WHEREAS, the Greater Sage grouse (*Centrocercus urophasianus*) is an iconic species that inhabits much of the sagebrush-grassland habitats in Montana;

WHEREAS, thanks to concerted efforts of wildlife managers, private landowners, and others, the State of Montana currently enjoys viable and widespread populations of the species, the second largest abundance of Greater Sage grouse among western states;

WHEREAS, the United States Fish and Wildlife Service (USFWS) has determined that the Greater Sage grouse species is warranted for listing as a threatened or endangered species under the Endangered Species Act of 1973 (ESA), but is precluded by other higher priority species;

WHEREAS, the United States District Court for the District of Idaho ruled on February 2, 2012 that the USFWS must re-evaluate the status of the Greater Sage grouse by September 30, 2015;

WHEREAS, the United States Secretary of the Interior has invited Montana and other western states to develop state-specific programs to conserve the Greater Sage grouse species and preclude the need to list under the ESA;

WHEREAS, the development of a state strategy in Montana will be critical in demonstrating to the USFWS that the species does not warrant federal protection under the ESA;

WHEREAS, the development of a state-specific strategy will enable the Bureau of Land Management (BLM) and U.S. Forest Service (USFS) to incorporate relevant elements from the strategy into their land use plans and environmental analyses;

WHEREAS, because of the sound management practices and ongoing efforts of private landowners, approximately half of Greater Sage grouse habitat in Montana involves private property, and maintaining the species will require effective conservation strategies across property ownerships;

WHEREAS, the State of Montana has management authority over Greater Sage grouse populations in Montana;
WHEREAS, the State of Montana, in collaboration with stakeholders, developed and adopted a state Greater Sage grouse plan in 2005, pertaining to sage grouse population responses to large-scale changes in habitat;

WHEREAS, the listing of the Greater Sage grouse could have a significant adverse effect on the economy of the State of Montana;

WHEREAS, new science, information and data continue to emerge regarding the habitats and behaviors of the Greater Sage grouse;

WHEREAS, in February 2013 Governor Bullock created the Greater Sage grouse Habitat Conservation Advisory Council (Council), to gather information, and bring stakeholders and experts together in a public process to recommend conservation measures to address the primary and secondary threats to the Greater Sage grouse (hereafter sage grouse) in Montana, and a state-wide strategy to preclude the need to list the sage grouse under the ESA, and to bring those recommendations to the Governor no later than January 31, 2014;

WHEREAS, in preparing its recommendations, the Council reviewed the 2005 Montana Sage Grouse Conservation Plan, BLM Interim Memorandum Guidance, National Technical Team Report, USFWS Conservation Objectives Team Report (COT), relevant scientific information, and other existing strategies and information, held ten multi-day public meetings in Helena, accepted broad and diverse public comment on draft recommendations, and conducted seven public hearings around the state;

WHEREAS, the Council formally presented its recommendations and advice to the Governor on January 29, 2014;

Creation of the Montana Sage Grouse Oversight Team and the Montana Sage Grouse Habitat Conservation Program

1. There is created a Montana Sage Grouse Oversight Team (MSGOT), attached to the Governor’s Office. The initial composition of MSGOT shall include the Directors of the Departments of Fish, Wildlife and Parks, Environmental Quality, Natural Resources and Conservation, and Transportation, the Executive Director of the Montana Board of Oil and Gas Conservation, a representative of the Rangeland Resources Committee, and a member of the Governor’s Office.

2. The function of MSGOT will be to oversee the administration of the Montana Sage Grouse Habitat Conservation Program (Program). This will include, among other tasks: supervision of the Program Manager, staying abreast of emerging science and developing appropriate guidance, reviewing and troubleshooting the consultation process, providing input to funding requests for research and land management projects, and recommending to the Governor further improvements to the Program.

3. The role of the Program and MSGOT is to: provide guidance to, exchange information with, seek input from, and consult with state agencies and other instruments of state government
during permitting and other authorizations, or during consultation, or technical, financial, or other assistance for non-regulated activities; administration of the Conservation Strategy (including application of the Density Disturbance Calculation Model); serve as the principal point of contact for the interested public and stakeholders regarding the Conservation Strategy; and oversee administration of the Sage Grouse Stewardship and Conservation Fund, designed to promote voluntary and cooperative habitat conservation and beneficial land management practices (if approved by the Legislature). Nothing in this Order in any way creates, adds to, or expands the regulatory authority of any state agency.

4. During the initial startup of the Program, MSGOT shall focus its efforts on the following tasks: setting up the Program, including hiring staff and creating protocols for operation; working with state agency and Program staff to educate state agencies and other instruments of state government regarding the Program and the provisions of this Order (Conservation Strategy); address such other issues as are delineated in this Order and attachments and as may arise during startup. The Department of Fish, Wildlife and Parks shall provide necessary staff assistance for the MSGOT (until such time as key Program staff are hired).

5. All meetings of the MSGOT shall be open to the public, with public notice and participation, consistent with Montana law.

6. During the initial startup of the Program, the Department of Fish, Wildlife and Parks shall, as practical, use this Conservation Strategy and professional judgment in applying this Strategy when commenting on state activities that have the potential to impact sage grouse.

7. MSGOT shall report to the Governor further improvements in the Program that are necessary, and it is anticipated that a subsequent Executive Order will fully implement all aspects of the Program and transition to mandatory review and consultation (“effective date”).

8. The staffing for the Program is as follows: Program Manager; GIS Manager; GIS Technician, two Biologists, and support for seasonal work. The Departments of Fish, Wildlife and Parks, Environmental Quality, and Natural Resources and Conservation shall provide legal assistance to the Program as necessary. During the initial Program startup, each agency shall allocate such additional staff resources as are necessary. After the Program and GIS Managers are hired, MSGOT may choose to contract with other state agencies for services in lieu of hiring staff.

9. Management by state agencies shall give priority to the maintenance and enhancement of sage grouse habitats in Core Population and Connectivity Areas identified in Attachment A. Absent substantial and compelling information, the Core Population Areas (Core Areas) in Attachment A should not be altered for at least 5 years.

10. MSGOT shall develop incentives to accelerate or enhance required reclamation in habitats in and adjacent to Core Areas, including but not limited to stipulation waivers, funding for enhanced reclamation, and other strategies. Incentives shall result in net benefit to, and not cause declines in, sage grouse populations.
11. Where possible, MSGOT shall develop incentives to encourage new land uses and activities in General Habitat to occur in a manner that minimizes impacts to sage grouse populations and habitats.

12. Where appropriate, and to minimize or streamline the process associated with implementation of this Conservation Strategy, MSGOT should consider recommending for adoption best management practices that can be self-implemented in place of MSGOT or Program review.

13. MSGOT shall develop a comprehensive program that provides for appropriate mitigation, including compensatory mitigations (financial, off-set, or off-site). All new land uses or activities shall follow the sequencing provisions required herein (avoid, minimize, reclaim). Mitigation shall be required for all activities that are subject to agency review, approval, or authorization, even if the impacts are indirect or temporary. A variety of mitigation tools may be used, including conservation banks, habitat exchanges, and approved conservation plans.

14. Predators can be a threat to localized sage grouse populations and an impediment to efforts to protect sage grouse. Predators have always preyed upon sage grouse, and the best way to minimize this impact is to provide good quality habitat in sufficient quantity. In addition to generally implementing this Conservation Strategy, Attachment B contains specific recommended practices for minimizing the effects of predators on sage grouse.

15. While it is unlikely that predator control is a long-term solution to a general range-wide decline in populations of sage grouse, it may provide beneficial short-term relief to localized decreases in sage grouse populations. For example, the U.S. Fish and Wildlife Service (USFWS) recently granted a permit to the State of Idaho for the lethal removal of ravens in three specific locations to evaluate the impacts of predation on sage grouse. If such localized circumstances are found to exist, MSGOT should involve diverse stakeholders to explore public-private opportunities for field research to examine the predator-prey relationship, the effects of habitat disturbance, and the feasibility and efficacy of a predator management plan.

**General Principles**

16. Valid rights are legal rights or interests that are associated with a land or mineral estate and cannot be divested from that estate until that interest expires, is relinquished, or acquired. Existing rights shall be recognized and respected, including those associated with state trust lands.

17. Approximately 64% of sage grouse habitat in Montana is in private ownership. Montana’s private landowners care about the future of sage grouse and manage their lands productively in this regard. State agencies are directed to work collaboratively with private landowners (and local governments) to maintain and enhance sage grouse habitats and populations, and to the greatest extent possible shall use non-regulatory measures that reflect unique localized conditions, including soils, vegetation, development type, predation, climate and other local realities. Voluntary incentives designed to conserve sagebrush habitat and grazing lands
within identified sage grouse Core Areas and General Habitat areas on private and state lands will be created and encouraged.

18. The success of this Conservation Strategy depends on state and federal agencies, including the U.S. Fish and Wildlife Service, Bureau of Land Management, U.S. Forest Service, Natural Resource Conservation Service, and other federal agencies, working collaboratively to maintain and enhance sage grouse habitats and populations.

19. Funding, assurances (including efforts to develop Candidate Conservation Agreements and Candidate Conservation Agreements with Assurances, etc.), habitat enhancement, reclamation efforts, mapping and other associated proactive efforts to assure viability of sage grouse in Montana shall be focused and prioritized to occur in Core Areas. Formal voluntary agreements between private and federal regulatory entities to address the conservation needs of sage grouse shall be entitled to deference.

20. Fire suppression efforts in Core Areas shall be prioritized, recognizing that other local, regional, and national suppression priorities may take precedent. Coordination among all fire-fighting units is required to implement fire prevention, suppression, and rehabilitation management as detailed in Attachment C. The Department of Natural Resources and Conservation shall follow these recommendations as resources and circumstances allow, and will request cooperation and collaboration from federal agencies on rehabilitation projects after wildfire. Public and firefighter safety remains the number one priority for all fire management activities.

21. MSGOT, Program staff, and all state and federal agencies shall strive to maintain consistency with this Conservation Strategy, recognizing that adjustments may be necessary based upon local conditions and limitations.

22. MSGOT shall regularly reevaluate the effectiveness of this Conservation Strategy, at a minimum annually, as new science, information and data emerge regarding the habitats and behaviors of sage grouse, and shall recommend such changes as are appropriate.

Application of the Conservation Strategy to Land Uses and Activities

23. Existing land uses and activities shall be recognized and respected by state agencies, and those existing prior to the effective date of the Program shall not be managed under the stipulations of this Conservation Strategy. Examples of existing activities include oil and gas, mining, agriculture, processing facilities, power lines, housing, operations and maintenance activities of existing energy systems within a defined project boundary, (i.e., ROW), and other uses that were in place prior to the effective date of the Program. Provided these uses and activities are within a defined project boundary (such as a recognized federal oil and gas unit, drilling and spacing unit, mine plan, subdivision plat, etc.) they may continue within the existing boundary, even if they exceed the stipulations of this Conservation Strategy.

24. New land uses or activities in Core Areas shall be avoided when possible. New developments or land uses permitted or authorized within Core Areas shall minimize impacts
on suitable habitat, and reclaim and restore any disturbance (and mitigation as appropriate). This analysis shall be documented by Program staff for each new activity or use. A similar sequence (avoid, minimize, reclaim/restore) shall also be applicable in General Habitat, under less rigorous standards to be developed by MSGOT.

25. It is recognized that in some locations new uses or activities associated with valid rights, such as some mineral rights, may be in substantial conflict with the stipulations of this Conservation Strategy, and that reasonable exceptions to the Strategy may be necessary. Similarly, the expansion of existing uses and activities not otherwise subject to this Conservation Strategy may necessitate reasonable exception. In all cases the sequencing, stipulation, and mitigation provisions of this Conservation Strategy shall be the benchmark for evaluating such uses or activities and developing alternative operating scenarios.

26. New land uses or activities within Core Areas shall be authorized, approved, or conducted only when it can be demonstrated that the project will not cause declines in sage grouse populations.

27. Land uses or activities that follow the sequencing requirements of this Conservation Strategy (including mitigation as appropriate) and that are consistent with the stipulations set forth in Attachment D shall be deemed sufficient to demonstrate that the project will not cause declines in sage grouse populations.

28. Proposals to deviate from standard stipulations or utilize exceptions from standard stipulations will be considered by the Program (with review by MSGOT) and the appropriate land management and permitting agencies, with input from the Department of Fish, Wildlife and Parks, and the United States Fish and Wildlife Service.

29. A petition may be filed with MSGOT to create a Special Management Area, where planned land uses or activities associated with valid rights cannot be implemented after evaluation against the sequencing, stipulation, and mitigation provisions of this Conservation Strategy. The requirements and objectives for this process are contained in Attachment E, and MSGOT shall recommend such additional requirements and objectives as necessary.

30. Montana's private landowners are currently managing their lands in a responsible manner, and it is not coincidence that such a high percentage of productive sage grouse habitat is found on private land. It is critical that existing land uses and landowner activities continue to occur in Core Areas and General Habitat, particularly agricultural activities on private lands. Many uses or activities on private lands are not subject to state agency review, approval, or authorization. Only those projects occurring after the effective date of the Program which state agencies are vested with discretion by state or federal statute to review, approve, or authorize are subject to consistency review. This Conservation Strategy in no way creates, adds to, or expands the regulatory authority of any state agency.

31. Attachment F contains a list of existing land uses and landowner activities that are exempt from this Conservation Strategy.
32. Livestock grazing is the most widespread type of land use across sagebrush country. Proper livestock management is a critical tool for providing and maintaining high quality sage grouse habitat, and recommended best practices are contained in Attachment G.

33. The Governor’s Executive Budget Fiscal Years 2016-2017 will include a proposal for a Sage Grouse Stewardship and Conservation Fund, designed to, among other objectives, promote and fund voluntary incentive-based non-regulatory programs and practices on private land to conserve sage grouse habitat (if approved by the Legislature).

34. Program staff and state agencies shall adhere to the stipulations contained in this Conservation Strategy when reviewing or providing consultation, or technical, financial, or other assistance for non-regulated activities.

35. The Program staff, before submitting its final recommendation to a state agency for any use or activity it has reviewed, shall comply with the provisions of the Private Property Assessment Act, Title 2, Chapter 10, Part 1, MCA.

36. State Trust Lands are held in trust as provided in The Enabling Act, and the management of those lands is vested in the State Land Board. The Department of Natural Resources and Conservation (DNRC) is directed to bring this Conservation Strategy before the Board for its consideration, with a request that the Board adopt this Strategy or otherwise determine the appropriate application of this Strategy to the management of State Trust Lands in Core or Connectivity Areas, or General Habitat.

37. Cropland conversion and sagebrush eradication on native range are particular threats to sage grouse. The DNRC is directed to bring before the State Land Board for its consideration a prohibition of these two activities on State Trust Lands in Core and Connectivity Areas and General Habitat, with criteria for waivers. The requested prohibitions should be contingent on similar action by federal agencies for lands on which they control the surface rights. The requested prohibition on cropland conversion should also be contingent on commitments by state and federal agencies to work cooperatively with the Bureau of Indian Affairs and tribal governments to address cropland conversion of sage grouse habitat on tribal lands.

38. On State Trust Lands the DNRC will work cooperatively with lessees to maintain healthy sagebrush shrub, native grass, and forb communities on State Trust grazing lands in Core and Connectivity Areas. DNRC shall develop additional lease evaluation criteria to be used for these lands, consistent with the recommendations in Attachment G. The criteria should establish rangeland characteristics that will ensure responsible grazing management practices, consistent with maintaining and improving habitat for sage grouse, while providing for working rangelands. DNRC should also develop a corrective action program for leases that fail to meet the criteria. The criteria and corrective action program shall be brought before the State Land Board for approval.

39. Exotic annual grasses and other invasive plants, and shrubs and trees, alter habitat suitability for sage grouse by reducing or eliminating native forbs and grasses essential for food and cover. Non-native annual grasses also facilitate an increase in mean fire frequency. As
resources allow, state agencies should prioritize the eradication of cheatgrass and Japanese brome in Core Areas, through improved management practices, appropriate herbicide treatments, and biological controls. The Montana Department of Agriculture should review the appropriateness of listing Japanese brome (*Bromus japonicus*) as a regulated species (priority #3) in Montana, and report to MSGOT the results of its evaluation.

40. The hunting of sage grouse is managed by the Department of Fish, Wildlife and Parks (FWP) through the Montana Fish and Wildlife Commission. A framework for conservation action to manage hunting and the viability of sage grouse populations is outlined in the Management Plan and Conservation Strategies for Sage Grouse in Montana – Final (Rev. 2-1-2005, pp. 54-55). That framework shall continue in effect and guide Department and Commission action until such time as the Department or Commission finds that a different approach is warranted. The Program shall consult with FWP when reviewing sage grouse issues in a permit application or other authorization for a use or activity in a Core or Connectivity Area, or General Habitat.

41. State agencies shall report to the Office of the Governor by no later than January 31, 2015, and annually thereafter detailing their actions to comply with this conservation strategy.

**DURATION**

This Executive Order is effective immediately and remains in effect until it is rescinded or superseded by subsequent Executive Order.

**NOW, THEREFORE, I, STEVE BULLOCK,** Governor of the State of Montana, by the authority vested in me under the laws and Constitution of the State of Montana, do hereby create the Montana Sage Grouse Oversight Team and the Montana Sage Grouse Habitat Conservation Program.

Given under my hand and the Great Seal of the State of Montana, this 9th day of September, 2014.

STEVE BULLOCK, Governor

**ATTESTED:**

LINDA McCULLOCH, Secretary of State
Attachment B

RECOMMENDED PRACTICES TO MINIMIZE EFFECTS OF PREDATORS

a. Eliminate or minimize external food sources for ravens and small mammals, particularly dumps, landfills, waste transfer facilities, and road kill.

b. Remove abandoned farmhouses, barns, building debris piles, and other structures that harbor mammalian predators.

c. Provide adequate buffers (up to 4.0 miles from leks) between placement of new tall structures and nesting and brood-rearing habitat to minimize or eliminate the subsidy of predators. Bury power lines, when economically feasible.

d. Remove abandoned tall structures, such as fence posts, power line poles, and cell towers that can serve as perching structures for aerial predators.

e. Apply habitat management practices (e.g., grazing management and vegetation treatments) that improve sage grouse nesting habitat thus decreasing the effectiveness of predators.

f. Develop strategies for specific, selective, and if needed, assertive short-term predator control based on biological assessments appropriate to local conditions, especially in instances where a sage grouse population has declined from exotic conditions, such as West Nile Virus.

g. Request the State use localized predator control when permanent anthropogenic features are documented to contribute to unnatural numbers of predators that are reducing local sage grouse populations, and where the impacts from these permanent features will not be eliminated or minimized enough to stabilize the local sage grouse population.

h. Research and monitor the effects of predator control to determine causal connections with sage grouse survival; modify control strategies accordingly.

i. Encourage local government to help with small mammal predator control during sage grouse breeding, nesting, and brood-rearing season.
Attachment C

RECOMMENDATIONS FOR WILDFIRE PREVENTION, RESPONSE, AND REHABILITATION

Wildfire temporarily or permanently eradicates sagebrush habitat. Fire, both lightning-caused and human-caused, is a primary risk to sage grouse, not only by deteriorating and often eliminating habitat, but also by increasing future fire frequencies through the promotion of fire-prone vegetation, especially invasive grasses. The replacement of native perennial bunchgrass communities by invasive annuals is a primary contributing factor to increasing fire frequencies in the sagebrush ecosystem. The following recommendations are designed to reduce the potential for fire in sagebrush systems, suppress fires that do ignite, and (re)establish sagebrush and native species in areas that do burn.

a. Prevention (Pre-fire):

1. Broaden DNRC, Volunteer Fire Departments, and all fire-fighting unit awareness by providing maps of sage grouse habitat and copies of these recommendations, including every county fire-fighting office.

2. Prioritize eradication of cheatgrass and Japanese brome and/or address management practices, acquire funding for appropriate herbicide treatments, and explore biological controls.

3. During high-risk fire seasons, reduce risk of human caused fires as authorized by statute.

b. Suppression (Fire -Public and firefighter safety remains the number one priority for all fire management activities):

1. Prioritize initial attack with the goal of immediate suppression in Core Areas, and secondarily in Connectivity Areas and General Habitat, including use of fire retardants and other appropriate tools.

2. Improve coordination between state agencies (e.g., DNRC) and Montana Association of Counties on all fire suppression activities.

3. Request federal partners mirror the initial attack program of DNRC.

4. Prioritize outreach from DNRC to private operators regarding initial attack in sagebrush areas.

5. Carefully consider the use of backfires within Core and Connectivity Areas and General Habitat to minimize the potential for escape and further damage to sage grouse and sagebrush habitats (a tactical decision made in the field).
6. Identify and establish defensible fire lines in areas where: effectiveness is high; fire risk is likely; and, negative impacts from these efforts (e.g., fragmentation) are minimized. Avoid use of any vegetative stripping in healthy, unfragmented habitats, unless fire conditions and local ecological conditions so warrant.

c. Rehabilitation (Post-fire):

1. Use available tools to prevent (re)establishment of cheatgrass and Japanese brome, as necessary.

2. Ensure most successful restoration strategies are being implemented that (re)establish native sage grouse habitat; develop handbook of methods for most appropriate restoration strategies.

3. Identify funding options for restoration implementation.

4. Use locally available seeds where it is most likely to be effective and in areas of high need.

5. Prioritize Core Areas over sagebrush areas outside of Core Areas for restoration efforts.

6. Verify that all seeding in Core Areas is certified by an independent contractor as weed-free and free of cheatgrass and Japanese brome.

7. Explore establishing a state seed bank, if viability of seeds can be maintained; evaluate use of local seed sources (i.e., seed orchards). Report to MSGOT.

Attachment D

STIPULATIONS FOR USES AND ACTIVITIES

REVIEW PROCESS

Point of Contact: The first point of contact for addressing sage grouse issues in a permit application or other authorization for a use or activity in a Core or Connectivity Area, or General Habitat, should be the Montana Sage Grouse Habitat Conservation Program (Program). Project proponents need to have a thorough description of their project and identify the potential effects on sage grouse prior to submitting an application to the permitting agency (details such as draft project area, habitat maps and any other information will help to expedite the project). Project proponents should contact the Program at least 45-60 days prior to submitting their application. More complex projects will require more time. The Program has a role of consultation, recommendation, and facilitation, and has no authority to either approve or deny the project. The purpose of the initial consultation with the Program is to become familiar with the project proposal and ensure the project proponent understands the sequencing, stipulation, and mitigation provisions, and implementation process.

Maximum Disturbance Process: Uses and activities in Core Areas will be evaluated within the context of maximum allowable disturbance (disturbance percentages, location and number of disturbances) of suitable sage grouse habitat within the area affected by the project. The maximum disturbance allowed will be analyzed via a Density/Disturbance Calculation Tool (DDCT) process, similar to that currently utilized by the State of Wyoming. Unsuitable habitat occurring within the project area will not be included in the disturbance cap calculations. Existing disturbances shall be included.

Process Deviations and Exceptions: Any proposals for deviations from these stipulations, undefined activities, or exceptions must demonstrate that the proposed activities will not cause declines in sage grouse populations in core areas. Proposals to deviate from standard stipulations or utilize exceptions from standard stipulations will be considered by the Program (with review by MSGOT) and the appropriate land management and permitting agencies, with input from the Department of Fish, Wildlife and Parks, and the United States Fish and Wildlife Service.

Permitting/Authorization: The complete analysis package developed by consultation and review outlined herein will be forwarded to the appropriate reviewing or permitting agency. The Program recommendations will be included, as will other recommendations from project proponents and other appropriate agencies.

Requirements for Gravel Pits: MSGOT shall review the procedural and substantive permitting requirements contained in state law relating to gravel pits, and shall consider the need for further adjustments to these stipulations to accommodate those requirements while still protecting sage grouse, and shall recommend any further adjustments to these stipulations that may be appropriate.

Excepted Activities: A list of existing land uses and landowner activities that are not subject to these stipulations is provided in Attachment F.
CORE AREA STIPULATIONS

Sage grouse Core Areas were delineated as areas of highest conservation priority. These stipulations are designed to maintain existing levels of suitable sage grouse habitat by regulating uses and activities (hereafter activities) in Core Areas to ensure the maintenance of sage grouse abundance and distribution in Montana. The following stipulations apply to all new activities in Core Areas:

1. **Surface Disturbance:** Surface disturbance will be limited to 5% of suitable sage grouse habitat averaged across the area affected by the project. The DDCT process will be used to determine the level of disturbance (and the relevant area). Distribution of disturbance may be considered and approved on a case-by-case basis, with a goal of consolidating disturbance. Unsuitable habitat should be identified in a seasonal and landscape context, on a case-by-case basis, outside the NSO buffer around leks. This will incentivize proponents to locate projects, where technically feasible, in unsuitable habitat to avoid creating additional disturbance acres. Acres of development in unsuitable habitat are not considered disturbance acres. The primary focus should be on protection of suitable habitats and protection from habitat fragmentation. The calculation of total percent disturbance shall include all existing disturbance (including wildfire), authorized but yet to be implemented activities, and proposed activities that are under consideration by the appropriate reviewing or permitting agency.

2. **Surface Occupancy:** Within 0.6 miles of the perimeter of active sage grouse leks there will be no surface occupancy (NSO) for new activities. NSO, as used in these recommendations, means no surface facilities including roads shall be placed within the NSO area. Other activities may be authorized with the application of appropriate seasonal stipulations, provided the resources protected by the NSO are not adversely affected. For example, and absent such adverse effects, underground utilities and geophysical exploration are permissible if conducted in accordance with seasonal stipulations.

3. **Seasonal Use:** As authorized by permitting agency or agencies, activities (production, maintenance, and emergency activity exempted) will typically be prohibited from March 15 – July 15 outside of the NSO perimeter of an active lek and within 2 miles of that perimeter in Core Areas where breeding, nesting, and early brood-rearing habitat is present. Discretionary maintenance and production activity will not occur between the hours of 4:00 - 8:00 am and 7:00 - 10:00 pm between March 15 – July 15. In areas used as winter concentration areas, exploration and development activity will be prohibited December 1 – March 15. Activities may be allowed during seasonal closure periods as determined on a case-by-case basis. Activities in unsuitable habitat also may be approved year round on a case-by-case basis.

4. **Transportation:** Locate main roads used to transport production and/or waste products > 2 miles from the perimeter of active sage grouse leks. Locate other roads used to provide facility site access and maintenance > 0.6 miles from the perimeter of active sage grouse leks. Construct roads to minimum design standards needed for production activities.
5. **Pipelines:** Bury pipelines and restore disturbed area with native grasses, forbs and shrubs to achieve cover, species composition, and life form diversity commensurate with the surrounding plant community or desired ecological condition to benefit sage grouse and replace or enhance sage grouse habitat. Seed mixes should include two native forbs and two native grasses with at least one bunchgrass species. Landowners should be consulted on desired plant mix on private lands. The operator is required to control noxious and invasive weed species, including cheatgrass. Co-locate pipelines with roads, transmission lines, and other linear features, when possible.

6. **Overhead Power Lines and Communication Towers:** Use topographic screening and bury new lines when economically feasible, if not; locate overhead lines at least 0.6 miles from the perimeter of occupied sage grouse leks. If siting of overhead power lines is necessary within 2.0 miles of important breeding, brood-rearing, and winter habitat, follow the most current version of the Avian Power Line Interaction Committee guidelines to minimize collision potential and raptor perch sites or bury a portion of the line. Co-locate all new power lines with roads, existing power lines, or other linear features when possible.

   Follow USFWS Best Management Practices for tall structures when erecting new communication towers. Locate new communication towers at least 0.6 miles from the perimeter of occupied sage grouse leks.

   Anti-collision measures should be installed within 0.6 mile of the perimeter of known sage grouse concentration areas such as leks and winter ranges, where icing conditions are unlikely to occur. If effective perch preventers are identified, they should be installed within 0.6 mile of known concentration areas.

   Burying existing overhead lines that have been identified as contributing to a decline in sage grouse populations will be considered as a mitigation option.

   Electric utilities, including electric cooperatives, are working with the Avian Power Line Interaction Committee (APLIC), which includes federal agencies and state wildlife agencies to develop a set of Best Management Practices (BMPs) to guide construction, operation, and maintenance activities in sage grouse habitats. When this document is finalized and approved for use, it should be incorporated in this Conservation Strategy.

7. **Noise:** New noise levels from construction activities, at the perimeter of an active lek, should not exceed 10 dBA above ambient noise (existing activity included), from 6:00 p.m. to 8:00 a.m. during the initiation of breeding (March 1 – July 15), unless a site-specific noise level is agreed upon by the project proponent and Program. MSGOT shall review the emerging science on this issue, including the work being conducted regarding this issue in the State of Wyoming, and shall recommend any further adjustments in this stipulation that may be appropriate.

8. **Vegetation Removal:** Vegetation removal will be limited to the minimum disturbance required by the project. All topsoil stripping and vegetation removal in suitable habitat will occur between July 16 and March 14 in areas that are within 4.0 miles of an active
lek. Initial disturbance in suitable habitat between March 15 and July 15 may be approved on a case-by-case basis.

9. **Sagebrush Eradication and Treatments**: Sagebrush eradication is considered disturbance and will contribute to the 5% disturbance factor, unless approved by MSGOT. Sagebrush treatments that maintain sagebrush canopy cover at or above 30% total canopy cover within the treated acres will not be considered disturbance. In stands with less than 30% cover, treatment should be designed to maintain or improve sagebrush habitat. Treatments to enhance sagebrush-grassland will be evaluated based upon the existing habitat quality and the functional level post-treatment. Restored sagebrush grassland habitats that provide effective cover and food for sage grouse should be recognized as part of the habitat base. This serves as an incentive for restoring and protecting converted habitats.

10. **Wildfire and Prescribed Burns**: Following wildfire, it is recommended that landowners implement a management plan consistent with the rehabilitation practices in Attachment C, with a goal of returning the area to functional sage grouse habitat. The Program and MSGOT should stay abreast of evolving science regarding post-fire rehabilitation in order to advise landowners. This is specific to wildfire and not intended for other incentive or mitigation situations. The Program should be consulted in advance for any proposal to conduct prescribed burns in sagebrush habitat. Prescribed burns should be prohibited unless it can be demonstrated that they will either result in no loss of habitat or be beneficial to sage grouse habitat. Burnouts, backfires, and all other public safety measures are appropriate for fighting wildfires.

11. **Monitoring/Adaptive Response**: Proponents of new projects are expected to coordinate with the Program and the permitting agency to determine which leks need to be monitored and what data should be collected and reported. Generally, monitoring plans should include an evaluation of affected leks as well as reference leks for control purposes. If declines in affected leks (using a three-year running average during any five-year period relative to trends on reference leks) are determined to be caused by the project, the operator will propose adaptive management responses to increase the number of birds. If the operator cannot demonstrate a restoration of bird numbers to baseline levels (established by pre-disturbance surveys, reference surveys and taking into account regional and statewide trends) within three years, operations will cease until such numbers are achieved. In the interim, the operator, permitting agency, and the Program will create additional adaptive management efforts to restore sage grouse population numbers and baseline numbers, as well as restore project operations. Natural occurrences and their effects on sage grouse and sagebrush habitat will be considered in all cases. The MSGOT shall review the work being conducted around this issue by the State of Wyoming and the U.S. Fish and Wildlife Service, and shall recommend any further adjustments to this stipulation that may be appropriate.

12. **Reclamation**: Except for reclamation prescribed for coal mines under MSUMRA/SMCRA and their implementing regulations and permits, reclamation should re-establish native grasses, forbs and shrubs during interim and final reclamation to
achieve cover, species composition, and life form diversity commensurate with the surrounding plant community or desired ecological condition to benefit sage grouse and replace or enhance sage grouse habitat. Seed mixes should include two native forbs and two native grasses with at least one bunchgrass species. Where sagebrush establishment is prescribed, establishment is defined as meeting the standard prescribed in the individual reclamation plan. Landowners should be consulted on desired plant mix on private lands. The operator is required to control noxious and invasive weed species, including cheatgrass.

13. Conifer Expansion: For government agencies managing sagebrush in Core Areas, there should be a “no net conifer expansion” policy adopted, with criteria for approve waivers. This policy can be enacted through management plans and their implementation; stipulations in permits, leases, and licenses; and similar mechanisms. Conifer removal should be done manually, unless other methods can be shown to remove conifers without significantly impacting sagebrush. Where conifer encroachment is an issue near leks, land managers should ensure that all conifers are removed within at least 0.6 miles of leks.

14. Rangelands: Rangelands on State Trust Lands will be managed in accordance with criteria to be developed by the Department of Natural Resources and Conservation, consistent with the recommendations in Attachment G, and taking into consideration the existing management practices of the lessee on surrounding non-state lands.

15. Existing Activities: Areas already disturbed or approved for development within Core Areas prior to the effective date of the Program are not subject to sage grouse stipulations with the exception that existing operations may not initiate activities resulting in new surface occupancy within 0.6 miles of an active sage grouse lek. Any existing disturbance will be counted toward the calculated disturbance cap for a new proposed activity. The level of disturbance for existing activity may exceed 5%.

INDUSTRY-SPECIFIC STIPULATIONS within Core Areas

The following industry-specific stipulations are applicable in addition to the general stipulations, and in the event of conflict, these specific stipulations control.

1. Oil and Gas: Well pad densities are not to exceed an average of 1 per square mile (640 acres), and suitable habitat disturbed not to exceed 5% of suitable habitat within the DDCT. As an example, the number of well pads within a 2.0 mile radius of the perimeter of an active sage grouse lek should not exceed 11, distributed preferably in a clumped pattern in one general direction from the active lek.

2. Mining:
   a. For development drilling or ore body delineation drilling on tight centers, (approximately 50’x50’) the disturbance area will be delineated by the external limits of the development area. For a widely-spaced disturbance pattern (greater
than 50' x 50'), the actual disturbance footprint will be considered the disturbance areas.

b. Sage grouse monitoring results will be reported in the mine permit annual report, and to the Program. Pre-disturbance surveys will be conducted as required by the appropriate regulatory agency.

c. The number of active mining development areas (e.g., operating equipment and significant human activity) are not to exceed an average of one area per square mile (640 acres) within the DDCT. An active mining development area is any single mine site or series of contiguous mine sites that will be mined in a continuous, cast-back fashion.

d. Surface disturbance and surface occupancy stipulations will be waived when implementing underground mining practices that are necessary to protect the health, welfare, and safety of miners, mine employees, contractors and the general public. The mining practices include but are not limited to bore holes or shafts necessary to: 1) provide adequate oxygen to an underground mine; 2) supply inert gases or other substances to prevent, treat, or suppress combustion or mine fires; 3) inject mine roof stabilizing substances; and 4) remove methane from mining areas. Any surface disturbance or surface occupancy necessary to access the sites to implement these mining practices will also be exempt from any stipulation.

e. Mining permits will include requirements for mitigation, including, where appropriate, off-site mitigation that enhances or promotes sage grouse genetic diversity, critical habitat, connectivity, and population viability.

3. Coal Mining:

a. Coal mining operations will be allowed to continue under the terms and conditions included in permits issued by the Montana Department of Environmental Quality under the authority of the Montana Strip and Underground Mine Reclamation Act (MSUMRA) and the federal Surface Mining Control and Reclamation Act (SMCRA) and imposed by those statutes' implementing state and federal regulations.

b. Coal mining operations are generally governed by MSUMRA and SMCRA under this Conservation Strategy, and those laws are the mechanisms by which this Conservation Strategy is applied to coal mining operations. This Strategy shall not preclude federal leasing.

e. New coal mining operations, including expansions into or within Core Areas, requires permitting under MSUMRA/SMCRA.

4. Wind Energy: Wind energy development should be avoided in sage grouse core areas. An exception may be made if it can be demonstrated by the project proponent using the
best available science that the development will not cause a decline in sage grouse populations.

GENERAL HABITAT STIPULATIONS

The health of General Habitat areas is a critical element in the effort to maintain the abundance and distribution of sage grouse in Montana. Development scenarios in General Habitat are more flexible than in Core Areas, but should still be designed and managed to maintain populations, habitats, and essential migration routes, since this Conservation Strategy requires habitat connectivity and movement between populations in Core Areas. In all General Habitat areas, the following stipulations apply:

1. **Surface Occupancy**: Within 0.25 miles of the perimeter of an active sage grouse lek there will be no surface occupancy (NSO).

2. **Surface Disturbance**: There are no specific surface disturbance limits in General Habitat. However, as a standard management practice surface disturbance should be minimized, through measures such as co-locating new and existing structures. Structures and associated infrastructure will be removed and areas reclaimed.

3. **Seasonal Use**: Activities (production and maintenance activity exempted) will be prohibited from March 15 – July 15 within 2.0 miles of an active lek where breeding, nesting, and early brood-rearing habitat is present. Discretionary maintenance and production activity will not occur between the hours of 4:00 - 8:00 am and 7:00 - 10:00 pm between March 15 – July 15. In areas used as winter concentration areas, exploration and development activity will be prohibited December 1 – March 15. Activities may be allowed during seasonal closure periods as determined on a case-by-case basis. This stipulation may be modified or waived for areas of unsuitable habitat. Any deviations from this stipulation for unsuitable habitat will be determined by the applicable permitting agency in coordination with the Program.

4. **Overhead Power Lines and Communication Towers**: New overhead power lines and communication towers will be located outside of General Habitat when possible. Where avoidance is not possible, develop a route or siting location that uses topography, vegetative cover, site distance, etc., to effectively protect identified sage grouse habitat in a cost-efficient manner. If siting of overhead power lines is necessary within 2.0 miles of important breeding, brood-rearing, and winter habitat, follow the most current version of the Avian Power Line Interaction Committee guidelines to minimize collision potential and raptor perch sites or bury a portion of the line. Site new lines in existing corridors wherever practicable.

5. **Noise**: New noise levels from construction activities, at the perimeter of an active lek, should not exceed 10 dBA above ambient noise (existing activity included), from 6:00 p.m. to 8:00 a.m. during the initiation of breeding (March 1 – July 15), unless a site-specific decibel level is agreed upon by the project proponent and Program. MSGOT shall review the emerging science on this issue, including the work being conducted
regarding this issue in the State of Wyoming, and shall recommend any further adjustments in this stipulation that may be appropriate.

6. **Vegetation Removal**: Vegetation removal as part of permitted activities will be limited to the minimum disturbance required by the project.

7. **Sagebrush Treatments**: Treatments to enhance sagebrush-grassland will be evaluated based upon the existing habitat quality and the functional level post-treatment. Restored sagebrush grassland habitats that provide effective cover and food for sage grouse should be recognized as part of the habitat base. This serves as an incentive for restoring and protecting converted habitats.

8. **Wildfire and Prescribed Burns**: Suppression of wildfire in General Habitat will be emphasized, recognizing that other local, regional, and national suppression priorities may take precedent. Public and firefighter safety remains the number one priority for all fire management activities. The Program should be consulted in advance for any proposal to conduct prescribed burns in sagebrush habitat. Prescribed burns should be prohibited unless it can be demonstrated that they will either result in no loss of habitat or be beneficial to sage grouse habitat. Burnouts, backfires, and all other public safety measures are appropriate for fighting wildfires.

9. **Reclamation**: Reclamation should re-establish native grasses, forbs, and shrubs during interim and final reclamation. The goal of reclamation is to achieve cover, species composition, and life form diversity commensurate with the surrounding plant community or desired ecological condition to benefit sage grouse and replace or enhance sage grouse habitat to the degree that environmental conditions allow. Landowners should be consulted on the desired plant mix on private lands. The operator is required to control noxious and invasive plant species, including cheatgrass (Bromus tectorum) and Japanese brome (Bromus japonicus).

10. **Rangelands**: When possible, rangelands on State Trust Lands should be managed consistent with the recommendations in Attachment G, taking into consideration the existing management practices of the lessee on surrounding non-state lands.

11. **Oil and Gas, Mining**: Encourage development in incremental stages to stagger disturbance and design schedules that include long-term strategies to localize disturbance and recovery within established zones over a staggered time frame. Remove facilities and infrastructure and reclaim when use is completed, including for exploration activities.

12. **Other Mining**:
   
a. Sage grouse monitoring results will be reported in the mine permit annual report, and to the Program. Pre-disturbance surveys will be conducted as required by the appropriate regulatory agency.
b. Surface occupancy stipulations will be waived when implementing underground mining practices that are necessary to protect the health, welfare, and safety of miners, mine employees, contractors and the general public. The mining practices include but are not limited to bore holes or shafts necessary to: 1) provide adequate oxygen to an underground mine; 2) supply inert gases or other substances to prevent, treat, or suppress combustion or mine fires; 3) inject mine roof stabilizing substances; and 4) remove methane from mining areas. Any surface disturbance or surface occupancy necessary to access the sites to implement these mining practices will also be exempt from any stipulation.

c. Mining permits will include requirements for mitigation, including, where appropriate, off-site mitigation that enhances or promotes genetic diversity, critical habitat, connectivity, and population viability.

13. Coal Mining:

a. Coal mining operations are generally governed by MSUMRA and SMCRA under this Conservation Strategy, and those laws are the mechanisms by which this Conservation Strategy is applied to coal mining operations. This Strategy should not preclude federal leasing.

b. Conservation measures will be developed for coal mining operations on a case-by-case basis via the terms and conditions included in permits issued by MDEQ under the authority of the Montana Strip and Underground Mine Reclamation Act (MSUMRA) and in compliance with the federal Surface Mining Control and Reclamation Act (SMCRA).

14. Wind Energy: New wind energy developments are not recommended within 4.0 miles of the perimeter of active sage grouse leks, unless it can be demonstrated that the development cannot reasonably meet this setback and will not cause a decline in sage grouse populations. Any development must adhere to the U.S. Fish and Wildlife Service Land-Based Wind Energy Guidelines, and project developers should work cooperatively with agencies, utilities, and landowners to use topography, vegetative cover, site distance, etc. to effectively protect identified sage grouse habitat.

**CONNECTIVITY HABITAT STIPULATIONS**

Connectivity habitat includes those areas that provide important linkages among populations of sage grouse, particularly between Core Areas or priority populations in adjacent states and across international borders. Only one sage grouse connectivity area has been identified (Montana-Saskatchewan Connectivity Area in Valley County). Research continues, based on genetics work, to better define the composition of other possible priority Connectivity Areas. MSGOT shall study and recommend the stipulations that are necessary in Connectivity areas to prevent a decline in sage grouse populations. In the interim, the Valley County Connectivity area shall be subject to the stipulations for General Habitat.
Attachment E

Special Management Areas

A petition may be filed with the Program to create a Special Management Area (SMA), where planned land uses or activities associated with valid rights cannot be implemented after evaluation against this Conservation Strategy.

1. Petitions may be submitted to the Program to create a new SMA. The Petition shall be submitted by the project developer (holder of valid rights).

2. The Petition shall contain: a geographic description of the area proposed to be created and a detailed description of the number and location of the sage grouse lek(s) within the area; an evaluation of how the creation of the proposed SMA would impact the Core Area function relative to the sage grouse; and, an explanation of the rationale for the creation of the SMA.

3. The Petitioner shall submit a proposed conservation plan (including plans for off-set mitigation) and shall work in cooperation with both the Program and reviewing/permitting agency to develop an acceptable plan to be submitted to the MSGOT for review. The conservation goal of the plan is to maintain and restore seasonal sage grouse habitats that support viable sage grouse populations. As industrial activities subside, these populations are expected to expand into vacant functional habitats.

4. All applicable Core Area stipulations will apply to the SMA until the conservation plan has been recommended for approval by MSGOT and subsequently approved by the appropriate agency. The conservation plan will follow the mitigation framework developed by MSGOT and shall include a noise abatement stipulation, a strategy for restoration/reclamation within the Core Area (which results in a long-term reduction in surface disturbance), a proposal for off-set mitigation, and a monitoring component using peer-reviewed scientific methods that is designed to monitor sage grouse populations, the impact of development, and restoration efforts on sage grouse populations, and provide feedback if adjustments are needed in the conservation plan to reduce impacts on sage grouse populations.

5. In evaluating whether to recommend approval of the creation of the new SMA, the MSGOT shall consider how the creation of an SMA will impact the habitat and population of sage grouse both within the Core Area and on a statewide basis.

6. MSGOT shall evaluate the need for a cap on the number of sage grouse impacted by SMAs (i.e., the population of sage grouse impacted by all SMAs may not exceed a specific population, measured by the number and size of leks impacted or a similar population metric), and shall make a recommendation in this regard.

7. The MSGOT must develop a process where designated SMAs can be reclassified. This process should be based on metrics measuring the quantity and quality of sage grouse.
habitat restored and/or reclaimed, as well as the documented use of that habitat by sage grouse.

MSGOT should recommend such additional requirements and objectives as necessary.
Attachment F

EXEMPT ACTIVITIES

The following existing land uses and landowner activities are exempt from compliance with this strategy:

a. Existing animal husbandry practices (including branding, docking, herding, trailing, etc.).

b. Existing farming practices (excluding conversion of sagebrush/native range to cropland agriculture).

c. Existing grazing operations that meet rangeland health standards or utilize recognized rangeland management practices (for example, allotment management plans, Natural Resource and Conservation Service grazing plans, prescribed grazing plans, etc.).

d. Construction of agricultural reservoirs and aquatic habitat improvements less than 10 surface acres and drilling of agriculture and residential water wells (including installation of tanks, water windmills, and solar water pumps) more than 0.6 miles from the perimeter of a lek in Core Areas and more than 0.25 miles from a lek in General Habitat or Connectivity Areas. Within 0.6 miles of a lek in Core Areas and within 0.25 miles of a lek in General Habitat or Connectivity Areas, no review is required if construction does not occur March 15 – July 15 and construction does not occur on the lek. All water tanks shall have bird escape ramps.

e. Agricultural and residential electrical distribution lines more than 0.6 miles from a lek in Core Areas and 0.25 miles from a lek in General Habitat or Connectivity Areas. Within 0.6 miles of a lek in Core Areas and within 0.25 miles of a lek in General Habitat or Connectivity Areas, no review is required if construction does not occur between March 15 – July 15 and construction does not occur on the lek. Raptor perching deterrents shall be installed on all poles within 0.6 or 0.25 miles, respectively, from leks, if they are proven to be effective according to Avian Power Line Interaction Committee guidance. Other management practices, such as vegetation screening and anti-collision measures, should be applied to the extent possible. Routine maintenance of existing power lines conducted between July 16 – March 14 is also an exempt activity.

f. Pole fences. Wire fences if fitted with visibility markers where high potential for sage grouse collisions has been documented.

g. Irrigation (excluding the conversion of sagebrush/grassland to new irrigated lands). Tribal lands under existing and future state water compacts.

h. Spring development if the spring is protected with fencing and enough water remains at the site to provide mesic (wet) vegetation.
i. Herbicide and pesticide use except for in the control of sagebrush and associated native forbs. Grasshopper/Mormon cricket control following Reduced Agent-Area Treatments (RAATS) protocol.

j. County road maintenance.

k. Production and maintenance activities associated with existing oil, gas, communication tower, and power line facilities in compliance with approved authorizations.

l. Low impact cultural resource surveys.

m. Emergency response.
Attachment G

RECOMMENDATIONS FOR RANGE AND DISEASE (West Nile) MANAGEMENT

The following recommendations outline voluntary management practices for private lands to maintain or enhance sage grouse populations and habitats. Whenever possible, adherence to these recommendations is encouraged.

Range Management

Livestock grazing is the most widespread type of land use across the sagebrush biome. Although improper livestock management, as determined by local ecological conditions, may have negative impacts on sage grouse seasonal habitats, proper livestock management is a critical tool for providing and maintaining high quality sage grouse habitat. Range management structures and fences necessary for proper grazing management can also be placed or designed to be neutral or beneficial to sage grouse. The following recommendations are intended to support grazing management as a tool for providing quality sage grouse habitat.

a. Landowners in sage grouse Core and Connectivity Areas and General Habitat are encouraged to adopt the Sage grouse Initiative grazing practices and range management recommendations, including:

1. Rotating livestock to different pastures, while resting others to establish a diversity of habitat types.
2. Changing seasons of use within pastures to ensure all plants have the ability to reproduce.
3. Leaving residual cover (grass from the past season) to increase hiding and nesting cover for sage grouse.
4. Managing the frequency and intensity of grazing to sustain native grasses, wildflowers, and shrubs.
5. Managing livestock access to water to ensure healthy livestock and healthy watersheds.

b. Range management structures should be designed and placed to be neutral or beneficial to sage grouse.

c. Structures that are currently contributing to negative impacts to either sage grouse or their habitats should be removed or modified to remove the threat.

d. Mark fences that are in high risk areas for collision with permanent flagging or other suitable device to reduce sage grouse collisions.

e. Identify and remove unnecessary fences.
f. Placement of new fences and livestock management facilities (including corrals, loading facilities, water tanks, and windmills) should consider their impact on sage grouse and, to the extent practicable, be placed at least 0.6 miles from active leks.

**Disease Management (West Nile virus)**

West Nile virus was a new source of mortality for sage grouse, particularly in low and mid-elevation populations, from 2003 – 2007. If there is a West Nile virus outbreak that significantly reduces sage grouse populations, the MSGOT should look at a local site-specific strategy for enhancing the sage grouse population. Elimination of anthropogenic-created habitat for the mosquito vectors of West Nile virus is an important conservation measure for sage grouse, and the following recommendations are intended to further this objective.

a. Construct ponds to reduce prevalence of mosquitoes that transmit West Nile virus consistent with current BLM guidance (see, A Report on National Sage grouse Conservation Measures, Appendix C: BMPs for how to make a pond that won’t produce mosquitoes that transmit West Nile virus).

b. Manage ponds to reduce prevalence of mosquitoes that transmit West Nile virus.

c. Other management actions to reduce prevalence of mosquitoes that transmit West Nile virus include erection of bat houses, and managing containers, wood piles, and tire storage facilities that harbor breeding or overwintering mosquitoes and/or larvae.
DEFINITIONS

Suitable Habitat – is within the mapped occupied range of sage grouse, and:

1. Generally has 5% or greater canopy cover of sagebrush, where “sagebrush” includes all species and sub-species of the genus *Artemisia*. This excludes mat-forming sub-shrub species such as *A. frigida* (fringed sagewort) and *A. pedatifida* (birdfoot sage). Sagebrush canopy cover may be less than 5% when complimented by other shrubs suitable for sage grouse cover requirements; or

2. Is moist meadow containing forbs suitable for brood-rearing within 300 yards of suitable sagebrush cover (as defined above). Introduced species such as alfalfa may be very important on these sites where native forbs are not available.


Unsuitable Habitat – is land within the historic range of sage grouse that did not, does not, nor will not provide sage grouse habitat due to natural ecological conditions such as badlands or canyons.

Surface Disturbance – includes any conversion of formerly suitable habitat to grasslands, croplands, mining, well pads, roads, or other physical disturbance that renders the habitat unusable for sage grouse.

Lek Status -

- Active - Data supports existence of lek. Supporting data defined as 1 year with 2 or more males lekking on site followed by evidence of lekking within 10 years of that observation.
- Inactive - A confirmed active lek with no evidence of lekking for the last 10 years. Requires a minimum of 3 survey years with no evidence of lekking during a 10 year period.
- Extirpated - Habitat changes have caused birds to permanently abandon a lek as determined by the biologists monitoring the lek.
- Unconfirmed - Possible lek. Sage grouse activity documented. Data insufficient to classify as active status.

Valid Right(s) – legal “rights” or interest that are associated with land or mineral estate and that cannot be divested from the estate until that interest expires, is relinquished, or acquired.

Habitat Exchange - an efficient, effective approach to wildlife conservation in America, developed in partnership by private landowners, industry, environmental groups, academics and
government. In a Habitat Exchange, landowners and industry are given financial incentives to conserve wildlife habitat. Landowners benefit by earning revenue from credit sales and developers benefit by meeting conservation objectives or regulatory requirements with less red tape.