Convolvulus arvensis</i>	Point	50	0.14	0-10%	101 - 200	Vegetative	USFS
x-mc-c-036	<i>Agropyron cristatum</i>	Point	50	0.18	0-10%	51 - 100	Seed	USFS
x-mc-c-039	<i>Convolvulus arvensis</i>	Point	75	0.40	0-10%	51 - 100	Vegetative	USFS
x-mc-c-040	<i>Poa pratensis</i>	Polygon		19.64	0-10%	500+	Seed	USFS
x-mc-c-042	<i>Poa pratensis</i>	Polygon		3.60	0-10%	500+	Seed	USFS
	<i>Bromus japonicus</i>	Polygon		3.60	0-10%	500+	Seed	USFS
x-mc-c-048	<i>Poa pratensis</i>	Polygon		17.22	0-10%	500+	Seed	USFS
x-mc-c-050	<i>Bromus inermis</i>	Point	30	0.06	0-10%	51 - 100	Seed	USFS
x-mc-c-051	<i>Agropyron cristatum</i>	Polygon		20.18	25-50%	500+	Seed	USFS
	<i>Poa pratensis</i>	Polygon		20.18	0-10%	500+	Seed	USFS