Department of the Interior Departmental Manual

Effective Date: 01/19/2017 Series: Public Lands Part 604: Landscape-Level Management Chapter 2: Conservation and Restoration of the Sagebrush Biome

Originating Office: Office of Policy Analysis

604 DM 2

2.1 **Purpose**. This chapter establishes Departmental policy in compliance with the Secretary's Order 3336, Rangeland Fire Prevention, Management, and Restoration, and provides guidance to bureaus/offices for implementing measures to conserve and restore the integrity of the sagebrush biome, including greater sage-grouse habitat.

2.2 **General**. The conservation and restoration of the sagebrush biome are critical resource and fire management priorities for the Department of the Interior (Department). The Department has identified the greater sage-grouse as a focal species for the sagebrush biome and is working closely with other federal, state, tribal, and local partners and stakeholders to conserve the greater sage-grouse and the sagebrush biome. Habitat loss, due to wildfire, development, and fragmentation are the most significant threats to the greater sage-grouse and the more than 350 other plant and animal species in the sagebrush biome. The effects of these threats are compounded by the increased frequency, size and severity of rangeland fire, increased abundance and scale of invasive nonnative plant species, and large-scale development. Critical elements for conserving and restoring the sagebrush biome include: improved management of rangeland vegetation; restoration of native plant communities, including the increased use of native plant materials; strategies that focus development activities in appropriate areas to avoid and minimize habitat loss; a reversal in the spread of invasive nonnative plants through better control mechanisms; and increasing the capability and capacity of fire prevention, suppression, and post-fire rehabilitation actions. A policy that addresses threats to the health of the sagebrush biome will result in conserving and restoring the sagebrush biome for the benefit of all.

2.3 **Scope**.

A. The policy in this chapter applies to all bureaus/offices responsible for the management of resources, including but not limited to water, lands, air, fire, natural, scenic, recreational, cultural, and infrastructure resources under the jurisdiction of the Department.

B. This chapter does not apply to the Office of Inspector General or where the Secretary does not have discretionary control over or otherwise lacks authority to manage, the resources in furtherance of this chapter.

2.4 **Authorities**. Authorities for this policy are provided in Appendix A.

2.5 **Definitions**. Definitions for this policy are provided in Appendix B.

2.6 **Policy**.

A. It is the policy of the Department to work with other federal, state, tribal, local and private partners to apply the landscape-level approaches specified in 604 DM 1 to the sagebrush biome. It is the policy of the Department to protect, conserve, and restore the health of the sagebrush biome. Given the nature and extent of the threat of wildland fire to the health of the sagebrush biome, allocation of fire management resources and assets, before, during, and after wildland fire incidents will reflect this policy priority, as well investments related to restoration activities. Application of the principles identified in paragraph 2.7 below assures implementation of measures that address threats to the sagebrush biome, including reducing the incursion of invasive nonnative plants and the likelihood, size, and severity of rangeland fire. Application of this policy also:

(1) Achieves landscape goals (social, environmental, and economic) at multiple spatial scales, from local, to state, to biome-wide by coordinating across administrative boundaries with Federal, state, tribal, local, and private partners and stakeholders.

(2) Increases awareness and expertise in sagebrush restoration; invasive species management; evaluation and remediation of threats to the sagebrush biome; and rangeland fire prevention, suppression, and post-fire rehabilitation.

(3) Restores sagebrush ecosystem resilience and resistance to disturbance including enhancing efforts to control the spread of invasive nonnative plant species.

B. This chapter reaffirms the Department's policy to utilize a landscape-level approach at multiple scales, based upon the best-available science and other high quality information, to inform management of the sagebrush biome, including resource use, fire management, fuels treatment, habitat restoration, post-fire rehabilitation, and invasive nonnative plant management. Bureau policies and strategies should address:

(1) avoiding and minimizing new and additional surface disturbance in ecologically or culturally sensitive areas when possible;

(2) improving habitat conditions and habitat connectivity;

- (3) reducing threats of rangeland fire;
- (4) managing invasive nonnative plant species;
- (5) addressing environmental change; and

(6) monitoring and evaluation to support adaptive management.

2.7 **Principles**. In carrying out the policies set forth in paragraph 2.6 and consistent with applicable authorities and regulations, it is the Department's policy to use the following set of principles to facilitate prioritization and implementation of conservation and restoration actions across multiple spatial scales and ownerships within the sagebrush biome.

A. <u>Coordination and Partnerships.</u> Work in coordination with other Federal agencies, states, tribes, local, and private partners, and stakeholders, on all aspects of conserving and restoring the sagebrush biome to meet social, ecological, and economic goals. Facilitate new public-private partnerships, including youth corps, veteran crews, and rangeland fire protection associations, and expand capacity for improved sagebrush management.

B. <u>Conservation of Sagebrush Habitats</u>. Coordinate and collaborate with all parties to evaluate species, habitats, and uses of the sagebrush biome to identify any additional landscape goals necessary to conserve and restore the sagebrush biome that are not addressed by using a focal species (e.g., greater sage-grouse) approach.

C. <u>Managing Invasive Nonnative Plant Species and Wildland Fire</u>. The impacts of wildland fire and nonnative invasive plant species are a particular challenge in the sagebrush biome. Addressing these threats is a critical component of efforts to enhance the ecological condition of the sagebrush biome, requiring a long-term commitment to invasive species management, effective wildland fire management, and ecosystem restoration activities. Enhance the capability, capacity, and coordination of all parties to increase: wildland fire management capability for prevention, suppression, and post-fire rehabilitation; and the rate of prevention, early detection, rapid response and control of invasive nonnative plants in the sagebrush biome.

D. <u>Restoration</u>. Restoration of degraded sagebrush habitat is critical to the economic and social well-being of communities and the survival of the species that depend on it. Work with all parties to increase the pace and success of post-fire rehabilitation and habitat restoration in the sagebrush biome, recognizing that restoration in arid landscapes can be difficult and long-term work.

E. <u>Surface Disturbance</u>. Work with all parties to reduce habitat fragmentation and protect key habitat areas while focusing development and uses in less ecologically and culturally sensitive areas, when possible.

F. <u>Monitoring, Evaluation, and Adaptive Management</u>. Use rigorous compliance and effectiveness monitoring and evaluation at multiple spatial scales, based on standard and quantitative indicators, to ensure that management actions achieve their desired outcomes, and, if not, to inform changes in resource management practices. Place particular focus on monitoring, evaluation, and adaptive management relative to rangeland fire management (including preparedness, fuels management, wildland fire response and suppression), invasive species management, post-fire rehabilitation, and habitat restoration.

G. <u>Long-term Evaluation and Multi-year Commitments</u>. Recognize the potential for slow response and recovery rates, and the potential for those rates to change in response to weather, changing climate, and ecological conditions. This may require multiple-year and recurring investments, long-term monitoring, multiple interventions, and adaptation of plans and strategies to achieve goals.

H. <u>High Quality Information</u>. Incorporate the best-available science and other high quality information, including traditional ecological knowledge, into management decisions, and continually seek better information in areas of greatest uncertainty. Develop and utilize scientific information and tools necessary to inform conservation and restoration actions of the sagebrush biome and evaluate the effectiveness of those actions. Revisit and validate existing plans and strategies when new science becomes available.

I. <u>Locally-Adapted Seeds and Native Plant Materials.</u> In accordance with the National Seed Strategy for Rehabilitation and Restoration (2015, Plant Conservation Alliance), to the extent practicable, utilize locally-adapted, genetically appropriate seeds and native plant materials appropriate to the location, conditions, and management objectives for vegetation management and restoration activities.

J. <u>Addressing Environmental Change</u>. Consider how environmental change, and particularly the role of climate change, directly and indirectly affects species and habitat condition and trend, post-fire rehabilitation and habitat restoration effectiveness, the invasion and control of nonnative plant species, and the likelihood, size, and severity of rangeland fire within the sagebrush biome.

2.8 **Implementation**. The Department and its bureaus/offices must implement existing policies and practices and, when necessary, introduce new policies and practices to institutionalize the principles detailed in paragraph 2.7 above. The *Integrated Rangeland Fire Management Strategy* (IRFMS), *Final Report to the Secretary of the Interior*, Department of the Interior, May 2015, and associated action plan, and the governance established to implement such, are part of the existing policies and practices of the Department. The IRFMS outlines an approach to improve the efficiency and efficacy of actions to address rangeland fire, to better prevent and suppress rangeland fire, and improve efforts to rehabilitate and restore fire-impacted landscapes within the sagebrush biome, including greater sage-grouse habitat. Additional implementation efforts include but are not limited to:

A. Designing and implementing a comprehensive, integrated approach for coordinated nonnative invasive plant management including the concepts of early detection and rapid response and large scale experimental activities to increase the efficacy of control actions.

B. Developing and implementing a strategic approach to minimizing surface disturbance, including identifying areas appropriate for development and use, tracking surface disturbance and habitat fragmentation, and encouraging the use of new technologies that can limit habitat loss and fragmentation while allowing for appropriate development and use.

C. Developing and implementing consistent long-term monitoring protocols to meet 01/19/2017 #4072 New the intent of Principle 2.7(F) of this chapter.

D. Implementing, maintaining, and updating (as necessary) the Actionable Science Plan (*The Integrated Rangeland Fire Management Strategy Actionable Science Plan*: U.S. Department of the Interior, Washington D.C., 128 p., 2016) by conducting periodic reviews to identify emerging management questions and associated science needs. Commit to multi-year investments to advance scientific understanding of the sagebrush biome and inform science-based decision making.

E. Developing, implementing, maintaining, and updating (as necessary) the *Science Framework for Conservation and Restoration of the Sagebrush Biome: Linking the Department of the Interior Secretarial Order 3336 (SO 3336) to Long-Term Strategic Conservation Actions. Part 1. Science Basis and Applications (in press, December 21, 2016)* to protect, conserve, and restore the integrity of the sagebrush biome, including greater sage-grouse habitat. This effort can identify areas of high ecological and habitat value to enhance the efficiency and efficacy of fire prevention and greater sage-grouse habitat protection; conduct multi-scale experiments with restoration techniques and tools, including bio-controls and other tools for cheatgrass control, and use the results to improve the success of restoration activities; maintain a sufficient supply of seeds, seedlings, and other plant materials with emphasis on enhancing use of genetically-appropriate, locally-adapted native plant materials; and assure the use of high quality information and the best-available science to protect and restore the sagebrush biome.

F. Improving existing and, as needed, developing new geospatial information systems that facilitate identification of existing and potential conservation priorities and opportunities at the landscape-level. Providing the tools and training necessary to promote effective use of these systems in developing landscape-level strategies and plans. Implementing processes to provide access to a common set of data and updating as new information becomes available.

G. Reviewing and updating fire management plans within the sagebrush biome and utilizing predictive services and other technologies, to the extent practicable, to position fire suppression resources where needed in response to anticipated and real time needs.

H. Enhancing interagency collaboration among federal, state, tribal, and local agencies to the maximum extent possible, including, but not limited to, the Western Governors Association (WGA), the Sage Grouse Task Force supported by the WGA, and the Western Association of Fish and Wildlife Agencies Sagebrush Executive Oversight Committee to increase coordination in prioritizing, planning and implementing projects to achieve conservation and restoration of the sagebrush biome.

2.9 **Responsibilities**.

A. <u>Deputy Secretary</u>. Provides Departmental oversight and leads the Rangeland Fire Task Force.

B. <u>Assistant Secretary – Policy, Management and Budget</u>. Provides staff support to monitor implementation of the policy and requirements in this chapter. Oversees coordination of budgets and practices that facilitate multi-year investments in science and restoration.

C. <u>Program Assistant Secretaries</u>. Provide management oversight and ensure that their respective bureaus/offices comply with the requirements in this chapter.

D. <u>Heads of Bureaus/Offices</u>.

(1) Provide updates to their respective Assistant Secretary on the implementation of this chapter.

(2) Ensure bureau or office compliance with this policy.

(3) Designate staff to coordinate the program requirements within the bureau responsible for:

(a) Reviewing and updating existing regulations, policy, guidance, processes, and plans as necessary, to ensure consistency with this chapter.

(b) Working collaboratively with bureaus/offices to develop, use, and institutionalize policies and practices to implement the requirements in this chapter, including efforts to conduct periodic reviews to confirm consistency with the policy (paragraph 2.6), principles (paragraph 2.7), and implementation (paragraph 2.8).

(c) Working with appropriate bureau officials to ensure that persons conducting wildland fire management, conservation and restoration activities in the sagebrush biome have the appropriate experience and training, including in landscape-level approaches, partnership development, sagebrush ecosystem science, restoration science, wildland fire operations, and/or fuels and nonnative invasive plant management; where appropriate, including measures in employee performance appraisal plans or other personnel or contract documents; and coordinating similar evaluation processes with the Office of Acquisition and Property Management with regard to experience and training for contractors.

(d) Assuring use of the best available science in decision-making when feasible, and support advancing knowledge through scientific investigations to further adaptive management.

E. <u>Senior Steering Committee (SSC)</u>. The SSC supports the Rangeland Fire Task Force with implementation, coordination, and oversight activities.

2.10 Rangeland Fire Task Force (Task Force).

A. <u>Purpose</u>. The Task Force is responsible for reviewing existing wildfire, rehabilitation and restoration policies and programs; seeking input from partners; and implementing a science-based strategy to reduce the threat of nonnative invasive plant species

and large-scale rangeland fire across the sagebrush biome.

B. <u>Membership</u>. The Task Force members include the Deputy Secretary and the Assistant Secretaries. The Deputy Secretary serves as the Chair.

C. <u>Responsibilities</u>. The Task Force provides overall program leadership for policy and budgets and appoints representatives to the SSC.

2.11 **Legal Effect**. This policy is intended to improve the internal management of the Department. It does not create any right or benefit, substantive or procedural, enforceable at law or in equity by any person against the United States, its agencies, it officers or employees, or any other person. It does not alter or affect any existing duty or authority of individual bureaus or offices.

Appendix A

Authorities

This chapter is consistent with Federal laws and other authorities, including but not limited to the following:

- A. National Environmental Policy Act (NEPA) of 1969, 42 U.S.C. § 4321 et seq.
- B. Endangered Species Act (ESA), 16 U.S.C. § 1531 et seq.
- C. Migratory Bird Treaty Act (MBTA), 16 U.S.C. § 703-7120.
- D. The National Fish and Wildlife Foundation Establishment Act, 16 U.S.C. 3701 et seq.
- E. Fish and Wildlife Coordination Act (FWCA) [16 U.S.C § 661-667(e), as amended].
- F. Federal Land Policy and Management Act (FLPMA), 43 U.S.C. § 1701 et seq.
- G. The Federal Land Assistance Management and Enhancement Act of 2009, Title V of Division A of P.L.111-88.
- H. Protection Act of September 20, 1922 (42 Stat. 857; 16 U.S.C. § 594)
- I. McSweeney-McNary Act of 1928 (45 Stat. 221; 16 U.S.C. § 487)
- J. Economy Act of June 30, 1932 (47 Stat. 417; 31 U.S.C. 1535)
- K. Taylor Grazing Act of June 28, 1934 (48 Stat. 1269; 43 U.S.C. § 315)
- L. Oregon and California Act of August 28, 1937 (50 Stat. 875; 43 U.S.C. § 1181e)
- M. National Park Service Acts as amended (67 Stat. 495; 16 U.S.C. § 1b)
- N. Federal Property and Administrative Service Act of 1949, 40 U.S.C. § 471; et seq.
- O. Reciprocal Fire Protection Act of May 27, 1955 (69 Stat. 66; 42 U.S.C. § 1856a)
- P. National Wildlife Refuge System Administration Act of 1966 as amended (80 Stat. 927; 16 U.S.C. § 668dd through 668ee)
- Q. Disaster Relief Act of May 22, 1974 (88 Stat. 143; 42 U.S.C. § 5121)

- R. Federal Fire Prevention and Control Act of October 29, 1974 (88 Stat. 1535; 15 U.S.C. § 2201)
- S. Federal Grant and Cooperative Agreement Act of 1977 (P.L. 950224, as amended by P.L. 97-258, September 13, 1982 (96 Stat. 1003; 31 U.S.C. § 6301 thru 6308)
- T. Supplemental Appropriation Act of September 10, 1982 (96 Stat. 837)
- U. Wildfire Suppression Assistance Act of 1989 (P.L. 100-428, as amended by P.L. 101-11, April 7, 1989)
- V. Indian Self-Determination and Education Assistance Act (P.L. 93-638) as amended
- W. National Indian Forest Resources Management Act (P.L. 101-630 November 28, 1990)
- X. Tribal Self-Governance Act of 1994 (P.L. 103-413)
- Y. Department of the Interior and Related Agencies Appropriations Act (P.L. 103-32).
- Z. Department of the Interior and Related Agencies Appropriations Act, Fiscal Year 1995 (P.L. 103-332).
- AA. Guidance for Presidential Memorandum on Environmentally and Economically Beneficial Landscape Practices on Federal Landscaped Grounds, Federal Register, Vol. 60, No. 154, August 10, 1995, p. 40837
- BB. Executive Order 13112, Invasive Species, February 3, 1999

CC. Executive Order 13751, Safeguarding the Nation from the Impacts of Invasive Species, December 5, 2016

- DD. National Wildlife Refuge System Improvement Act of 1997 (P.L. 105-57)
- EE. The Reclamation Act of June 17, 1902 (32 Stat. 388; 43 U.S.C. 391)
- FF. Soil and Moisture Conservation Act of 1935 (49 Stat 163)

Appendix B

Definitions

A. <u>Actionable Science Plan</u>. The Actionable Science Plan is identified as a deliverable in *An Integrated Rangeland Fire Management Strategy* [DOI, 2015, Section 7(b)viii, Action Item #3]. The Plan identifies priority science needed to support adaptive management of the sagebrush ecosystem in the western United States. Published in October, 2016, it is a shared vision of the near-term science needed to inform management strategies and develop management tools to achieve long-term protection, conservation, and restoration of the ecosystem.

B. <u>Adaptive Management</u>. A type of natural resource management in which decisions are made as part of an ongoing science-based process. Adaptive management involves testing, monitoring, and evaluating applied strategies, and incorporating new knowledge into management approaches that are based on scientific findings and the needs of society. Results are used to modify management policy, strategies, and practices. The Department Adaptive Management Implementation Policy is provided in 522 DM 1.

C. <u>Conservation</u>. For the purposes of this chapter and related Departmental efforts, "Conservation" is a management action(s) taken for the purpose of maintaining resources with a goal of sustainable, functioning ecosystems consisting of native species, and ecological functions such as pollination, and biogeochemical cycling representative of the environmental and ecological conditions of surrounding biome(s). Conservation actions may include administrative activities such as acquisition of conservation easements or activities such as the construction of fuel breaks.

D. <u>Ecosystem</u>. The complex of a community of organisms and its environment (Executive Order 13112).

E. <u>Fire Preparedness</u>. Fire Preparedness is the state of being ready to provide an appropriate response to wildland fires based on identified objectives. Preparedness is the result of activities that are planned and implemented prior to fire ignitions (Interagency Standards for Fire and Fire Aviation Operations, 2016, pg. 8).

F. <u>Focal Species</u>. For the purpose of this chapter and related Departmental efforts, "focal species" include sagebrush obligate, near-obligate, dependent, or associated species identified as: (1) at-risk, (2) influencing management actions and regional economies, (3) potentially being negatively influenced by management actions, and/or (4) serving as indicators of habitat quality or habitat niches such as riparian areas in sagebrush ecosystems.

G. <u>High Quality Information</u>. For the purpose of this chapter and related Departmental efforts, "high quality information" means any representation of knowledge such as facts or data, including the best available scientific information, which is accurate, reliable, and unbiased, is not compromised through corruption or falsification, and is useful to its intended users.

H. <u>Invasive Species</u>. Executive Order 13112, Invasive Species, February 3, 1999, as amended by Executive Order 13751, December 5, 2016 defines an invasive species as "with regard to a particular ecosystem, a non-native organism whose introduction causes or is likely to cause economic or environmental harm, or harm to human, animal, or plant health."

I. <u>Landscape</u>. For the purposes of this chapter and related Departmental efforts, a "landscape" is defined as an area encompassing an interacting mosaic of ecosystems and human systems characterized by a set of common management concerns. The landscape is not defined by the size of the area, but rather by the interacting elements that are relevant and meaningful in an management context. The term "landscape" is not exclusive of areas described in terms of aquatic conditions, such as watersheds, which may represent the appropriate landscape scale. (Definition as in 600 DM 6)

J. Landscape-Level Approach. For the purposes of this chapter, and related Department efforts, a landscape-level approach (sometimes called a landscape-scale approach) is a structured and analytical method that informs resource management decisions at multiple spatial scales, typically when diverse stakeholders seek multiple social, environmental, and economic goals. Landscape-level approaches identify landscape goals and critical attributes, assess resource availability, condition, and trend, and identify explicit resource objectives at multiple scales and often across administrative boundaries and political jurisdictions. Landscape-level approaches then identify threats and/or opportunities to achieve resource management objectives, and can be used to prioritize actions to best achieve such objectives. Landscape-level approaches are encouraged in order to inform land and resource policy and management decisions. For the purposes of this policy, 'landscape-level approach' is a generic term to include landscape-level strategies and plans and/or the utilization of such a method in the absence of landscape-level strategies or plans. These approaches are applied to inform bureau and office work processes, such as development and approval of plans, issuance of permits and authorizations, establishment of mitigation priorities, production and delivery of science and data, management of resources, and budget allocation. (Definition as in 604 DM 1).

K. <u>Landscape Goals</u>. For the purposes of this chapter, landscape goals are broad statements of desired present and future landscape condition, developed in coordination with stakeholders. Goals could include desired conditions for commercial or economic development or resource extraction, provision of key ecological services to communities, or protection and conservation of habitats or species. Critical attributes that are crucial to the landscape goals can then be identified and managed across multiple scales. (Definition as in 604 DM 1).

L. <u>Landscape-Level Strategies and Plans</u>. Strategies and plans that employ landscape-level approaches that are used to inform bureau and office work processes to strategically develop and approve plans, issue permits and authorizations, prioritize mitigation efforts, produce and deliver science and data, manage resources, and allocate budgets. Consistent with their statutory authorities, land management agencies may develop landscape-level plans or strategies through their land use planning process, or incorporate relevant aspects of existing or new landscape-scale strategies into land use plans through their land use planning process.

M. <u>Native Species</u>. With respect to a particular ecosystem, a species that, other than as a result of an introduction, historically occurred or currently occurs in that ecosystem (Executive Order 13112).

N. <u>Prevention</u>. Any actions to avoid an incident, to intervene for the purpose of stopping an incident from occurring, or to mitigate an incident's effect to protect life and other values. This includes measures designed to mitigate damage by reducing or eliminating risks to persons or other values, lessening the potential effects or consequences of an incident. For the purposes of this chapter and related Departmental efforts, "prevention" is primarily in reference to any activities directed at reducing the incidence of rangeland fires and the spread invasive nonnative plant species, including public education, law enforcement, personal contact, use of weed-free equipment and materials, and reduction of fuel hazards and/or construction of fuel breaks (fuels management).

O. <u>Rangeland Fire</u>. For the purposes of this chapter and related Departmental efforts, "rangeland fire" is any wildfire (non-structure fire that occurs in vegetation or natural fuels) located on rangelands (lands on which native vegetation consists primarily of grasses, grass-like plants, forbs or shrubs and woodlands) within the sagebrush biome.

P. <u>Resilient Ecosystems</u>. For the purposes of this chapter and related Departmental efforts, "resilient ecosystems" are those ecosystems that have the capacity to regain their fundamental structure, processes, and function when altered by environmental stressors such as drought and insects as well as disturbances, like inappropriate livestock grazing and altered fire regimes.

Q. <u>Resistant Ecosystems</u>. For the purposes of this chapter and related Departmental efforts, "resistant ecosystems" are those ecosystems that have the capacity to retain their fundamental structure, processes, and function when exposed to environmental stresses, disturbances, or nonnative invasive plant species.

R. <u>Restoration</u>. Ecological restoration is the process of assisting the recovery of an ecosystem that has been degraded, damaged, or destroyed¹. For the purposes of this chapter and related Departmental efforts, "restoration" is a management action(s) taken for the purpose of addressing degraded resources with a goal of sustainable, functioning ecosystems consisting of native species, and ecological functions such as pollination, and biogeochemical cycling representative of the environmental and ecological conditions of surrounding biome(s). Restoration refers to historic and current functions and characteristics but reflects ecological change and current ecological, environmental and societal drivers and controls. Restoration actions may occur before or after the occurrence of rangeland fire, or other disturbances that have degraded the vegetation community, and includes efforts to restore native plant communities that have been invaded by invasive nonnative plant species. Restoration can be achieved through passive or active means. When desired species exist at the site as plants or seeds, *passive restoration* can often be achieved through changes in current management practices to allow for recovery of desired conditions through normal successional processes,

¹ Society for Ecological Restoration, SER International Primer on Ecological Restoration http://www.ser.org/resources/resources-detail-view/ser-international-primer-on-ecological-restoration#3 01/19/2017 #4072 New

without human-aided revegetation or habitat modification. *Active restoration* is needed when desired species or structural groups are poorly represented in the community and restoration through normal successional processes will not occur in a timeframe that meets management objectives, and involves revegetation and modification of existing undesirable plant communities using a variety of techniques to achieve desired outcomes.

S. <u>Suppression</u>. For the purposes of this chapter and related Departmental efforts, "suppression" is any management action taken to extinguish a fire or confine fire spread beginning with its discovery.

T. <u>Treatment</u>. For the purposes of this chapter and related Departmental efforts, "treatment" is defined as any local scale management action that directly manipulates vegetation to achieve a vegetation or habitat objective (e.g., conifer removal, nonnative invasive plant controls, fuel treatments, or seeding plants).

U. <u>Wildland Fire</u>. For the purpose of this chapter and related Departmental efforts, "wildland fire" is any non-structure fire that occurs on wildland.