



Bighorn Basin Resource Management Plan Revision Project		
Sage-Grouse Conservation Issue	Bighorn Basin Draft RMP/EIS (Preferred Alternative D)	Bighorn Basin Supplement (Alternative E)
Priority Sage-Grouse Habitat		
<p>Greater Sage-grouse are a landscape species (Connelly et al. 2011a). Migratory populations have large annual ranges that can encompass >2,700 km² (1,042 mi²/667,184 ac) (Knick and Connelly 2011, <i>citing</i> Dalke et al. 1963; Schroeder et al. 1999; Leonard et al. 2000) (the species may use up to 2,500 mi² per population (Rich and Altman 2001)). Large-bodied birds are generally more strongly affected by habitat loss and fragmentation (Winter et al. 2006). Although conclusive data on minimum patch size is unavailable (Connelly et al. 2011a), conserving large expanses of sagebrush steppe is the highest priority to conserve sage-grouse (Aldridge et al. 2008; Connelly et al. 2011b; <i>see</i> Manier et al. 2013: 25-26).</p> <p>Sage-grouse conservation plans should designate and manage large areas of priority sage-grouse habitat to conserve the species. Priority habitat is generally defined as “having the highest conservation value to maintaining sustainable Greater Sage-grouse populations” (BLM Memo 2010-071) and should include all active sage-grouse leks, and brood-rearing, transitional and winter habitats. “Priority habitat will be areas of high quality habitat supporting important sage-grouse populations, including those populations that are vulnerable to localized extirpation but necessary to maintain range-wide connectivity and genetic diversity” (BLM Memo 2010-071).</p>	<p>Designates 1,857,485 acres as “greater sage-grouse key habitat areas,” including 1,231,383 acres of BLM surface estate, mostly based on boundaries depicted on the Wyoming Sage-Grouse Core Breeding Areas Map (Version 2) (WY EO 2008-2) (SEIS ES-1; SEIS 2-4, Table 2-2; <i>see</i> DRMP Q-2, Table Q-1). The latest iteration of the Wyoming Core Breeding Areas Map (Version 3, WY EO 2010-4) depicts “core areas” that, although totaling less acreage than key habitat areas, include some sage-grouse habitat and connective corridors not included in key habitat areas (compare SEIS Maps 01-02; DRMP Q-3, Figure Q-1). Key habitat areas could be modified (including reduced) based on criteria in DRMP Append. Q.</p>	<p>Designates 1,857,485 acres as “greater sage-grouse key habitat areas,” including 1,231,383 acres of BLM surface estate, mostly based on boundaries depicted on the Wyoming Sage-Grouse Core Breeding Areas Map (Version 2) (WY EO 2008-2) (SEIS ES-1; SEIS 2-4, Table 2-2; <i>see</i> DRMP Q-2, Table Q-1). The latest iteration of the Wyoming Core Breeding Areas Map (Version 3, WY EO 2010-4) depicts “core areas” that, although totaling less acreage than key habitat areas, include some habitat areas and connective corridors not covered by key habitat areas (compare SEIS Maps 01-02; DRMP Q-3, Figure Q-1). Key habitat areas could be modified (including reduced) based on criteria in DRMP Append. Q.</p>
<p>Prohibit new surface disturbance in priority sage-grouse habitat. Where new disturbance cannot be avoided (e.g., due to valid existing rights), (A) minimize impacts by limiting preexisting and permitted disturbance to one instance per section of sage-grouse habitat regardless of ownership, (B) with less than three percent surface disturbance per section or priority area (SGNTT 2011: 8; Knick et al. 2013). Disturbances include but are not limited to highways, roads, transmission lines, substations, wind turbines, oil and gas wells, heavily grazed areas, range developments, pipelines, landfills, mines, and vegetation treatments that reduce sagebrush cover. (C) Where possible, buffer active sage-grouse leks against surface disturbance or occupancy by 4 miles¹ (SGNTT 2011: 23).</p>	<p>Key habitat areas are generally available for resource extraction. Surface occupancy is prohibited within 0.6 miles of occupied or undetermined sage-grouse leks (DRMP 4-75; DRMP 2-84, Table 2-5, Record 4120), although the BLM may grant an <i>exception, modification and waiver</i> of this stipulation (DRMP G-12, Table G-1, Record 4120). Density of disturbance limited to one energy production</p>	<p>Manages key habitat areas so that disturbances do not exceed one instance per section within the DDCT analysis area (<i>but see</i> SEIS ES-3) and cover less than three percent of sage-grouse habitat regardless of land ownership (SEIS 2-17, Table 2-5, Record 7). Prohibits further disturbance within key habitat areas where three percent cap is exceeded until habitat</p>

¹ Smaller sage-grouse lek buffers may be justified where research demonstrates that most sage-grouse nests (i.e., > 90 percent) would be protected by the smaller buffer (see, e.g., Conservation Plan for Greater Sage-Grouse in Utah, unpublished: 9), although the impacts from continued and future land use (pursuant to valid existing rights) in nesting habitat would still advise adopting larger 4-mile lek buffers to conserve the species.

	<p>facility or transmission structure per section in key habitat areas (DRMP 2-86, Table 2-5, Record 4121) (it is unclear if this stipulation applies to non-energy mineral development). Unless withdrawn or segregated from mineral entry, key habitat areas open to mineral entry for bentonite, gypsum and other locatable minerals (DRMP 2-53, Table 2-5, Record 2002). Key habitat areas generally available for coal exploration, geothermal leasing, salable, and other leasable minerals development, (DRMP 2-53, Table 2-5, Records 2003, 2005, 2007, 2015, 2016). Siting wind energy projects would be “avoided” in key habitat areas (DRMP 2-79, Table 2-5, Record 4085).</p>	<p>has been restored to maintain the area under this threshold (SEIS 2-17, Table 2-5, Record 7). Disturbances do not include heavily grazed areas, range developments, severely burned areas, or vegetation treatments that reduce sagebrush cover (SEIS 2-17, Table 2-5, Record 7). Key habitat areas administratively unavailable for new fluid mineral leasing (SEIS 2-28, Table 2-5, Record 71). Alternative E excludes new rights-of-way (SEIS 2-18, Table 2-5, Record 10), and restricts non-energy mineral leasing (SEIS 2-27, Table 2-5, Record 65) and salable minerals extraction (SEIS 2-28, Table 2-5, Record 70) in key habitat areas. Alternative E would also seek to withdraw key habitat areas from appropriation under the mining laws (SEIS 2-19, Table 2-5, Record 15) and from locatable mineral leasing (SEIS 2-27, Table 2-5, Record 67).²</p>
<p>Identify³ and protect sage-grouse winter habitat (Braun et al. 2005, <i>citing</i> Connelly et al. 2000 and others; Moynahan et al. 2007).</p>	<p>The DRMP identifies 210,229 acres of sage-grouse winter concentration areas in the planning area, including 172,779 acres on BLM surface estate (DRMP 2-17, Table 2-2; SEIS 2-4, Table 2-2), but the plan does not provide a map of winter habitat. The plan includes prescriptions for winter habitat both within and outside key habitat areas, suggesting that winter habitat is located both within and outside key habitat (<i>see</i> DRMP 4-75). The preferred alternative would seasonally proscribe disturbing or disruptive</p>	<p>The SEIS identifies 210,229 acres of sage-grouse winter concentration areas in the planning area, including 172,779 acres on BLM surface estate (SEIS 2-4, Table 2-2), but it does not provide a map of winter habitat. Alternative E includes no specific measures for managing winter habitat, although restrictions on land uses would serve to protect winter habitat within key habitat areas (<i>see</i> SEIS 4-124 – 4-125, SEIS Table-1). Alternative B also seasonally proscribes disturbance or</p>

² Record 15 is written ambiguously and it is difficult to decipher its intent: “do not recommend withdrawals not associated with mineral activity in the Greater Sage-Grouse Key Habitat Areas ACEC unless the land management is consistent with sage-grouse conservation measures” (SEIS 2-19, Table 2-5).

³ Failure to map sage-grouse winter habitat could be grounds for remanding an RMP/EIS back to BLM to address the omission. *WWP v. Salazar*, 4:08-CV-516BLW, Slip Op. at 3.

	activities in winter habitat “that support key habitat area [sage-grouse] populations” (DRMP 2-84, Table 2-5, Record 4120) (the same restriction appears to apply to winter habitat outside key habitat, DRMP 4-75, regardless of whether it supports key habitat populations(?)).	disruptive activities in winter habitat outside key habitat areas (DRMP 2-84, Table 2-5, Record 4120).
Manage or restore sage-grouse habitat so that at least 70 percent of the land cover is sagebrush steppe sufficient to meet sage-grouse needs ⁴ (SGNTT 2011: 7; Knick et al. 2013 ⁵).	The DRMP does not propose to maintain/retain/restore 70 percent of vegetative cover in sage-grouse habitat as sagebrush. The plan includes some general objectives for maintaining the composition and increasing the cover of sagebrush steppe (e.g., DRMP 2-82, Table 2-5, Records 4099, 4101).	Alternative E does not adopt a standard for land cover, but does prescribe robust standards for maintaining and restoring sagebrush habitats (SEIS 2-20, Table 2-5, Records 20-27, 30).
<i>Restoration Sage-Grouse Habitat</i>		
Designate restoration sage-grouse habitat to focus habitat restoration efforts to extend sage-grouse habitat and mitigate for future loss of priority habitat (BLM Memo MT-2010-017). Restoration habitat may be degraded or fragmented habitat that is currently unoccupied by sage-grouse, but might be useful to the species if restored to its potential natural community. Restoration habitat should be identified in management planning based on its importance to sage-grouse and the likelihood of successfully restoring sagebrush communities (Meinke et al. 2009; Wisdom et al. 2005a). Effective restoration requires a regional approach (e.g., sub/regional EISs) that identifies appropriate options across the landscape (Pyke 2011). Passive restoration should be prioritized over active restoration methods in these areas.	The DRMP does not designate restoration areas, although it includes a goal to “[i]dentify the amount of habitat that should undergo restoration and/or rehabilitation during the life of the plan and initiate restoration and/or rehabilitation...” (DRMP 2-80, Table 2-5, Goal BR:10).	Alternative E does not designate restoration areas, but does prescribe robust standards for maintaining and restoring sagebrush habitats (SEIS 2-20, Table 2-5, Records 20-27, 30).
<i>Specially Designated Sage-Grouse Habitat</i>		
Designate a subset of sage-grouse priority habitat areas as sagebrush reserves (e.g., Areas of Critical Environmental Concern (Bureau of Land Management), Zoological Areas (Forest Service), ⁷ research natural areas (Bureau of Land Management, Forest Service), or national wildlife refuges (Fish and Wildlife Service), etc.) to be specially managed refugia for sage-grouse and other sagebrush-dependent species. ⁸ Sagebrush reserves should encompass centers of sage-grouse abundance on the landscape and protect a sufficiently large proportion of habitat in each planning area to sustain biological processes, recover species and mitigate for the systematic effects of climate change, invasion by nonnative plants and unnatural fire. ⁹ Sagebrush reserves	The DRMP analyzed 138,172 acres for new or expanded ACECs that might have benefited sage-grouse, but the preferred alternative only proposes to designate a small portion of this total—16,925 acres—in the final plan ¹⁰ (Defenders of Wildlife analysis; DRMP 4-	Alternative E would designate greater sage-grouse key habitat areas as an ACEC, totaling 1,857,485 acres, including 1,231,383 acres of BLM surface ownership (SEIS 2-11, Table 2-3; <i>see also</i> SEIS 4-58, Table

⁴ While ≥ 70 percent of land cover is sagebrush, the remainder of the landscape should be other natural habitats or areas that could be restored to sagebrush steppe.

⁵ Seventy-nine percent of the area within 5 km of active sage-grouse leks was in sagebrush cover.

⁶ *See also* Karl and Sadowski (2005): 15.

⁷ The Sage-Grouse Recovery Alternative referred to specially designated areas on Forest Service lands as “Sagebrush Conservation Areas,” p. 30 (www.sagebrushsea.org/pdf/Sage-Grouse_Recovery_Alternative.pdf).

⁸ More than 350 species of conservation concern occur in sagebrush steppe (Wisdom et al. 2005a: 21 and App. 2).

⁹ *See* Sage-Grouse Recovery Alternative for criteria for designating sagebrush reserves, p. 50 (www.sagebrushsea.org/pdf/Sage-Grouse_Recovery_Alternative.pdf).

should offer additional conservation benefits for sage-grouse and other sagebrush-dependent species over priority habitat. They may be withdrawn from locatable and leasable minerals development (43 U.S.C. § 1714); closed to new surface disturbance; and prioritized for grazing permit retirement and removal of infrastructure (unnecessary oil and gas equipment, roads, range developments, fencing, etc.).	381, Table 4-18). Existing(?) and proposed(?) ACECs in the preferred alter-native include 23,144 acres of sage-grouse key habitat areas (SEIS 4-58, Table 4-9).	4-9) (although the SEIS also indicates the proposed key habitat areas ACEC is 1,436,941 acres, SEIS ES-3).
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Fluid Minerals Development (unleased)

State of Wyoming		Wyoming BLM	NTT Report Recommendations	Sage-Grouse Ecology	Bighorn Basin Draft RMP/EIS (Preferred Alternative D)	Bighorn Basin Supplement (Alternative E)
Lek Buffers	No surface occupancy within 0.6 miles of occupied sage-grouse leks in core areas, and “no more than” 0.25 miles from occupied leks outside core areas.	Surface occupancy is “prohibited” on or within 0.6 miles of occupied sage-grouse leks in core areas, and 0.25 miles from occupied leks outside core areas.	No surface occupancy throughout priority habitat; exceptions may be considered if a 4-mile no surface occupancy buffer is applied, and if an entire lease is within priority habitat, then a limitation of one well-pad per section might be applied.	Development negatively affects sage-grouse 1.9 miles from occupied leks (Holloran 2005). Most sage-grouse hens nest within 4 miles of leks (Moynahan 2004; Holloran and Anderson 2005). Effects of drilling on sage-grouse were noticeable out to 12.4 miles from leks (Taylor et al. 2012; Taylor et al. 2013).	Surface occupancy associated with fluid minerals development prohibited within 0.6 miles of occupied or undetermined sage-grouse leks in key habitat areas (DRMP 4-75; DRMP 2-84, Table 2-5, Record 4120). ¹¹ The BLM may grant an <i>exception, modification and waiver</i> of this stipulation (DRMP G-12, Table G-1, Record 4120).	Key habitat areas administratively unavailable for new fluid mineral leasing (SEIS 2-28, Table 2-5, Record 71). For leased mineral estate, no surface occupancy permitted in key habitat areas; exceptions may be considered where entire lease is within key habitat: apply 4-mile lek buffer and limit disturbance to one site per section with no more than three percent surface disturbance in that section (SEIS 2-30, Table 2-5, Record 76; SEIS G-4, Table G-2, EC-014). If lease is entirely within 4 mile radius of an occupied sage-grouse lek, limited disturbance to one site and three percent surface disturbance in that
	Density	Maximum development density of 1 well per an average of 640 acres.	Maximum development density of 1 well per 640 acres (with some exceptions).	Limit disturbance to 1 well per 640 acres.	Maximum development density of 1 well per 640 acres to 1 well per 699 acres (Holloran 2005; Doherty et al. 2010a; Doherty 2008).	Limit density of disturbance to one energy production facility or transmission structure per section in key habitat areas (DRMP 2-86, Table 2-5, Record 4121).

¹⁰ Some existing ACECs conserve sage-grouse habitat (Carter Mountain ACEC, Little Mountain ACEC). The preferred alternative would designate the Clarks Fork Canyon ACEC (2724 acres) and Sheep Mountain ACEC (14,201 acres), although as smaller areas than proposed in the conservation alternative (12,259 and 25,153 acres, respectively). Some sage-grouse habitat proposed for ACEC designation in the conservation alternative may be partially conserved in other ACECs or management designations in the preferred alternative (e.g., Chapman Bench Management Area).

¹¹ It is unclear what the difference is between the “controlled surface use stipulation” adopted in Alternative D, described as “prohibit[ing] surface disturbance...during development of oil and gas leases within occupied greater sage-grouse leks and associated buffers” (DRMP 2-3) and the “no surface occupancy stipulation” prescribed in Alternative F, which the SEIS seems to indicate is a different type of stipulation (*see* SEIS 4-81). Both appear to prohibit development in certain demarcated areas year-round.

Disturbance	In core areas, surface disturbance limited to 5 percent of “suitable sage-grouse habitat” per an average of 640 acres.	Cumulative existing surface disturbance may not exceed 5 percent per 640 acres (with some exceptions).	Surface disturbance may not exceed 3 percent per 640 acres (exceptions may be considered in limited circumstances).	Ninety-nine percent of active sage-grouse leks are in landscapes with less than 3 percent disturbance within 5 km of leks (Knick et al. 2013).	Cumulative disturbance in key habitat areas may not exceed 5 percent of sagebrush habitat ¹² per section in key habitat areas (DRMP 2-86, Table 2-5, Record 4121).	section (SEIS 2-30, Table 2-5, Record 76; SEIS G-4, Table G-2, EC-015). Exceptions and modifications to prohibition on surface occupancy may be granted in limited cases (SEIS G-4, Table G-2, EC-013, MC-015). Prohibition on surface occupancy may be waived if site is determined to be abandoned by sage-grouse (SEIS G-4, Table G-2, WV-020).
Winter Habitat	Activities restricted in sage grouse winter habitat in core areas from December 2 – March 13; “seasonal restrictions should also be considered” in winter habitat outside core areas.	No surface disturbing or disruptive activities in sage-grouse winter habitat from November 30 – March 14.	No surface occupancy in winter habitat during any time of the year; exceptions may be considered if a 4-mile no surface occupancy buffer is applied, and if an entire lease is within priority habitat, then a limitation of one well site per section might be applied.	No surface disturbance in or adjacent to winter habitat any time of year (Walker 2008).	Seasonally restrict surface-disturbing and disruptive activities in sage-grouse winter habitat (DRMP 4-75; DRMP 2-84, Table 2-84, Record 4120). The BLM may grant an <i>exception, modification and waiver</i> of this stipulation (DRMP G-12, Table G-1, Record 4120).	Winter habitat in key habitat areas administratively unavailable for new fluid mineral leasing (SEIS 2-28, Table 2-5, Record 71). No other specific prescription for managing fluid mineral development in winter habitat within or outside key habitat areas.
Livestock Grazing						
For range management, sage-grouse habitat objectives should be based on, in priority order, potential natural community within the applicable Ecological Site Description, Connelly et al. (2000: 977, Table 3), or other objectives that have been demonstrated to be associated with increasing sage-grouse populations. Utilization levels should not exceed 25 percent annually on uplands, meadows, flood plains and riparian habitat (Holecheck et al. 2010). Habitat objectives should be applied to all sage-grouse habitat areas. Management plans should: <ol style="list-style-type: none"> 1. Maintain ≥ 18 cm average grass height in nesting and brood-rearing habitat (Connelly et al. 2000; Braun et al. 2005). 2. Control livestock grazing to avoid contributing to the spread of cheatgrass (<i>Bromus tectorum</i>) (Reisner et al. 2013). 3. Facilitate voluntary grazing permit retirement in sage-grouse priority habitat (<i>see</i> SGNTT 2011: 17). 					Livestock grazing management objectives in sage-grouse habitat in the DRMP are not based on potential natural community within the applicable Ecological Site Description or Connelly et al. (2000), although the preferred alternative would seek to manage grazing to achieve or make progress towards “achieving 65 percent or more of historical climax plant community” on a given site (DRMP 2-65). The Wyoming Standards for Healthy Rangelands and Guidelines for Livestock Grazing	Livestock grazing would be prohibited in key habitat areas (2-32, Table 2-5, Record 87). Alternative E would also maintain retirement of grazing privileges as an option in priority sage-grouse habitat where the current grazing permittee is willing to retire grazing on all or part of an allotment (SEIS 2-35, Table 2-5, Record 109).

¹² Why is the disturbance cap limited to “sagebrush habitat”? Research indicates that anthropogenic disturbance affects sage-grouse, regardless of whether it occurs in sagebrush or adjacent/related habitat types within sage-grouse range.

	<p>Management aspire to achieve or maintain habitat conditions to support listed, candidate and sensitive species (DRMP N-5).</p> <p>The DRMP does not limit forage utilization levels in sage-grouse habitat. On the contrary, the plan would permit up to 35 percent annual utilization of grass species on uplands receiving less than 14 inches of precipitation per year on grazing allotments <i>not</i> meeting rangeland health standards, and between 50-60 percent on allotments that are meeting <i>or making acceptable progress toward meeting</i> rangeland health standards. Allowable utilization levels are even higher on uplands receiving more than 14 inches of precipitation and on riparian sites (W-2, Table W-1).</p> <p>(1) No specific standard for grass height is included in the plan, although generally stated management goals (see above) may achieve the objective.</p> <p>(2) Cheatgrass is present in the planning area (DRMP 3-69, 3-81, 3-87) and is increasingly a management concern (DRMP 3-67, 3-30, 3-69), including in sagebrush habitat (DRMP 3-65, 3-81) used by sage-grouse (DRMP 3-65, 3-67). "Invasive species are considered the single most serious threat to natural habitats" in Wyoming (Buffalo FO DRMP/EIS 306); cheatgrass affects wildlife (Buffalo FO DRMP/EIS 327), including pronghorn (DRMP 3-96) and sage thrasher (DRMP 3-109, Table 3-31). While the DRMP acknowledges that livestock grazing can spread invasive plants (DRMP 4-146), the plan also contends that grazing can increase</p>	
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	<p>ecosystem resiliency against the spread of cheatgrass (DRMP 4-146). The DRMP was drafted before Reisner et al. (2013) was published. (3) The DRMP would not facilitate grazing permit retirement in sage-grouse habitat. In fact, it would apportion extra forage production to suspended permitted use on grazing allotments (DRMP 2-161, Table 2-5, Record 6277) and impress abandoned allotments into use as reserve allotments with the goal of grazing them at least every five years (DRMP 2-161, Table 2-5, Record 6279).</p>	
<p><i>Climate Change Effects</i></p>		
<p>Account for the effects of climate change in management planning (CEQ Memo, 02-18-2010 (draft)). Climate change is a recognized threat to sage-grouse (Connelly et al. 2011b: 556, Table 24.2; Blomberg et al. 2012; van Kooten et al. 2007) that is also predicted to have deleterious impacts on sagebrush steppe (Schlaepfer et al. 2012; Neilson et al. 2005). Most climate change simulations predict sagebrush steppe will contract as mean temperatures increase and the frost line shifts northward (Blomberg et al. 2012; Neilson et al. 2005). In the worst case scenario, sagebrush species are simulated to contract to just 20 percent of current distribution (Wisdom et al. 2005b: 206, <i>citing</i> Neilson et al. 2005). The largest remaining areas will be in southern Wyoming and in the gap between the northern and central Rocky Mountains, followed by areas along the northern edge of the Snake River Plateau and small patches in Washington, Oregon and Nevada (<i>see</i> Miller et al. 2011: 181, Fig. 10.19). Sagebrush steppe may also shift northward in response to increased temperatures (Schlaepfer et al. 2012; Shafer et al. 2001).</p> <p>Measures for ameliorating the effects of climate change on species and landscapes include increasing the size and number of protected areas, maintaining and enhancing connectivity between protected areas, and identifying and protecting areas likely to retain suitable climate/habitat conditions in the future (even if not currently occupied by the species of concern). Management should also repulse invasive species, sustain ecosystem processes and functions, and restore degraded habitat to enhance ecosystem resilience to climate change (Chester et al. 2012; NFWPCAS 2012).</p>	<p>The DRMP/EIS identifies climate change as a planning issue (DRMP ES-2, 1-10) and describes the challenges climate change presents to resource management (DRMP 3-255 – 3-259), including sage-grouse. “Sensitive species...such as the sage-grouse, which are already stressed by declining habitat, increased development and other factors, could experience additional pressures as a result of climate change” (DRMP 3-257). However, aside from general measures to maintain vegetation and reduce disturbance, the plan prescribes no specific measures to increase habitat resiliency to better contend with climate change effects.</p>	<p>Except for a few prescriptions related to vegetation seedings, the SEIS includes no specific measures related to climate change. However, Alternative E would restrict various land uses and limit disturbance in key habitat areas (<i>see</i> SEIS 4-124 – 4-125, SEIS Table-1), which would support ecosystem resilience in the face of climate change.</p>
<p><i>Wind Energy Development</i></p>		
<p>Prohibit wind energy development in priority sage-grouse habitat (Jones 2012; SGNTT 2011: 12). If development is permitted, locate turbines and infrastructure at least four miles from sage-grouse leks (Manville 2004; Jones 2012); do not site wind energy development in or adjacent to sage-grouse wintering areas.</p>	<p>Siting wind energy projects would be “avoided” in key habitat areas (DRMP 2-79, Table 2-5, Record 4085).</p>	<p>Wind energy development would be excluded in the ACEC (SEIS 2-19, Table 2-5, Record 20).</p>

<i>Bureau of Land Management Sensitive Species Management</i>		
<p>Greater sage-grouse are a candidate species for listing under the Endangered Species Act (ESA) and a designated Bureau of Land Management “sensitive species” across their range. BLM policy directs that actions authorized, funded or implemented by BLM do not contribute to the need to list a candidate species under the ESA (BLM WO IM 97-118; BLM Manual 6840). “As a federal agency, the BLM is obligated to develop and implement a strategy to avoid having its management activities contribute to the need to list greater sage-grouse under the [Endangered Species Act] (Lander RMP/FEIS: 1282). This includes “[p]rioritizing Bureau sensitive species and their habitats for conservation action based on considerations such as human and financial resource availability, immediacy of threats and relationship to other BLM priority programs and activities (BLM Manual 6840.2(C)(5)).</p>	<p>Sage-grouse populations are expected to continue to decline in the Bighorn Basin (SEIS 3-4). Threats to sage-grouse from various land uses under the preferred alternative would generally be the same as current management (SEIS 4-155, Table 2b). The preferred alternative anticipates that additional restoration and reclamation requirements will benefit sage-grouse more than under current management (DRMP 4-222, 4-246), although the DRMP also admits that habitat restoration in xeric sagebrush steppe can be difficult “and would result in adverse impacts to special status species in sagebrush habitat under all alternatives (DRMP 4-223). The plan acknowledges that small lek buffers are less effective for conserving sage-grouse than larger buffers (DRMP 4-228).</p>	<p>Proactive management actions would be most beneficial to special status species under Alternative E (and Alternative B) (SEIS ES-9, 4-75). Alternative E would also designate the greatest amount of sage-grouse habitat as an ACEC (SEIS 2-11, Table 2-3; SEIS ES-12), require the greatest restrictions on resource use in key habitat areas (SEIS 4-76), which would result in less surface disturbance in key habitat areas (SEIS 4-76), less habitat fragmentation and degradation (SEIS ES 4-78), and fewer additional acres invaded by weeds (SEIS ES-7, 4-77) than any other alternative, making it the most beneficial alternative for sage-grouse (SEIS 4-78). The cumulative impacts of land uses on all land ownerships in Management Zones I and II is anticipated to have the least effect on sage-grouse in the Bighorn Basin under Alternative E (SEIS 4-154).</p>
<i>Sage-Grouse Recovery Alternative</i>		
<p>Conservation organizations submitted the Sage-Grouse Recovery Alternative as a complete alternative to be analyzed and considered in management plans affecting sage-grouse in accordance with the National Environmental Policy Act (42 U.S.C. §§ 4321- 4347). The recovery alternative seeks to maintain and increase sage-grouse abundance and distribution by conserving, enhancing and restoring sagebrush steppe. It is comprehensive, reasonable and feasible to implement, and prescribes scientifically valid conservation measures to provide the best opportunity to conserve and recover sage-grouse. BLM policy directs the agency to “[e]nsure[] that land use and implementation plans fully address appropriate conservation of BLM special status species” (6840.04(E)(6)).</p>	<p>The DRMP/EIS was released prior to BLM’s announcement of the National Greater Sage-Grouse Planning Strategy and development of the Sage-Grouse Recovery Alternative.</p>	<p>The SEIS claims to have analyzed applicable conservation measures submitted by citizens in Alternatives E and F (SEIS 1-2), but the Sage-Grouse Recovery Alternative is not referenced or separately analyzed in the supplement. Individual conservation measures in the Recovery Alternative are apparent in Alternatives E and F, as well as the proposed ACECs.</p>

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