

GLOSSARY, BIBLIOGRAPHY, LIST OF PREPARERS, AND INDEX

## **GLOSSARY**

- a'a: A Hawaiian term for basaltic lava flows that are typically rough and jagged with a clinkery surface
- **Allotment:** An area allocated for livestock use by one or more qualified grazing permittees including prescribed numbers and kinds of livestock under one plan of management.
- **Animal Unit Month (AUM):** The amount of forage required to sustain one mature cow or the equivalent (e.g., five sheep or five goats), based on an average daily forage consumption of 26 pounds of dry matter per day.
- **Area of Critical Environmental Concern (ACEC):** An area of public lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values; fish and wildlife resources; or other natural systems or processes, or to protect humans from natural hazards.
- **Biological Soil Crust:** A complex mosaic of mosses, lichens, algai, cyanobacteria, and fungi that occupies the soil surface in arid and semiarid plant communities. These organisms weave through the soil and essentially glue the surface particles together, forming a protective coating against erosive forces.
- **Candidate Species:** Species not protected under the Endangered Species Act but under consideration by the U.S. Fish and Wildlife Service for inclusion on the list of federally threatened or endangered species.
- **Climax Vegetation:** The final vegetation community and highest ecological development of a plant community that emerges after a series of successive vegetational stages. The climax community perpetuates itself indefinitely unless disturbed by outside forces.
- **Cultural Resource:** The fragile and nonrenewable remains of human activity that are found in historic districts, sites, buildings, and artifacts and that are important in past and present human events.
- **Desired Future Condition:** Used to describe the future condition of resources to meet management objectives. Desired future condition is based on ecological, social, and economic considerations during the land and resource management planning process.
- **Diversity (Species):** (1) The absolute number of species in a community, species richness; and (2) a measure of the number of species and their relative abundance in a community; low diversity refers to few species or unequal abundance, high diversity to many species, or equal abundance.
- **Ecological Succession:** An ecosystem's gradual evolution to a stable state or climax. If through the ability of its populations and elements, an ecosystem can absorb changes, it tends to persist and become stable through time.
- **Endangered Species:** Any animal or plant species that is in danger of extinction throughout all of a significant portion of its range. These species are listed by the U.S. Fish and Wildlife Service under provisions of the Endangered Species Act.
- **Environmental Impact Statement (EIS):** A detailed written statement that is required by the National Environmental Policy Act for a proposed major federal action significantly affecting the quality of the human environment. The findings from the document are published in a Record of Decision.

Ethnographic Resource: A site structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it.

**Exotic Species:** An animal or plant species that is not a part of an area's original fauna or flora.

- Fire Condition Class (FCC): A classification for vegetation communities relative to the departure of the fire regime (frequency and severity of fire) from historic conditions. There are three fire condition classes ranging from FCC1 (low departure) to FCC3 (high departure).
  - FCC1 represents low departure from the historic fire regime. Key ecosystem components include a healthy mosaic of various successional stages for each vegetation type. For example, these components would include sagebrush steppe communities with native perennial grass and forb understories, or aspen or Douglas fir communities with trees of variable age, openings to allow tree regeneration, and an abundance of understory grasses and forbs.
  - FCC2 represents moderate departure from the historic fire regime, resulting in some risk of more frequent fire return intervals and/or greater levels of severity.
  - FCC3 represents high departure from the historic fire regime, resulting in high risk of resource loss due to frequent fire return intervals and/or high levels of severity. An example of FCC3 is an area that was formerly low-elevation sagebrush steppe that is currently dominated by an understory or monoculture of cheatgrass.
- Fire Suppression: All work and activities associated with fire extinguishing operations, beginning with the discovery and continuing until the fire is completely extinguished.
- Fissure Caves: A cave formed from a fissure, i.e., an elongated fracture or crack related to volcanic action.
- Fissure/Vent: An elongate fracture or crack at the surface from which molten rock and volcanic gases escape onto surface.
- Forb: A broad-leaved plant (herb) whose stem does not produce woody, persistent tissue and generally dies back at the end of each growing season, such as arrowleaf balsamroot.
- Government-to-Government Consultation: The active, affirmative process between agencies of the federal government and tribal governments under the laws of the United States. Tribal governments are considered domestic sovereignties with primary and independent jurisdictions over tribal lands. Consultation consists of: (1) identifying and seeking input from appropriate Native American governing bodies, community groups and individuals; and (2) considering their interests as a necessary and integral part of the decision-making process. The aim of consultation is to involve affected Native Americans in the identification of issues and the definition of the range of acceptable management options.
- **Indicator:** Components or attributes of an ecosystem that can be observed and/or measured that provides evidence of the function, productivity, health and/or condition of the ecosystem.
- **Inholding:** A nonfederal parcel of land that is completely surrounded by federal land.
- Integrated Pest Management (IPM): The use of all appropriate technologies and management techniques to bring about an effective degree of pest prevention and suppression in a cost-effective and environmentally sound manner.

Integrated Weed Management (IWM): A balanced approach to managing resources including the following processes: prevention, inventory, control, monitoring, and reporting. With IWM the actions include preventing weeds from invading; proper identification and knowledge of invasive weed species; inventory, mapping and monitoring of weed populations and damage. Weed control decisions are based on knowing potential damage, cost of control method, and environmental impact of the weed and control decision; using control strategies that may include a combination of methods to reduce the weed population to an acceptable level; and, evaluating the effectiveness and effects of management decisions.

Invasive Species: In this document, the definition for this term is "a plant or animal species (typically non-native) that rapidly spreads into or displaces a desirable native species or community." [Exception: An "invasive species," as defined in Executive Order 13112, is a species that is (1) non-native (or alien) to the ecosystem under consideration, and (2) whose introduction causes or is likely to cause economic or environmental harm or harm to human health. Invasive species can be plants, animals, and other organisms (e.g., microbes)].

**Key Habitats:** Key habitats contain generally large-scale, intact sagebrush steppe areas that provide Greater sage-grouse habitat during some portion of the year.

Source Habitat: Source habitats are a subset of Key habitat that support concentrated Greater sage-grouse populations. Source habitats are also commonly referred to as population strongholds. Data indicate that Greater sage-grouse populations in Source habitats have been generally stable or increasing since the drought of the early 1990s.

Isolated Habitat: Isolated habitats are a subset of Key habitat that support relatively small Greater sage-grouse populations. Isolated habitats are separated from other Key habitat by developed land or unsuitable habitat, such as farmland, forests, or grassland.

**Kipuka:** < kee' poo ka > Hawaiian word meaning "key", or opening such as for a door. A mound of older land, usually covered by vegetation, which is surrounded by a younger lava flow.

**Lava Tube:** Subterranean openings that form when the surface of flowing lava congeals forming a crust. Insulated from the cooling air, the lava underneath the solidified crust continues to flow. As the lava eruption ceases, the tube drains, and a large tubular cave may be left.

Lek: An assembly area where birds, especially Greater sage-grouse, carry on display and courtship behavior.

Limited Designation (motorized travel): BLM designation meaning that some restrictions apply to motorized travel on a specified route or in a specified area.

Lithic Scatter: Pertaining to or composed of stone scatter; a form of an archeological resource.

**Litter:** Dead plant or animal material on the soil surface.

Livestock Developments: Physical facilities, such as fences, water developments, and corrals that are used to handle and control livestock.

Management Framework Plan (MFP): Bureau of Land Management land use plan; predecessor to the Resource Management Plan (RMP).

Mineral Materials: Materials such as common varieties of sand, stone, gravel, pumice, pumicite, and clay that are not obtainable under the mining or leasing laws but that can be acquired under the Mineral Materials Act of 1947, as amended.

Multiple Use Management: The definition of multiple use is defined in the Federal Land Policy and Management Act of 1976 as follows:

The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resource or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform with changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historic values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of the uses that will give the greatest economic return or the greatest output.

National Environmental Policy Act of 1969 (NEPA): The federal law that established a national policy for the environment and requires federal agencies to (1) become aware of the environmental ramifications of their proposed actions, (2) fully disclose to the public proposed federal actions and provide a mechanism for public input to federal decision-making, and (3) prepare environmental impact statements for every major action that would significantly affect the quality of the human environment.

National Register of Historic Places (NRHP): The official list, established by the National Historic Preservation Act, of the nation's cultural resources worthy of preservation. The national register lists archeological, historic, and architectural properties (districts, sites, buildings, structures, and objects) nominated for their local, state, or national significance by state and federal agencies and approved by the national register staff.

Native American Graves Protection and Repatriation Act (NAGPRA): Requires Federal Agencies to inventory human remains and associated funerary objects in existing federal museum collections and to provide culturally affiliated tribes with the inventory of collections. The act also requires repatriation, on request, to the culturally affiliated tribes.

Native American Tribe: Any indigenous cultural group in the conterminous United States that the Secretary of the Interior recognizes as possessing tribal status, i.e. federally recognized (listed annually in the Federal Register).

Native Species: Plants or animals indigenous to the area.

Noxious Weeds: According to the Federal Noxious Weed Act (Public Law 93-629), a weed that causes adverse effects on humans and their environment and is therefore detrimental to public health and the agriculture and commerce of the United States.

**Pahoehoe:** A Hawaiian term for a basaltic lava flow that has a smooth, billowy, or ropy surface.

Particulate Matter: Fine liquid or solid particles suspended in the air and consisting of dust, smoke, mist, fumes, and compounds containing sulfur, nitrogen, and metals, typically averaging one micron or smaller in diameter.

Permittee: A person or organization legally permitted to graze a specific number and class of livestock on designated areas of public land during specified seasons each year.

**Phreatic:** Of or relating to groundwater.

**Pictograph:** Aboriginally painted designs on natural rock surfaces.

**Pioneer Plants:** Those that establish themselves first on disturbed areas or bare soil.

**Pleistocene Age:** The latest major geological epoch from 11,000 to 2 million years ago, the time of human evolution. Also known as the "Ice Age" due to the multiple expansion and retreat of glaciers.

**Prescribed Fire:** Controlled application of fire to natural fuels under conditions of weather, fuel moisture, and soil moisture that would allow confinement of the fire to a predetermined area and, at the same time, would produce the intensity of heat and rate of spread required to accomplish certain planned benefits to one or more objectives to wildlife, livestock, and watershed values. The overall objectives are to employ fire scientifically to realize maximum net benefits at minimum environmental damage and acceptable cost.

**Public Land:** Any land or interest in land owned by the United States and administered by the Secretary of the Interior through the Bureau of Land Management, without regard to how the United States acquired ownership, except for (1) land located on the Outer Continental Shelf and (2) land held for the benefit of American Indians, Aleuts, and Eskimos.

**Rangeland:** Land on which the potential natural vegetation is predominantly grasses, grass-like plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundra, and areas that support certain forb and shrub communities.

**Record of Decision (ROD):** A document signed by a responsible official recording a decision that was preceded by the preparation of an environment impact statement.

**Restoration Habitats:** Potential restoration habitats have the potential to provide Greater sage-grouse habitat in the future. These are sagebrush steppe that have been converted to grassland or woodland or are in the successional process of converting to woodland. These areas are located in close proximity to Key or Source habitats. Data indicate that Greater sage-grouse historically occupied these areas and may still utilize some sporadically, such as during migrations. Restoration habitats have a high likelihood of being reoccupied if habitat suitability improves. The following are potential restoration habitats:

**Restoration Type 1 (R1):** Sagebrush-limited areas with acceptable understory conditions in terms of perennial grass species composition and may include native and seeded grass rangelands. These are important areas to protect from wildfire and encourage sagebrush establishment and retention. Inexpensive management treatments may be needed (e.g., sagebrush and/or forb seedings).

**Restoration Type 2 (R2):** Existing sagebrush cover in these areas may or may not be adequate to meet the needs of Greater sage-grouse, but understory herbaceous conditions are poor. Undesirable plants such as cheatgrass, medusa head rye, or other exotics are common to dominant.

**Restoration Type 3 (R3):** Key or Source habitat with juniper or other conifer encroachment. Sagebrush is usually present but is being threatened or reduced by conifer expansion. Opportunities exist for improving habitat through appropriate fire management response, prescribed fire, or chemical or mechanical means.

- Rift Zone: Area characterized by an open volcanic fissure.
- Right-of-Way (ROW): A permit or an easement that authorizes the use of public land for certain specified purposes, commonly for pipelines, roads, telephone lines, electric lines, and reservoirs. It is also the reference to the land covered by such an easement or permit.
- Sacred Site: Any specific, discrete, narrowly delineated location on federal land that is identified by a Native American tribe, or Native American individual determined to be appropriately authoritative representative of a Native American religion, as sacred by virtue of its established religious significance to, or ceremonial use by, a Native American religion.
- Sagebrush Obligates: Species restricted to sagebrush habitats during the breeding season or yearround.
- Sagebrush Steppe Community: A semi-arid plant community that is characterized by a predominance of big sagebrush and other sagebrush species, plus grasses and forbs.
- Section 106 Consultation: Also known as the 36 CFR 800 process. Discussions between a federal agency official and the Advisory Council on Historic Preservation, State Historic Preservation Officer, and other interested parties concerning historic properties that could be affected by a specific undertaking. Section 106 is the portion of the National Historic Preservation Act that outlines the procedure. The procedure is codified in 36 CFR 800.
- Section 110: The section of the National Historic Preservation Act that requires federal agencies to complete cultural resources surveys and reports for all its lands and existing projects.
- Sensitive Species: Plant and animal species not yet officially listed but that are undergoing status review for listing on the U.S. Fish and Wildlife Service official threatened and endangered list; species whose populations are small and widely dispersed or restricted to a few localities; and species whose numbers are declining so rapidly that official listing may be necessary.
- **Shield Volcano:** A broad, gently sloping volcano that has a flattened dome shape, not unlike that of a knight's shield. Shield volcanoes usually cover a large area and form from overlapping and interfingering, low viscosity lava flows.
- **Spatter:** An accumulation of very fluid pyroclasts (ejected material).
- Special Status Species: Wildlife and plant species that are either federally listed as threatened or endangered, proposed threatened or endangered, candidate species, state-listed as threatened or endangered, or listed by a Bureau of Land Management State Director as sensitive or determined priority.
- Successional Stage: A stage of development of a plant community with another. Conditions of the prior plant community (or successional stage) create conditions that are favorable for the establishment of the next stage.
- Threatened and Endangered Species: As defined in the Endangered Species Act of 1973, as amended (Public Law 93-205; 87 Stat. 884), an endangered species means "any species which is in danger of extinction throughout all or a significant portion of its range" and threatened species means "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Whether a species is threatened or endangered is determined by the following factors: (1) present or threatened destruction, modification, or curtailment of its habitat or range; (2) over-utilization for commercial, sporting, scientific, or educational purposes; (3) disease or predation; (4) inadequacy of existing regulatory mechanisms; or (5) other natural or human-made factors.

- Traditional Lifeway Values: Values that are important for maintaining a group's traditional system of religious belief, cultural practice, or social interaction.
- Traditional Cultural Properties: A cultural property that is eligible for inclusion in the National Register of Historic Places because of its association with a living community's cultural practices or beliefs that (a) are rooted in that community's history and (b) are important in maintaining the community's continuing cultural identity.
- **Treaty:** A formal agreement between the United States and one or more Native American tribes. Typically, these arrangements ceded lands to the United States, reserving certain rights, privileges, and/or lands to the Native American signatories.
- Tree Mold: A tree mold or lava tree forms when lava flows around a tree and chills, leaving behind a "mold" of the space occupied by the tree, or impression of the charred wood. Tree molds can also be horizontal if the tree was knocked down by the lava flow.
- Trust Responsibility (also referred to as fiduciary responsibility): The trust responsibility of the United States, executed through the Secretary of the Interior, to uphold obligations of the federal government to federally recognized Native American tribes.
- **Understory:** Herbaceous plant components, including grasses and forbs, which grow beneath the overstory in stand of woody shrubs; or the herbaceous and woody shrubs growing beneath the overstory in a stand of trees.
- Valid Existing Rights: Locatable mineral development rights that existed when the Federal Land Policy and Management Act (FLPMA) was enacted on October 21, 1976. Some areas are segregated from entry and location under the Mining Law to protect certain values or allow certain uses. Mining claims that existed as of the effective date of the segregation may still be valid if they can meet the test of discovery of a valuable mineral required under the Mining Law. Determining the validity of mining claims located in segregated lands requires the Bureau of Land Management to conduct a validity examination and is called a "valid existing right" determination.
- Way: A road-like feature created and used by vehicles having four or more wheels, but not declared a road by the owner and that receives no maintenance to guarantee regular and continuous use.
- Wetland: Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and which under normal circumstances support a prevalence of vegetation typically adapted for life in saturated soil conditions.
- Wilderness Area: An area of federal land designated by the United States Congress and defined by the Wilderness Act of 1964 as a place "where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain." Designation is aimed at ensuring that these lands are preserved and protected in their natural condition. Wilderness areas, which are generally at least 5,000 acres or more in size, offer outstanding opportunities for solitude or a primitive and unconfined type of recreation; such areas may also contain ecological, geological, or other features that have scientific, scenic, or historical value.
- Wilderness Inventory: A written description of resource information and accompanying map of those public lands that meet the wilderness criteria as established under Section 603(a) of the Federal Land Policy and Management Act and Section 2(c) of the Wilderness Act.
- Wilderness Study Area (WSA): An area designated by a federal agency as having wilderness characteristics, thus making it worthy of consideration by Congress for wilderness designation.

- Wildfire: An unwanted wildland fire, regardless of ignition source, which is unplanned, has escaped control, or does not meet management objectives and therefore requires a suppression response.
- Wildland Fire Use (also called "Wildland Fire for Resource Benefit"): A naturally ignited fire allowed to burn under designated conditions to meet resource management objectives.
- Withdrawal: Removal or "withholding" of public lands from operation of some or all of the public land laws (settlement, sale, mining, and or mineral leasing). An action that restricts the use or disposal of public lands, segregating the land from the operation of some or all of the public land and/or mineral laws and holding it for a specific public purpose. Withdrawals may also be used to transfer jurisdiction of management to other federal agencies.

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