

Utah Conservation Measures for Gunnison Sage-Grouse

September 2015

The following conservation measures are stipulated in the *Gunnison Sage-Grouse Biological Opinion for NRCS (2015)* and should be incorporated into all NRCS conservation plans in Gunnison sage-grouse habitat, as applicable. Conservation measures marked “PLANNING” are to be incorporated into the NRCS planning process. Those marked “IMPLEMENTATION” should be incorporated into the specification sheets and be reviewed and signed by the landowner to ensure enactment during practice implementation. Conservation measures in *italics* are added from statewide coordination with Utah Division of Wildlife Resources (DWR) and are Utah-specific. Local DWR coordination should still occur when DWR coordination is called out or when necessary to facilitate conservation planning.

Conservation Measures

Potential Adverse Effects (AE) to the species as a result of the conservation practice standard	Conservation Measure (CM) recommended to ameliorate, minimize or abate the potential adverse effects. PLANNING: should be incorporated into the NRCS planning process by selecting the appropriate practices IMPLEMENTATION: should be incorporated into the specification sheets
AE 1: Physical disturbance (including noise) of birds	<p>CM 1:</p> <ul style="list-style-type: none"> a) PLANNING: NRCS shall coordinate with Utah Division of Wildlife Resources (DWR) to identify appropriate restrictions on the: <ul style="list-style-type: none"> i. placement, ii. extent, iii. configuration, and iv. timing of conservation practice standards (see b. below) and v. the area where these practice restrictions would apply so as to avoid or minimize physical disturbance to sage-grouse where they may occur. <p>For example, state wildlife agency may recommend that certain activities will not be allowed such as placement of practices that cause physical disturbance within prescribed distances of leks. <i>DWR recommends against any permanent disturbance within one mile of a lek.</i></p> <ul style="list-style-type: none"> b) <i>PLANNING & IMPLEMENTATION: Time of day restrictions on activities around leks from February 15 to May 15 from two hours before sunrise to two hours after sunrise, and general restrictions on disturbance in nesting and brood rearing habitat from April 1 to August 15, and winter habitat from November 15 to March 15.</i>
AE 2: Temporary soil and vegetation disturbances	<p>CM 2:</p> <ul style="list-style-type: none"> a) PLANNING: Evaluate the site's potential for soil erosion and invasion by undesirable plants during practice planning and design. Following the evaluation of local site conditions, site-specific Ecological Site Descriptions and the specific needs of the sage-grouse will be used to inform the reclamation strategy. b) PLANNING & IMPLEMENTATION: Minimize soil and vegetative disturbances during installation of conservation practices. <i>Use existing roads and disturbed areas for staging where feasible.</i> c) IMPLEMENTATION: During installation, utilize soil erosion protection measures if potential for off-site soil erosion exists. d) PLANNING: Native species will be used whenever possible to meet practice objectives with preference to shrubs, forbs, grasses and grass-like plants preferred by sage-grouse as well as those plants that reflect the potential of the specific ecological site to optimize sage-grouse habitat. <i>When it is necessary to use non-native species, they should provide the same community function as the native species would have filled (see Table 2: Recommended Plant Species for Sage Grouse below).</i>

	<ul style="list-style-type: none"> e) PLANNING: Tree species should not be planted. (<i>Note: Willow species may be necessary in some instances to create and stabilize wet meadow and riparian communities.</i>) f) PLANNING: When non-native species are necessary to stabilize disturbed areas, avoid the use of plants identified as either invasive or aggressive (<i>see NRCS Utah Invasive Species List</i>). g) IMPLEMENTATION: All seed mixes should be State-certified weed free. h) PLANNING: Timing of planting and post-establishment vegetation management will be designed as per local site conditions to meet NRCS practice specifications and NRCS biologist or DWR recommendations. <i>Late summer, fall or winter seeding is recommended to provide necessary seed stratification and to take advantage of favorable moisture conditions.</i> i) IMPLEMENTATION: Machinery associated with the practice should be clean and free of vegetative debris prior to use to prevent the spread of invasive plant species. j) PLANNING: Newly seeded/planted sites should be rested from livestock grazing for an appropriate period as determined by NRCS to ensure stand establishment. <i>The principal immediate post-treatment management objective should be to provide for maximum establishment and development of the seeded species. As a general rule, treated and seeded sties should not be grazed until at least the end of the second growing season following seeding.</i>
<p>AE 3: Increased potential for invasive plants</p>	<p>CM 3:</p> <ul style="list-style-type: none"> a) PLANNING: Evaluate the site's potential for invasion by undesirable plants during practice planning and design. Following the evaluation of local site conditions, site-specific Ecological Site Descriptions and the specific needs of the sage-grouse will be used to inform the reclamation strategy. b) PLANNING & IMPLEMENTATION: Minimize soil and vegetative disturbances during implementation of conservation practices. <i>Use existing roads and disturbed areas for staging where feasible.</i> c) PLANNING: Native species will be used whenever possible to meet practice objectives with preference to shrubs, forbs, grasses and grass-like plants preferred by sage-grouse as well as those species that reflect the potential of the specific ecological site to optimize sage-grouse habitat. <i>When it is necessary to use non-native species, they should provide the same community function as the native species would have filled (see Table 2: Recommended Plant Species for Sage Grouse below).</i> d) PLANNING: Tree species should not be planted. (<i>Note: Willow species may be necessary in some instances to create and stabilize wet meadow and riparian communities.</i>) e) PLANNING: When non-native species are necessary to stabilize disturbed areas, avoid the use of plants identified as either invasive or aggressive. f) IMPLEMENTATION: All seed mixes should be State-certified weed free (<i>see NRCS Utah Invasive Species List</i>). g) PLANNING: Timing of planting and post-establishment vegetation management will be designed as per local site conditions to meet NRCS practice specifications and NRCS biologist or DWR recommendations. <i>Late summer, fall or winter seeding is recommended to provide necessary seed stratification and to take advantage of favorable moisture conditions.</i> h) IMPLEMENTATION: Machinery associated with the practice should be clean and free of vegetative debris prior to use to prevent the spread of invasive plant species. i) PLANNING: Newly seeded/planted sites should be rested from livestock grazing for an appropriate period as determined by NRCS to ensure stand establishment. <i>The principal immediate post-treatment management objective should be to provide for maximum establishment and development of the seeded species. As a general rule, treated and seeded sties should not be grazed until at least the end of the second growing season following seeding.</i>
<p>AE 4: Removing sagebrush and understory vegetation during implementation of the conservation practice standard</p>	<p>CM 4:</p> <ul style="list-style-type: none"> a) PLANNING & IMPLEMENTATION: Design conservation practice standard to minimize or avoid loss of sagebrush during practice installation. <i>Smash or mow vegetation instead of blading where feasible.</i> b) IMPLEMENTATION: For linear practices, limit removal of sagebrush to one side of disturbance and to only the width of removal vehicle.

	<ul style="list-style-type: none"> c) IMPLEMENTATION: If access for operation and maintenance is required, limit access to one side of disturbance and a limit access to one vehicle width. d) PLANNING: NRCS shall coordinate with the DWR to determine overall practice applicability, location, extent, configuration, and timing in conservation practice standard's where removal of sagebrush and associated understory vegetation is the objective (brush management, grazing land mechanical treatment, and prescribed burning).
AE 5: Increased fire hazard	<p>CM 5:</p> <ul style="list-style-type: none"> a) PLANNING: Woody slash shall be treated if significant buildup of fuels occurs (typically in phase II and III juniper treatments). b) PLANNING: Slash piles shall be burned when wildfire risk is low (usually when soils are frozen or saturated). Follow state forestry laws, when applicable, for treating slash to minimize wildfire risk. <i>Consult with Utah Department of Forestry, Fire, and State Lands and local jurisdictions for burn permits.</i>
AE 6: Accidental mortality to individual sage-grouse	<p>CM 6:</p> <ul style="list-style-type: none"> a) PLANNING: Plan and design placement of new fences away from active, inactive and historic leks. If this is not possible, NRCS will require that fences be adequately marked to increase visibility. b) PLANNING: Identify existing fences that are nearby to an active, inactive or historic lek and consider removing or relocating the fence to a site further from the lek. c) PLANNING: NRCS will require, at a minimum, marking all existing fences within 0.6 mile from an active, inactive or historic lek, or in areas where collisions are known to occur. Please see technical guidance on marking fences for further detail. d) PLANNING: Use escape ramps in all new and existing water facilities that occur within the Action Area. e) PLANNING & IMPLEMENTATION: For haying operations, employee techniques to avoid or minimize mortality, such as flush bars, slower speeds and harvesting patterns that herd wildlife out of the hayland (e.g., from center to outside of field).
AE 7: Increased potential for West Nile virus	<p>CM 7:</p> <ul style="list-style-type: none"> a) PLANNING: Where a conservation practice standard involves the creation of an open water source, excluding livestock watering tanks, follow recommendations from the DWR and design practice to minimize or eliminate the threat of West Nile virus to the species. <ul style="list-style-type: none"> i. <i>Potential for increasing West Nile virus disease vectors should be carefully examined before adding new water developments, especially developments with standing water. Benefits of increased mesic brood rearing habitat (forbs, grasses and insects) associated with the creation of an open water source may outweigh the risks of West Nile virus.</i>
AE 8: Increased potential for predation	<p>CM 8:</p> <ul style="list-style-type: none"> a) IMPLEMENTATION: Minimize to the extent possible the removal of existing vegetation when installing practice. b) PLANNING & IMPLEMENTATION: Whenever possible when installing fence, use T-posts or cones on posts to reduce perching opportunities for avian predators. c) IMPLEMENTATION: Avoid leaving trash or brush piles that could provide cover for predator species. d) PLANNING: Powerlines should be buried whenever possible or use solar systems to supply required power needs. e) PLANNING: Consider the possibility of increased habitat suitability for ravens and other predators resulting from water developments when placing water developments within sage-grouse range. Wildlife watering facilities should not be installed for sage-grouse. f) PLANNING: Tree species should not be planted. (<i>Note: Willow species may be necessary in some instances to create and stabilize wet meadow and riparian communities.</i>)
AE 9: Practice is considered to be of "limited use" for sage-grouse	<p>CM 9:</p> <ul style="list-style-type: none"> a) PLANNING & IMPLEMENTATION: Where the particular "limited use" conservation practice standard is planned, NRCS shall coordinate with DWR to develop and implement site-specific guidelines to determine practice: <ul style="list-style-type: none"> i. applicability,

	<ul style="list-style-type: none"> ii. location, iii. extent, iv. configuration, and v. timing to reduce risk to sage-grouse and their habitats.
<p>AE 10: Practice implementation in isolation without concurrent grazing management prescribed to address sage-grouse habitat needs, can result in a reduction of sage-grouse habitat quality</p>	<p>CM 10:</p> <ul style="list-style-type: none"> a) PLANNING (for WLFW/SGI): The umbrella practice (or Core practice) Upland Wildlife Habitat Management (code 645) shall be used to design, implement and install the practice; to ensure that sage-grouse habitat is maintained or improved following application.

Table A: Recommended Plant Species for Sage Grouse

Recommendations for Preferred Native Plant Species to Seed for Sage Grouse in Utah Sagebrush Steppe and Sagebrush Semi Desert Communities		
Grass	Forb	Shrub
Alkali Sacaton	Annual Sunflower	Antelope Bitterbrush
Alpine Timothy	Arrowleaf Balsamroot	Basin Big Sagebrush
Big Bluegrass	Dusty Penstemon	Black Sagebrush
Blue Grama	Eaton Penstemon	Desert Bitterbrush
Blue Wildrye	Firecracker Penstemon	Fourwing Saltbush
Bluebunch Wheatgrass	Gooseberryleaf Globemallow	Green Ephedra
Bottlebrush Squirreltail	Lewis Flax	Mountain Big Sagebrush
Buffalograss	Mountain Dandelion	Nevada Ephedra
Canby Bluegrass	Munro Globemallow	Skunkbrush Sumac
Galleta	Palmer Penstemon	Smooth Sumac
Great Basin Wildrye	Rocky Mountain Beeplant	Stansbury Cliffrose
Green Needlegrass	Rocky Mountain Penstemon	True Mountain Mahogany
Idaho Fescue	Scarlet Globemallow	Willow (local species)
Indian Ricegrass	Silvery Lupine	Winterfat
Inland Saltgrass	Sulfur-flower Buckwheat	Wyoming Big Sagebrush
Letterman Needlegrass	Sweetanise	
Mountain Brome	Utah Bird's Foot Trefoil	
Muttongrass	Utah Milkvetch	
Needle and Threadgrass	Utah Sweetvech	
Prairie Junegrass	Western Yarrow	
Salina Wildrye	Wild Geranium	
Sand Dropseed	Showy Goldeneye	
Sandberg Bluegrass	Yellow Beeplant	
Sheep Fescue		
Sideoats Grama		
Slender Wheatgrass		
Streambank Wheatgrass		
Thickspike Wheatgrass		
Western Wheatgrass		

From: Utah DWR 2014