Gunnison County Weed Management Program
Background and Request for Guidance from USFWS

In response to the listing of the Gunnison Sage-grouse as "Threatened" under the Endangered Species Act, the Gunnison County Weed Management Program would like to ensure compliance with USFWS policies and regulations related to managing lands in Gunnison Sage-grouse habitat. We submit the following information and background about the Gunnison County Weed Management Program's efforts with the hope that USFWS will provide guidance on any adjustments or changes we may need to make to Program policies, practices or procedures on public and private lands in Gunnison Sage-grouse habitats as we plan to begin work in Spring of 2015.

Gunnison Basin Weed Commission Cooperative Partnerships

The Gunnison County Weed Management Program leads the Gunnison Basin Weed Commission, a coalition of federal, state, county and municipal agencies, private landowners and citizens who are active in managing state-listed noxious weeds throughout the Gunnison Basin. In addition to managing noxious weeds on lands and rights-of way managed by Gunnison County, the Weed Management Program provides contracted noxious weed control services on lands managed by the following Gunnison Basin Weed Commission partners: US Forest Service, Bureau of Land Management, National Park Service, Western Area Power Administration, Colorado Division of Parks and Wildlife, Colorado Department of Transportation, Hinsdale County, Saguache County, Town of Pitkin, City of Gunnison, Town of Crested Butte, Town of Mt. Crested Butte. Additional Gunnison Basin Weed Commission member agencies include Colorado State University Extension, Natural Resources Conservation Service, Gunnison Conservation District and numerous citizen and business representatives. Since the first Gunnison Watershed Integrated Weed Management Plan was developed in 1994, these partners have joined in shared efforts to plan and fund control of state-listed noxious weeds in the Upper Gunnison River Watershed and to raise public awareness about the potential negative impacts that noxious weeds can have on our local ecology and economy.

Gunnison Basin Weed Management Program Area

Land areas where noxious weed management efforts are carried out by the Gunnison County Weed Management Program include that portion of the Upper Gunnison River Watershed in the northern half of Hinsdale County, the northwestern one-third of Saguache County, and all of Gunnison County. There are approximately 2,585,464 acres of public and private lands in the weed management area. Land ownership within the weed management area is distributed as follows (in acres):

Land Ownership	Gunnison County	Saguache County	Hinsdale County	Total
Privately Owned	327,520	44,257	10,371	382,148
USFS	1,118,109	312,481	154,905	1,585,495
NPS/ B. Reclamation	63,056	0	0	63,056
BLM	273,807	110,720	136,320	520,847
State Ownership	22,621	3,660	1,643	27,924
County Ownership	600	183	8	791
Municipal Ownership	4,847	-0-	356	5,203
Total	**1,810,560**	**471,301**	**303,603**	**2,585,464**

The management area includes large acreages of relatively dry sagebrush rangelands; upper elevation rangelands, forests, irrigated pasture and hayland adjacent to major streams and drainages. Elevation within the management area ranges from approximately 6500 feet to over 13,000 feet. Average annual precipitation ranges from approximately 10 inches at Gunnison to over 40 inches at or above timberline elevations. Please see the included map of the land area where the Gunnison County Weed Management Program carries out noxious weed management.

Typical Example of Work Performed by the Gunnison County Weed Management Program

In 2014, the Gunnison County Weed Management Program completed 812 acres of noxious weed treatments for Gunnison Basin Weed Commission partners using chemical and mechanical methods. The vast majority of these treatments occurred in road rights-of way. The following table lists areas where those noxious weed treatments were completed in 2014. Weed treatments that occurred within Gunnison Sage-grouse habitat are highlighted in yellow:

Cooperator	Treatment Site	Acres
National Park Service		
	CONE Island	9.63
	Dillon Pinnacles	0.13
	Dry Gulch	0.22
	Elk Creek	0.47
	East Elk Creek	0.10
	Red Creek	0.89
	Wilson's Landing	0.30
	Lake Fork	0.30
	Old Stevens	0.21
	Soap Creek	7.61
	Beaver Creek	2.17
	Total Acres	**22.03**
US Forest Service		
	Kebler Pass	12.86
	Marshall Pass	1.75
	Gothic/Scohfield	1.03
	Red Creek	1.95
	Slate River	1.48
	Washington Gulch	0.27
	Cement Creek	3.67
	Taylor/Spring Ck.	8.82
	Needle Creek	0.77
	Irwin area	0.21
	Brush Creek	1.76
	Alpine Plateau	13.90
	Total Acres	**48.47**
CO Dept. of Parks & Wildlife		
	Sapinero SWA	1.69
	Dome Lakes SWA	0.60
	Total Acres	**2.29**
CO Dept. of Transportation		
	SH 114	68.85
	SH 133	59.96
	SH 135	97.28
	SH 92	12.18
	US 50	109.39
	SH 149	19.39
	Total Acres	**367.05**
Hinsdale Cty.	CR 30, 33, 20	6.54
	Total Acres	**6.54**
Saguache Cty.	CR 14PP	19.78
	CR 15GG	1.17
	CR 17GG	1.13
	CR 24UU	0.67
	CR KK14	6.17
	CR NN14	3.23
	Total Acres	**32.15**

Cooperator	Treatment Site	Acres
Town of Pitkin	Streets/Alleys	1.12
	Total Acres	**1.12**
City of Gunnison	Streets/Alleys	3.94
	Water Treatment/Wetlands	1.01
	Total Acres	**4.95**
Town of Crested Butte		
	Block 79	1.54
	Butte Ave Rec Path	0.23
	Ditch Headgate	0.19
	Gravel Pit	1.75
	Maintenance Yard	2.62
	Total Acres	**6.33**
Town of Mt. CB		
	Rec. Path 3.64	
	Gothic Road	5.36
	Parking Lots	1.37
	Total Acres	**10.37**
Bureau of Land Mgmt.		
	Rainbow Lake	0.97
	Red Creek	1.03
	Cabin & Alder Ck.	0.31
	BLM 3072	0.50
	BLM 3090	10.80
	Soap Creek	0.75
	BLM 3092	0.50
	Blue Creek	2.25
	Sapinero Mesa	2.10
	Blue Mesa	1.75
	Dome Lakes Area	2.00
	Alpine Loop	2.00
	Slate River	0.50
	Total Acres	**25.46**
Gunnison Cty.	CR 2	0.32
	Marble Area Roads	1.40
	CR 4	2.20
	CR 7	0.30
	CR 8	3.97
	CR 9	0.41
	CR 10	5.14
	CR 11	0.29
	CR 12	24.66
	CR 16 & 19	0.50
	CR 17	13.68
	CR 18	0.84
	CR 20	0.32
	CR 21	1.54
	CR 24	2.77
	CR 25	9.65
	CR 26	10.60
	CR 27	9.54

Cooperator	Treatment Site	Acres
Gunnison Cty. (continued)	CR 29	0.92
	CR 32	6.45
	CR 38	15.38
	CR 43	0.17
	CR 45	1.35
	CR 46	1.05
	CR 48	0.63
	CR 50	0.36
	CR 54	0.12
	CR 62	0.95
	CR 75	0.25
	CR 76	14.84
	CR 77	1.17
	CR 209	0.27
	CR 265	1.67
	CR 317	3.66
	CR 710	0.08
	CR 720	0.82
	CR 721	3.52
	CR 726	0.35
	CR 727	10.05
	CR 730	38.34
	CR 734	4.50
	CR 737	5.82
	CR 738	5.67
	CR 740	2.81
	CR 742	15.47
	CR 771	0.63
	CR 811	2.69
	CR 813	0.49
	CR 818	0.76
	CR 826	0.21
	CR 858	7.28
	CR 864	19.28
	CR 888	1.65
	Antelope Hills Waterline	3.41
	Allen Homesites	0.33
	Basin Industrial Park	6.05
	Castle Mtn. Subdivision	5.69
	CB Maintenance Facility	1.60
	Dos Rios Subdivision	2.76
	Fairgrounds	0.75
	Goose Creek Gravel Pit	0.27
	Meridian Lake Pk Subdiv.	0.54
	N. Elk Meadows Subdiv.	0.31
	Panoview Subdivision	0.47
	Riverbend Subdivision	1.23
	Somerset	0.37
	Whitewater Park	1.37
	Tincup	0.38
	North Valley Sewer Easmt.	2.11
	Total Acres	**285.43**
Private Landowners		
	Total Acres	**0.75**

The included map illustrates areas where the Gunnison County Weed Management Program completed noxious weed treatments throughout the Gunnison Basin in 2014, including where weed treatments occurred in Gunnison Sage-grouse habitat.

The noxious weed control work completed in 2014 is typical of work carried out by the Gunnison County Weed Management Program in recent years. We anticipate work in the foreseeable future to be very similar to work completed in 2014, both in locations and acreages of weeds to be treated.

Please note: Contracted work completed by the Gunnison County Weed Management Program for Gunnison Basin Weed Commission cooperators may not include all weed management efforts by those agencies. Most cooperators implement their own noxious weed management efforts to supplement work completed by the Gunnison County Weed Management Program.

Integrated Weed Management Plan and Policies

The Gunnison County Weed Management Program carries out an integrated weed management program in order to comply with requirements of the Colorado Noxious Weed Act and operates according to the policies set forth in the Gunnison County Weed Management Program Integrated Weed Management Plan (adopted in July 2013). Integrated weed management is a strategy using a comprehensive approach to noxious weed control that aims to achieve healthy and productive natural, agricultural and urbanized ecosystems through an interdisciplinary and multi-faceted program. The major components of Gunnison County's Integrated Weed Management Plan are:

A. Integrated Weed Control

The following integrated weed control methods are implemented according to current best practices, safety standards, science and technology.

1. Mechanical/Physical Control: Physical control intentionally disrupts the growth of weeds through practices such as cultivation, mowing, hand pulling, flooding, and burning.

2. Cultural Control: Cultural control practices enhance and favor the growth of desirable plant species that may out-compete noxious weeds. These methods may include controlled grazing, fertilization, irrigation, and seeding vigorously growing, competitive desirable plant species.

3. Biological Control: Biological control involves the release of beneficial organisms to diminish weed seed production, increase plant stress, and limit the expansion of underground parts of the plant's reproductive system.

4. Chemical Control: Chemical control involves the application of EPA-registered herbicides that are effective on target noxious weed species. Herbicides and application rates utilized are selected to prevent adverse impacts to the ecology and inhabitants of the weed management area. All requirements, guidelines, safety protocols and application rates listed on product labels are strictly adhered to. In the interest of protecting habitats and native plant populations, herbicides are utilized only to spot treat noxious weeds, and no broad-scale herbicide applications are made. Herbicides used by the Gunnison County Weed Management Program in 2014 (listed in decreasing order of frequency and amount of use) included: Milestone, Escort XP, Telar XP, Plateau, Vista, RoundUp Pro, and Tordon 22K.

5. Mapping and Monitoring: Regularly mapping and monitoring weed populations during and following control efforts confirm the efficacy of the control methods utilized, ensure no negative ecological impacts are occurring and inform ongoing integrated weed management approaches.

B. Education and Awareness

The Gunnison County Weed Management Program promotes noxious weed education and awareness by informing the public through formal workshops and classes, submissions to local media, public and informal meetings, consultations with landowners, and other outreach efforts. We work closely with Gunnison Basin Weed Commission partners to develop educational programs and to develop strategies for raising public awareness about noxious weeds.

C. Prevention

In addition to working toward eradication and control of existing weed infestations, preventing the further spread of noxious weeds is a high priority of the Weed Management Program. Preventative measures include:

1. Participating in the Colorado Department of Agriculture's Certified Weed Free Forage Program in conjunction with local agricultural producers in order to certify weed-free hay and promote its production. In 2014, the Gunnison County Weed Management Program worked with seven Gunnison Basin hay producers to certify 589 acres of lands (all within Sage-grouse habitat) as noxious weed-free.

2. Performing inspections of reclamation projects to ensure compliance with Gunnison County's Reclamation Permit requirements for any development, or land use change defined and/or regulated by the Gunnison County Land Use Resolution, the Gunnison County Specifications for Road and Bridge Construction, or the Uniform Building Code. Gunnison County's Reclamation Permit program seeks to ensure that soil disturbances associated with development are reclaimed adequately to prevent current and future soil erosion and noxious weed problems. Following development activities such as home building, road construction or installation of utilities, the Gunnison County Weed Management Program's on-site inspection of reclamation work provides assurance that property owners and developers have adequately re-vegetated soil disturbances and controlled noxious weeds in order to prevent negative impacts to the environment and neighboring property owners.

D. Noxious Weed Control in Gunnison Sage-grouse habitats

The Gunnison County Weed Management program adheres to all existing road and area closures from March 15-May 15 in order to prevent disturbance to Gunnison Sage-grouse during their mating season. The Program also avoids working in Gunnison Sage-grouse habitats during early morning hours following lifting of road and area closures after May 15, in order to avoid disturbance to Sage-grouse during the time of day when they are most active.

Noxious Weed Management on Private Lands

A. Gunnison County Weed Management Program Services to Private Landowners

A major function of the Gunnison County Weed Management Program is to provide educational programming and consultations for private landowners in the Gunnison Basin in order to raise awareness about noxious weeds, to provide information about integrated weed management practices and to assist private landowners in developing noxious weed management plans for their properties.

Approximately 382,148 acres of lands within the Gunnison County Weed Management program area are privately owned. According to the Colorado Noxious Weed Act, private landowners and managers are

responsible for control of noxious weeds on their lands. As a result, the Gunnison County Weed Management Program performs minimal noxious weed control work on privately-owned lands.

However, the Program frequently provides private landowners with educational and consultative services related to noxious weed control and the development of long-term noxious weed management plans. For example, in 2014, the Program provided 110 consultations to private landowners on topics related to noxious weed control, developed two formal public education programs, worked with agricultural producers to certify 589 acres of "Weed Free Hay" for the Colorado Department of Agriculture's Weed-Free Forage Program, and published numerous public notices in local newspapers to raise awareness about safe and effective integrated methods for control of noxious weeds.

In addition to USFWS guidance on any changes that may need to be made to the Gunnison County Weed Management Program's noxious weed control efforts on public lands, we also seek guidance related to providing consultative and educational services to private landowners who manage property in Gunnison Sage-grouse habitat.

As we seek to comply with USFWS regulations related to management of Gunnison Sage-grouse habitat, what advice should we give or withhold from private landowners regarding noxious weed control, reclamation of soil disturbances following construction, grazing practices and other land management issues in Gunnison Sage-grouse habitat?

B. Private Weed Management Contractors and Pesticide Applicators

Many private landowners in the Gunnison Basin rely on the services of private contractors for noxious weed control. Active private weed control contractors and pesticide applicators working in the Gunnison Basin estimate that, on average, they collectively treat approximately 500 acres of noxious weeds on private lands in Gunnison Sage-grouse habitat on an annual basis. These treatments include work on properties ranging from less than an acre to properties exceeding hundreds of acres of Gunnison Sage-grouse habitat. Numerous properties where private contractors carry out noxious weed control work have Candidate Conservation Agreements – Certificates of Inclusion in place. Most, however, do not.

The Gunnison County Weed Management Program frequently provides referrals to private landowners in Gunnison Sage-grouse habitat seeking the services of noxious weed management and reclamation contractors.

As the Gunnison County Weed Management Program seeks to comply with USFWS regulations related to management of Gunnison Sage-grouse habitat, what advice should we give or withhold from private landowners regarding hiring private contractors to carry out noxious weed control, reclamation, and other land management services?

The Gunnison County Weed Management Program also works in partnership with numerous private contractors to coordinate noxious weed control efforts on private lands throughout the Gunnison Basin.

What advice should we give or withhold from private weed management contractors, reclamation contractors and pesticide applicators regarding accepting and performing work on private lands within Gunnison sage-grouse habitat?