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## **Appendix U. Glossary**

Abandoned (pertaining to raptor nests): A nest site that does not exhibit evidence of use, such as greenery in the nest, fresh whitewash, obvious nest maintenance, and the observed presence of adults or young at the nest, for a period of seven consecutive years (verified through monitoring) would be deemed abandoned.

6 **Activity plan**: A detailed and specific plan for managing a single resource program or plan element 7 undertaken as needed to implement the more general resource management plan decisions. An activity plan 8 is prepared for specific areas to reach specific resource management objectives within stated timeframes.

9 Adaptive management (AM) or adaptive resource management (ARM): A structured, iterative
 10 process of optimal decision making in the face of uncertainty, with an aim to reducing uncertainty over time
 11 via system monitoring.

Adverse visual impact: Any modification in land forms, water bodies, or vegetation, or any introduction of structures, which negatively interrupts the visual character of the landscape and disrupts the harmony of the basic elements (i.e., form, line, color, and texture).

Aesthetics: Relates to the pleasurable characteristics of a physical environment as perceived through thefive senses of sight, sound, smell, taste, and touch.

Agency: Any federal, state, or county government organization participating with jurisdictional
 responsibilities.

Air quality: A measure of the health-related and visual characteristics of the air, often derived from
 quantitative measurements of the concentrations of specific injurious or contaminating substances.

Air Quality Class I and II Areas: Regions in attainment areas where maintenance of existing good air quality is of high priority. Class I areas are those that have the most stringent degree of protection from future degradation of air quality, such as national parks. Class II areas permit moderate deterioration of existing air quality, such as lands administered by the BLM.

Allocated uses: The BLM allocates cultural resources to one of five categories including 1) scientific use,
 2) conservation for future use, 3) traditional use, 4) public use, or 5) experimental use. If cultural resources

are evaluated as lacking significant values, they are categorized as discharged from management.

Allotment Management Plan (AMP): A written program of livestock grazing management including supportive measures, if required. An AMP is designed to attain specific management goals in a grazing allotment and is prepared cooperatively with the permittee(s) or lessee(s).

Allotment (range): A designated area of land available for livestock grazing upon which a specified number
 and kind of livestock may be grazed under management of an authorized agency.

All-terrain vehicle (ATV): A small, amphibious motor vehicle with wheels or tractor treads for traveling over rough ground, snow, or ice, as well as on water. For the purposes of this document, an ATV is defined as a motor vehicle that: 1) is designed primarily for recreational nonhighway all-terrain travel, 2) is 50 or

36 fewer inches in width, 3) has an unladen weight of 800 pounds or less, 4) travels on three or more low

37 pressure tires, and 5) has a seat designed to be straddled by the operator, and handlebars for steering

38 control.

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- Alluvial deposit: Sedimentary matter, such as sand and mud, deposits by flowing water, generally of
   comparatively recent times.
- 41 **Ambient (air)**: The surrounding atmospheric conditions to which the general public has access.
- 42 **Amphibolite**: A rock consisting mainly of amphibole and plagioclase.
- 43 **Analysis:** An examination of existing and/or recommended management needs and their relationships in 44 order to discover and display the outputs, benefits, effects, and consequences of initiating a proposed action.
- 45 Analysis of the Management Situation (AMS): Assessment of the current management direction. It 46 includes a consolidation of existing data needed to analyze and resolve identified issues, a description of
- 47 current BLM management guidance, and a discussion of existing problems and the opportunities for solving
- 48 them.
- 49 Andesite: A volcanic rock composed essentially of andesine and one or more mafics.
- 50 **Angle of observation**: The angle, both vertical and horizontal, between a viewer's line of sight and the 51 landscape being viewed.
- 52 Animal unit month (AUM): The amount of forage needed for one animal unit for one month.

53 Anthropogenic disturbance: A human-caused disturbance that causes an alteration in wildlife habitat; can 54 severely affect wildlife populations and ecosystem dynamics by altering one or many components of an 55 ecosystem.

- 56 **Anticline**: A fold that is convex upward.
- 57 Aquifer: A groundwater bearing rock unit (unconsolidated or bedrock) that will yield water in a usable58 quantity to a well or spring.
- 59 Archaeological site: A discrete location that provides physical evidence of past human use.
- 60 **Archaeology**: The scientific study of physical evidence of the human prehistoric and historic past through 61 recovery and analysis of artifacts, features, and sites.
- Area of critical environmental concern (ACEC): An area of public lands designated by the BLM for special management attention 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 life/provide
- 65 safety from natural hazards.
- 66 **Argillaceous**: Rocks composed of clay minerals.
- 67 Arkose: Sandstone containing 25 percent or more of feldspars, usually derived from silicic igneous rocks.
- 68 Artifact: A human-made object.
- Attainment area: An area that meets a federal primary or secondary ambient air quality standard for the
   pollutant.
- 71 Avoidance area: An area designated on a land use plan for which use for a ROW should be avoided if at 72 all possible.
- **Background distance zone**: The visible area of a landscape which lies beyond the foreground middleground. Usually from a minimum of three to five miles to a maximum of about 15 miles from a travel

- route, use area, or other observer point. Atmospheric conditions in some areas may limit the maximum toabout eight miles or less.
- 77 **Basic elements**: The four design elements (form, line, color, and texture) that determine how the 78 character of a landscape is perceived.
- **Basal area**: The cross sectional area of a single stem, including the bark, or of all stems of a species expressed per unit of land area. (Example: the basal area for a 14 inch tree at breast height is approximately one square foot. A stand of trees with an average of 140 trees per acre all 14 inches in diameter would be 140 square feet per acre )
- 82 140 square feet per acre.)
- **Basin**: A depressed area having no surface outlet (topographic basin); a physiographic feature or subsurface structure that is capable of collecting, storing, or discharging water by reason of its shape and the characteristics of its confining material (water); a depression in the earth's surface, the lowest part often filled by a lake or pond (lake basin); a widened part of a river or canal (drainage, river, stream basin).
- Basin and Range: Topography characterized by a series of tilted-fault block mountain ranges and broad
   intervening basins.
- 89 **Bentonite**: A sedimentary rock formed from the alteration in place of volcanic ash.
- 90 Best management practices (BMP): Activities that are added to typical operation, construction, or
- 91 maintenance efforts that help to protect environmental resources by avoiding or minimizing impacts of an
- 92 action.
- Biodiversity: The variety of life and its processes, and the interrelationships within and among various levels of ecological organization. Conservation, protection, and restoration of biological species and genetic diversity are needed to sustain the health of existing biological systems. Federal resource management agencies must examine the implications of management actions and development decisions on regional and
- 97 local biodiversity.
- Biological community: The living part of an ecosystem. Communities change with succession, thereby
   forming distinctive ecological units both in time and space. The plant community and the animal community
   together form the biotic community. Size is not implied (i.e., organisms associated with a decaying log or
- 101 with an entire forest each represent communities).
- Biological Soil Crusts: Communities of highly specialized autotrophic organisms consisting of a complex
   mosaic of cyanobacteria, green algae, mosses, lichens microfungi and other bacteria.
- 104 **Board feet:** A measurement of lumber volume. A board foot is equal to 144 cubic inches of wood.
- 105 **Bolson**: A basin, depression, or valley having no outlet.
- 106 **Breccia**: Fragmental rock whose components are angular.
- BLM sensitive species: Species requiring special management consideration to promote their
   conservation and reduce the likelihood and need for future listing under the ESA. Designated by the BLM
   State Director. All federally listed candidate species, proposed species, and delisted species in the 5 years
   following delisting will be conserved as BLM sensitive species (BLM H-6840).
- **Broadcast burn**: A prescribed fire ignited in areas with little or no forest canopy present. Broadcast burning
- is used in grasslands, shrublands, and oak woodlands for habitat restoration and fuels reduction purposes.
- 113 This type of burning can be beneficial for protecting and enhancing sage grouse habitat and mule deer and
- 114 elk winter ranges.

**Bureau of Land Management (BLM)**: An agency of the US Department of the Interior responsible for

116 managing most federal government subsurface minerals. It has surface management responsibility for federal

117 lands designated under the FLPMA of 1976.

- **Calcarenite**: A deposit composed of cemented sand-size grains of calcium carbonate.
- 119 Caldera: A large basin-shaped volcanic depression, more or less circular in form, the diameter of which is 120 many times greater than that of the included volcanic vent(s).
- 121 **Caliche**: Desert soil formed by near surface crystallization of calcite.
- 122 Candidate species: A plant or animal that has been studied and the US Fish and Wildlife Service has 123 concluded that they should be proposed for addition to the federal endangered and threatened species list. 124 These species have formerly been referred to as Category I candidate species. From the February 28, 1996 125 Federal Register, page 7597: "those species for which the Service has on file sufficient information on biological
- vulnerability and threat(s) to support issuance of a proposed rule to list but issuance of the proposed rule is
- I 27 precluded."
- 128 **Carbon monoxide**: A colorless, odorless, poisonous gas, produced by incomplete burning of carbon-based

fuels including gasoline, oil, and wood. Carbon monoxide is also produced from incomplete combustion of

- 130 many natural and synthetic products.
- Cave: Any naturally occurring void, cavity, recess, or system of interconnected passages which occurs
   beneath the surface of the earth or within a cliff or ledge [including any cave resource therein, but not
   including any vug (a small cavity in a rock), mine, tunnel, aqueduct, or other manmade excavation] which is

134 large enough to permit an individual to enter, whether or not the entrance is naturally formed or manmade.

- 135 Such term shall include any natural pit, sinkhole, or other feature that is an extension of the entrance.
- 136 **Characteristic**: A distinguishing trait, feature, or quality.
- 137 Characteristic landscape: The established landscape within an area being viewed. This does not
   138 necessarily mean a naturalistic character. It could refer to an agricultural setting, an urban landscape, a
   139 primarily natural environment, or a combination of these types.
- 140 Class I area (for air quality): Certain Wilderness areas greater than 5,000 acres, national memorial parks 141 greater than 5,000 acres, national parks greater than 6,000 acres, and international parks that were in 142 existence on or before August 7, 1977.
- 143 **Class II area (for air quality)**: By default, all areas not designated as Class I areas.
- Class III Wilderness Area (for air quality): Areas deserving of preservation, including Wilderness areas
   established by the Wilderness Act.
- 146 **Clastics**: Rock fragments that have been moved from their places of origin.
- 147 **Clean Air Act (CAA)**: Federal legislation governing air pollution. The CAA established NAAQS for carbon
- 148 monoxide, nitrogen dioxide, ozone, particulate matter, sulfur dioxide, and lead. PSD classifications define the
- 149 allowable increased levels of air quality deterioration above legally established levels. They include the
- 150 following:
- Class I Minimal additional deterioration in air quality (certain national parks and Wilderness areas)
- Class II Moderate additional deterioration in air quality (most lands)
- Class III Greater deterioration for planned maximum growth (industrial areas)

- 154 Clean Water Act (CWA): Federal legislation governing water quality enforced by the EPA.
- **Climate**: the long-term average of annual and seasonal weather conditions in a region.

156 Cohesive Strategy (Current) Condition Classes: The Cohesive Strategy for national fire planning
 157 defines three current condition classes as follows:

- Condition Class I: Fire regimes are within a historical range, and the risk of losing key ecosystem components is low. Vegetation attributes (species composition and structure) are intact and functioning within an historical range.
- Condition Class 2: Fire regimes have been moderately altered from their historical range. The risk of losing key ecosystem components is moderate. Fire frequencies have departed from their historical frequencies by one or more return intervals (either increased or decreased). This results in moderate changes to one or more of the following: fire size, intensity and severity, and landscape patterns. Vegetation attributes have been moderately altered from their historical range.
- Condition Class 3: Fire regimes have been significantly altered from their historical range. The risk of losing key ecosystem components is high. Fire frequencies have departed from historical frequencies by multiple return intervals. This results in dramatic changes to one or more of the following: fire size, intensity, and severity, and landscape patterns. Vegetation attributes have been significantly altered from their historical range.
- Cohesive Strategy (Current) Fire Regimes: The Cohesive Strategy for national fire planning defines
   historical natural fire regimes as follows:
- Fire regime I: 0 to 35-year frequency, nonlethal
- Fire regime II: 0 to 35-year frequency, lethal
- Fire regime III: 35 to 100+ year frequency, mixed
- Fire regime IV: 35 to 100+ year frequency, lethal
- Fire regime V: 200+ frequency, lethal
- 178 Colluvium: Consists of alluvium in part and angular fragments of the original rocks.

179 Comprehensive travel management: Open area means an area where all types of vehicle use is 180 permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards. 181 Limited area means an area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the following type of 182 183 categories: Numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use 184 only; use on existing roads and trails; use on designated roads and trails; and other restrictions. Closed 185 area means an area where off-road vehicle use is prohibited. Use of off-road vehicles in closed areas may 186 be allowed for certain reasons; however, such use shall be made only with the approval of the authorized 187 officer.

- 188 Community: The living part of an ecosystem. Communities change with succession, thereby forming distinctive ecological units both in time and space. The plant community and the animal community together form the biotic community. Size is not implied (i.e., organisms associated with a decaying log or with an antine forest each represent communities).
- 191 entire forest each represent communities).
- 192 Conodont: A microfossil occurring in various jagged or toothlike shapes and constituting the hard remains
   193 of an extinct marine animal of the order Conodonta.
- 194 Conserve/Conservation Strategy: A strategy outlining current activities or threats that are contributing
   195 to the decline of a species, along with the actions or strategies needed to reverse or eliminate such a decline

- 196 or threats. Conservation strategies are generally developed for species of plants and animals that are
- 197 designated as BLM sensitive species or that have been determined by the USFWS or National Marine
- **198** Fisheries Service to be federal candidates under the ESA.
- 199 **Contrast**: Opposition or unlikeness of different forms, lines, colors, or textures in a landscape.
- 200 **Contrast rating**: A method of analyzing the potential visual impacts of proposed management activities.
- 201 **Controlled surface use (CSU)**: CSU is a category of moderate constraint stipulations that allows some 202 use and occupancy of public land while protecting identified resources or values and is applicable to fluid 203 mineral leasing and all activities associated with fluid mineral leasing (e.g., truck-mounted drilling, stationary 204 drill rigs in unison, geophysical exploration equipment off designated routes, and construction of wells and/or 205 pads). CSU areas are open to fluid mineral leasing, but the stipulation allows the BLM to require special
- 206 operational constraints or setbacks to protect the specified resource or value.
- 207 Corridor: A wide strip of land within which a proposed linear facility (e.g., pipeline, transmission line) could
   208 be located.
- 209 **Corrosivity**: A characteristic defining a hazardous waste. A solid waste that is defined as corrosive 210 demonstrates the capability to destroy gradually by chemical action.
- 211 **Critical habitat**: Specific geographic areas, whether occupied by listed species or not, that are determined
- to be essential for the conservation and management of listed species, and that have been formerly described
- 213 in the Federal Register (USFWS).
- 214 Cubic feet per second (cfs): As a rate of stream flow, a cubic foot of water passing a reference section 215 in one second of time. One cfs flowing for 24 hours will yield 1.983 acre-feet of water.
- 216 **Cultural modification**: Any human-caused change in the land form, water form, vegetation, or the addition
- of a structure that creates a visual contrast in the basic elements (form, line, color, texture) of the naturalistic
   character of a landscape.
- **Cultural resources**: A cultural resource is any definite location of past human activity, occupation, or use, identifiable through inventory, historical documentation, or oral evidence. Cultural resources include archaeological, historic, or architectural sites, structures, places, objects, and artifacts, as well as traditional cultural properties.
- 223 Cumulative impacts: Additional and interactive combinations of activities that are not necessarily 224 individually quantitatively different, but together require different management techniques and applications. 225 Cumulative impacts occur when there are multiple infringements on the same values.
- 226 **Dacite**: The extrusive equivalent of quartz diorite.
- 227 **Decision Area**: Public lands (BLM-administered) and private split-estate (i.e., private surface acreage 228 overlying federally owned minerals) within the Planning Area are referred to in this document as the BLM's 229 Decision Area
- 229 Decision Area.
- 230 Developed recreation: Recreation that requires facilities that result in further concentrated use of the
- 231 area. For example, OHVs require parking lots and trails. Campgrounds require roads, picnic tables, and toilet
- 232 facilities.
- **Diabase**: Rock of basaltic composition, essentially of labradorite and pyroxene.

- **Diatreme**: General term for a volcanic vent or pipe emplaced in rocks by the explosive energy of gascharged magmas.
- 236 **Diorite**: Plutonic rock composed of sodic plagioclase and hornblende, biotite, or pyroxene.
- 237 **Disconformity**: An unconformity between parallel strata.
- Dispersed recreation: Recreation that does not occur in a developed recreation site, such as hunting,
   backpacking, and scenic driving.
- 240 **Distance zones**: A subdivision of the landscape as viewed from an observer position. The subdivision 241 (zones) includes foreground-middleground, background, and seldom seen.
- 242 **Dolomite**: A mineral composed of calcium, magnesium, and oxygen.
- 243 **Dry deposition**: The transfer of airborne gaseous and particulate material from the atmosphere to the 244 Earth's surface.
- 245 **Easement**: A right or privilege one may have on another's land.
- 246 **Easement, scenic**: A right to make use of land to protect the scenic values.
- Ecosystem: Any area or volume in which there is an exchange of matter and energy between living and nonliving parts; that is, the biotic community together with soil, air, water, and sunlight form an ecosystem.
  Ecosystems are the best units for studying the flow of energy and matter.
- **Ecoregion**: A large area of land and water that contains a geographically distinct assemblage of natural communities, with similar landforms, climate, ecological processes, and vegetation. They typically span millions of acres and multiple states.
- **Endangered species**: The classification provided to an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range (USFWS).
- 255 **Enhancement**: A management action designed to improve visual quality.
- **Environmental Impact Statement (EIS)**: A document prepared to analyze the impacts on the environment of a proposed action and released to the public for review and comment. An EIS must meet the requirements of the NEPA, the CEQ, and the directives of the agency responsible for the proposed action.
- 260 **Eolian**: Relating to, caused by, or carried by the wind.
- 261 **Ephemeral stream**: A stream that flows only in direct response to precipitation and its channel is at all times above the water table.
- 263 Equestrian: Of horses, horsemen, or horseback riding.
- 264 Erosion: The wearing away of the land surface by running water, wind, ice, or other geologic agents, and by265 such processes as gravitation creep.
- **Evaporation**: Conversion of water from the liquid phase to the gaseous phase.
- 267 Exclusion area: An environmentally sensitive area where ROWs would be granted only in cases where268 there is a legal requirement to provide such access.
- 269 **Facies**: General appearance or nature of one part of a rock body as contrasted with other parts.

- Fanglomerate: Composed of heterogeneous materials which were originally deposited in an alluvial fan
   but which since deposition have been cemented into solid rock.
- 272 Federal lands: Lands, or interests in lands (such as easements and ROWs), owned by the US.
- 273 **Fire behavior**: The manner in which a fire reacts to the influences of fuel, weather, and topography.
- 274 **Fire frequency**: A general term referring to the recurrence of fire in a given area over time. It is sometimes
- stated as number of fires per unit time in a designated area. It is also used to refer to the probability of an
- 276 element burning per unit time.
- 277 **Fire intensity**: The effects of fire on the aboveground vegetation generally described in terms of mortality.
- Fire Management Units: Predetermined areas that have similar fuels, topography, management
   objectives, and resource needs that allow each area to be managed as a unit.
- 280 **Fire regimes**: The characteristics of fire in a given ecosystem, including factors such as frequency, intensity,
- severity, and patch size. The terms used for the different fire regimes are: Nonlethal, Mixed I, Mixed 2, and
- 282 Lethal. Nonlethal fires are generally of the lowest intensity and severity with the smallest patches of mortality,
- 283 while lethal fires are generally of the highest intensity and severity with the largest patches of mortality. The
- 284 others fall in between.
- Fire Regime Condition Class (FRCC): Fire Regime Condition Classes are a qualitative measure describing the degree of departure from historical fire regimes, possibly resulting in alterations of key ecosystem components such as species composition, structural stage, stand age, canopy closure, and fuel loadings. One or more of the following activities may have caused this departure: fire exclusion, timber harvesting, livestock grazing, introduction and establishment of exotic plant species, introduced insects and disease, or other management activities.
- Fire severity: Fire effects at and below the ground surface. Describes the impacts on organic material on the ground surface, changes to soils, and mortality of below-ground vegetative buds, roots, rhizomes, and other organisms.
- **Fire suppression tactics**: The tactical approaches regarding suppression of a wildland fire. These range from control, confine, contain, and monitor. Control is the most aggressive tactic, while Monitor is the least.
- 296 **Fire use**: The combination of wildland fire use and prescribed fire application to meet resource objectives.
- 297 Floodplain: The area that borders a water body and is subject to flooding on a periodic basis.
- Floodprone area width: The area that would be expected to be covered by water if the wetted stream depth were twice as high as the full bank height, determined at the deepest part on a given transect. This width is then extrapolated over the length of the stream reach by averaging several random transects taken within the project area.
- 302 **Fluid minerals**: In this case, oil, gas, and geothermal resources.
- **Forecast**: Is a prediction of the changes in the resource anticipated given current management.
- **Foreground-middleground distance zones**: The area visible from a travel route, use area, or other observation point to a distance of three to five miles. The outer boundary of this zone is defined as the point where the texture and form of individual plants are no longer apparent in the landscape. Vegetation is
- 307 apparent only in patterns or outline.

- 308 Forest health: The perceived condition of a forest derived from concerns about such factors as its age,
- 309 structure, composition, function, vigor, presence of unusual levels of insects and disease, and resilience to
- disturbance. The perception and interpretation of forest health are influenced by individual and cultural
- 311 viewpoints, land management objectives, spatial and temporal scales, the relative health of the stands that
- 312 comprise the forest, and the appearance of the forest a point in time.
- **Form**: The mass or shape of an object or objects which appear unified, such as a vegetative opening in a forest, a cliff formation, or a water tank.
- 315 **Fossil**: The remains or traces of an organism preserved by natural processes in the earth's crust. This would
- 316 include plants and animals, their tracks, burrows, and other imprints, and are considered a nonrenewable
- 317 resource. It does not include minerals such as coal, oil and gas, and tar sands.
- **Geocacher:** A person who participates in geocaching, by either placing or searching for geocaches.
- 319 Hand-pile burn: A prescribed fire used to ignite hand or machine piles of cut vegetation resulting from
- 320 vegetation or fuel management activities. Piles are generally burned during the wet season to reduce damage
- 321 to the residual trees and to confine the fire to the footprint of the pile. Pile burning allows time for the
- 322 vegetative material to dry out and will produce less overall smoke by burning hot and clean.
- Humate: Black, acidic, organic matter composed of esters and salts of humic acid and carbonaceous
   mudrocks.
- 325 **Igneous**: Rocks formed by solidification from a molten or partially molten state.
- 326 Ignitability: A characteristic defining a hazardous waste. A solid waste that is defined as ignitable is one that 327 exhibits any of the capability to ignite under certain regulatory circumstances.
- **Indian Sacred Sites**: Any specific, discrete, narrowly delineated location on federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has
- informed the agency of the existence of such a site.
- 333 Indicator: Is an attribute, the presence or absence of which is a visible and/or measurable sign or index of 334 the condition of the resource.
- 335 Indian Trust Assets: Legal interests in property held in trust by the US for Indian tribes or individuals, 336 such as lands, minerals, hunting and fishing rights, and water rights.
- 337 Intermittent: Coming and going at intervals: not continuous.
- Interim Management Policy: An interim measure governing lands under Wilderness review. This policy
   protects wilderness study areas from impairment of their suitability as Wilderness.
- 340 **Intertonguing**: The disappearance of sedimentary bodies in laterally adjacent masses owing to splitting into
- 341 many thin units (tongues), each of which reaches an independent pinch-out termination.
- 342 **Intrusive**: Rock that consolidated from magma beneath the surface of the earth.
- 343 Invasive species: An alien species whose introduction does or is likely to cause economic or environmental
- harm or harm to human health.

- 345 **Jeopardy**: Under the ESA, jeopardy occurs when an action is reasonably expected, directly or indirectly, to
- 346 diminish a species' numbers, reproduction, or distribution so that the likelihood of survival and recovery in
- 347 the wild is appreciably reduced (USFWS).
- Jurisdiction: The legal right to control or regulate use of land or a facility. Jurisdiction requires authority,
   but not necessarily ownership.
- 350 **Karst**: Topography characterized by closed depressions, sinkholes and caves.
- 351 **Key features**: Are the geographic location, distribution, areas, or types of resource features that should 352 guide the allocation of land uses or management decisions.
- 353 **Key habitat type**: Describes the necessary features of optimal habitat for a given wildlife species.
- 354 **Key observation point (KOP)**: One or a series of points on a travel route or at a use area or a potential 355 use area, where the view of a management activity would be most revealing.
- 356 **Laccolith**: A concordant, intrusive body that has domed up the overlying rocks.
- 357 Land cover type: Describes a defined area of land in terms of the present vegetative community.
- 358 Landscape: An aggregate of different but interacting landforms, sometimes united by a cultural attribute
- 359 (e.g., a mosaic of farmland, including tilled fields, woodlots, stock ponds, swales, and fencerows). Landscape
- 360 ecology generally operates at a scale of at least many hectares or, more often, several square kilometers.
- 361 Landscape character: The arrangement of a particular landscape as formed by the variety and intensity
- 362 of the landscape features and the four basic elements of form, line, color, and texture. These factors give the
- 363 area a distinctive quality which distinguishes it from its immediate surroundings.
- 364 Landscape features: The land and water form, vegetation, and structures which compose the
   365 characteristic landscape.
- 366 Lapilli: Essential, accessory, and accidental volcanic ejecta.
- 367 Laramide orogeny: Process of forming mountains, particularly by folding and thrusting, beginning in
   368 Jurassic or Lower Cretaceous time until Lower Eocene time.
- 369 **Latillas**: relatively straight, slender saplings ( $1\frac{1}{2}$  to 2 inches in diameter), used in traditional Southwestern 370 architecture when stripped of bark and laid across the log roof beams, or vigas, as decking.
- 371 Lease: An authorization or contract by which one party (lessor) conveys the use of property, such as real 372 estate, to another (lessee) in return for rental payments. In addition to rental payments, lessees also pay 373 royalties (a percentage of value) to the lessor from resource production.
- 374 **Leasable minerals**: Those minerals or materials designated as leasable under the Mineral Leasing Act of 375 1920. They include coal, phosphate, asphalt, sulfur, potassium and sodium minerals, and oil, gas, and 376 geothermal resources.
- 377 Lease notice (LN): A lease notice (LN) provides more detailed information concerning limitations that 378 already exist in law, lease terms, regulations, or operational orders. A lease notice also addresses special 379 items that lessees should consider when planning operations, but it does not impose additional restrictions. 380 Lease notices are not an RMP-level decision, and new lease notices may be added to fluid mineral leases at 381 the time of sale. Lease notices apply only to leasable minerals (e.g., oil, gas, and geothermal) and not to other
- 382 types of leases, such as livestock grazing or coal leases.

- 383 Lentic: Of or relating to or living in still waters (as lakes or ponds).
- 384 Lentil: A minor rock-stratigraphic unit, a subdivision of a formation similar in rank to a member.

385 Line: The path, real or imagined, that the eye follows when perceiving abrupt differences in form, color, or 386 texture. Within landscapes, lines may be found as ridges, skylines, structures, changes in vegetative types, or 387 individual trace and branches

individual trees and branches.

- Listed Species: Species that are designated under the Endangered Species Act as either Threatened or
   Endangered, which may include members of the Plant, Animal or Fungi–Lichen Kingdoms (BLM H-6840).
- Listing: The formal process through which the US Fish and Wildlife Service adds species to the Federal List
   of Endangered and Threatened Wildlife and Plants.
- 392 Locatable mineral: Any valuable mineral that is not salable or leasable, including gold, silver, copper, and
   393 uranium, that may be developed under the General Mining Law of 1872.
- **Lotic**: Of, relating to, or living in actively moving water.
- 395 Maar: A crater formed by violent explosion not accompanied by igneous extrusion.
- 396 **Management activity**: A surface disturbing activity undertaken on the landscape for the purpose of 397 harvesting, traversing, transporting, protecting, changing, replenishing, or otherwise using resources.
- 398 Metamorphic: Rocks formed in the solid state in response to changes in temperature, pressure, and399 chemical environment.
- 400 **Migratory Bird**: An individual of any species protected by the Migratory Bird Treaty Act (list can be viewed 401 in 50 CFR 10.13).
- 402 **Mineral entry**: The location of mining claims by an individual to protect his/her right to a valuable mineral.
- 403 **Mineral potential:**

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- High: Those lands currently producing oil or gas or having high current industry interest.
- **Moderate**: Those lands, which have demonstrated oil and gas potential based on favorable geologic environments.
- 407 Low: Those lands where either the geologic environment appears to be favorable for the accumulation of oil and gas, or where little or no information is available to evaluate the oil and gas 409 potential.
- 410 **Mineral rights**: Outstanding third-party rights or an interest in minerals not owned by the person or party 411 conveying the land to the United States. Mineral rights are an exception in a deed that is the result of prior 412 conveyance separating title of certain minerals from the surface estate.
- 413 Mineral withdrawal: A withdrawal for public lands, which are potentially valuable for leasable minerals. 414 This precludes the disposal of the lands except with a mineral reservation, or unless the lands are found to
- 415 not be valuable for minerals.
- 416 Mitigation measures: Methods or procedures designed to reduce or lessen the adverse impacts caused 417 by management activities.
- 418 **Monzonite**: Granular plutonic rock with about equal amounts of orthoclase and plagioclase.

419 Multidisciplinary team: A group specialists with different backgrounds, assembled to solve a problem. 420 The problem is broken into pieces and each specialist works on a portion of the problem. Partial solutions 421 are then linked together to provide the final solutions.

422 Multiple use: Multiple use as defined by the Multiple Use - Sustained Yield Act 1960 means,: 1) the 423 management of all the various renewable surface resources so that they are used in the combination that 424 will best meet the needs of the American people, 2) making the most judicious use of the land for some or 425 all of these resources or related services over areas large enough to provide sufficient latitude for periodic 426 adjustments in use to conform to changing needs and conditions, 3) that some land will be used for less than 427 all of the resources, and 4) and harmonious and coordinated management of the various resources, each 428 with the other, without impairment of the productivity of the land, with consideration being given to the 429 relative values of the various resources, and not necessarily the combination of uses that will be given the

430 greatest dollar return or the greatest unit output.

A31 National Ambient Air Quality Standards (NAAQS): The allowable concentrations of air pollutants in the air specified by the federal government. The air quality standards are divided into primary standards (based on the air quality criteria and allowing an adequate margin of safety and requisite to protect the public health) and secondary standards (based on the air quality criteria and allowing an adequate margin of safety

435 and requisite to protect the public welfare) from any unknown or expected adverse effects of air pollutants.

436 National Environmental Policy Act of 1969 (NEPA): An act that encourages productive and enjoyable 437 harmony between humans and their environment and promotes efforts to prevent or eliminate damage to 438 the environment and biosphere and stimulate the health and welfare of humans; enriches understanding of 439 the ecological systems and natural resources important to the nation, and established the CEQ.

- 440 National Fire Danger Rating System (NFDRS): The National Fire Danger Rating System is a set of 441 computer programs and algorithms that allow land management agencies to estimate today's or tomorrow's 442 fire danger for a given rating area. NFDRS characterizes fire danger by evaluating the approximate upper 443 limit of fire behavior in a fire danger rating area during a 24-hour period. Calculations of fire behavior are 444 based on fuels, topography and weather, or what is commonly called the fire triangle.
- 445 National Register of Historic Places (NRHP): A listing of architectural, historical, archaeological, and
   446 cultural sites of local, state, or national significance. The list of sites was established by the Historic
   447 Preservation Act of 1966 and is maintained by the NPS.
- 448 **Native species**: With respect to a particular ecosystem, a species that, other than as a result of an 449 introduction, historically occurred or currently occurs in that ecosystem.
- 450 **Naturalistic character**: A landscape setting where the basic elements are displayed in a composition that 451 appears unaltered by man.
- 452 **Nitrogen oxides**: Produced from burning fuels, including gasoline and coal. Nitrogen oxides are smog 453 formers, which react with volatile organic compounds to form smog. Nitrogen oxides are also major 454 components of acid rain.
- 455 **Nonattainment area**: An area that does not meet (or that contributes to ambient air quality in a nearby 456 area that does not meet) any of the federal primary or secondary ambient air quality standards for the 457 pollutant.
- 458 Non-Functional: Riparian-wetland areas that clearly are not providing adequate vegetation, landform, or
- woody debris to dissipate energies associated with flow events, and thus are not reducing erosion, improvingwater quality, etc.

461 No surface occupancy (NSO): Use or occupancy of the land surface for fluid mineral exploration or 462 development and all activities associated with fluid mineral leasing (e.g., truck-mounted drilling, stationary 463 drill rigs in unison, geophysical exploration equipment off designated routes, and construction of wells and/or 464 pads) are prohibited to protect identified resource values. The NSO stipulation is a category of major 465 constraints. NSO areas are open to fluid mineral leasing, but surface occupancy or surface-disturbing 466 activities associated with fluid mineral leasing cannot be conducted on the surface of the land. Access to fluid mineral deposits would require directional and/or drilling from outside the boundaries of the NSO area. 467 468 This differs from areas identified as closed to leasing (NL) in which neither the surface area nor mineral

469 estate is available for fluid mineral leasing.

470 Noxious weed: A nonnative weed arbitrarily defined by law as being especially undesirable, troublesome,
471 and difficult to control. Weeds are designated noxious by the New Mexico Department of Agriculture for
472 the State of New Mexico.

473 **Observer position**: The placement and relationship of a viewer to the landscape which is being viewed.

Off-highway vehicle (OHV): A vehicle (including four-wheel drive, trail bikes, ATVs, and snowmobiles,
but excluding helicopters, fixed-wing aircraft, and boats) capable of traveling off road over land, water, ice,
snow, sand, marshes, and other terrain.

## 477 **OHV** designations:

- 478
   Closed Applies to areas and trails where the use of OHVs is permanently or temporarily prohibited. Emergency use of vehicles is allowed.
- Limited Applies to areas and trails where the use of OHVs is subject to restrictions such as limiting the number or types of vehicles allowed, dates and times of use (seasonal restrictions), limiting use to existing roads and trails, or limiting use to designated roads or trails. Under the designated roads and trails designation, use is allowed only on roads and trails that are signed for use. Combinations of restrictions, such as limiting use to certain types of vehicles during certain times of the year, are possible.
- Open Applies to areas and trails where OHVs may be operated subject to operating regulations and vehicle standards set forth in BLM Manual parts 8341 and 8343.

488 Ozone: A gas which is a variety of oxygen. The oxygen gas found in the air consists of two oxygen atoms 489 stuck together; this is molecular oxygen. Ozone consists of three oxygen atoms stuck together into an ozone 490 molecule. Ozone occurs in nature; it produces the sharp smell you notice near a lightning strike. High 491 concentrations of O3 gas are found in a layer of the atmosphere-the stratosphere-high above the earth. 492 Stratospheric O3 shields the earth against harmful rays from the sun, particularly ultraviolet B. Smog's main 493 component is O3; this ground-level O3 is a product of reactions among chemicals produced by burning coal, 494 mealing and other fuels and sharring found in graduate including achieves a point.

494 gasoline and other fuels, and chemicals found in products including solvents, paints, and hairsprays.

495 Paleontological locality: A geographic point or area where a fossil or associated fossils are found in a
 496 related geological context. A paleontological locality is confined to a discrete stratigraphic layer, structural
 497 feature, or physiographic area.

- 498 **Paleontology**: The science of animal and plant fossil remains.
- 499 **Paleozoic**: One of the eras of geologic time.
- 500 Particulate Matter: Includes dust, soot, and other tiny bits of solid materials that are released into and
- 501 move around in the air. Particulates are produced by many sources, including burning of diesel fuels by trucks
- and buses, incineration of garbage, mixing, and application of fertilizers and pesticides, road construction,

- industrial processes such as steel making, mining operations, agricultural burning (field and slash burning),and operation of fireplaces and woodstoves.
- 505 **Perennial channel**: A stream or river (channel) that has continuous flow in parts of its bed all year round 506 during years of normal rainfall. Perennial streams are contrasted with intermittent streams which normally 507 cease flowing for weeks or months each year, and with ephemeral channels that flow only for hours or days
- following rainfall. During unusually dry years, a normally perennial stream may cease flowing, becoming
- 509 intermittent for days, weeks, or months depending on severity of the drought.
- 510 **Perlite**: A volcanic glass having numerous concentric cracks which give rise to perlitic structure.
- 511 **Permit**: Permits are one of three forms of a land use authorization (the others are leases and easements).
- 512 Permits are short-term, revocable authorizations to use public lands for specific purposes that involve either
- 513 little or no land improvement, construction, or investment which can be amortized within the term of the
- 514 permit. A permit conveys no possessory interest. The permit is renewable at the discretion of the authorized
- 515 officer and may be revoked in accordance with its terms and applicable regulations.
- 516 Permitted livestock use: The forage allocated by, or under the guidance of, an applicable land use plan 517 for livestock grazing in an allotment under a permit or lease and is expressed in AUMs.
- 518 **pH**: A number used by chemists to express the acidity of solutions, including water. A pH value lower than
- 519 7 indicates an acidic solution, a value of 7 is neutral, and a value of higher than 7 indicates an alkaline solution.
- 520 Most groundwater in the US has pH values ranging from about 6.0 to 8.5.
- 521 **Phyllite**: A rock intermediate in metamorphic grade between slate and schist.
- 522 **Physiographic province**: An extensive portion of the landscape normally encompassing many hundreds
- 523 of square miles, which portrays similar qualities of soil, rock, slope, and vegetation of the same geomorphic
- 524 origin (Fenneman 1946; Sahrhaftig 1975).
- Planning Area: As used in this document, includes all land within the Planning Area boundaries regardless
   of jurisdiction or ownership.
- 527 **Pluton**: A body of igneous rock which formed beneath the surface of the earth by consolidation of magma.
- 528 **Polychlorinated biphenyls (PCBs)**: Synthetic organic compounds that can accumulate in the bodies of 529 fish and other organisms and cause death with enough exposure. Probable human carcinogen.
- 530 **Porphyritic**: A textural term for those igneous rocks in which larger crystals (phenocrysts) are set in a finer groundmass.
- 532 **Potable water**: Water that is suitable for drinking.
- 533 Potential Fossil Yield Classification: Geologic units are classified according to the PFYC system, usually 534 at the formation or member level, based on the relative abundance of significant fossils and their sensitivity 535 to adverse impacts. The classification uses a ranking of 1 through 5, with Class 5 assigned to units with a 536 very high potential for fossils. The classifications are described below.
- Class I Very Low. Igneous or metamorphic geologic units, or other units not likely to contain recognizable fossil remains. Management concern is negligible for Class I units and mitigation requirements are rarely necessary.
- Class 2 Low. Sedimentary geologic units that are not likely to contain vertebrate fossils or significant nonvertebrate fossils. Management concern is low for Class 2 units and mitigation requirements are not likely.

- Class 3 Moderate or Unknown. Fossiliferous sedimentary geologic units where fossil content varies in significance, abundance, and predictable occurrence; or sedimentary units of unknown fossil potential. Management concern may extend across the entire range of management. Ground-disturbing activities require sufficient assessment to determine whether significant resources occur in the area of the proposed action, and whether the action could affect the paleontological resources. Pre-disturbance surveys, monitoring, or avoidance procedures may be necessary.
- Class 4 High. Geologic units containing known occurrences of significant fossils, but these occurrences may vary in local abundance and predictability. Management concern is moderate to high, depending on the potential impacts of the proposed action and local geologic conditions. Predisturbance field surveys are often needed, and avoidance or on-site monitoring may often be necessary during project activities.
- Class 5 Very High. Highly fossiliferous geologic units that consistently and predictably produce significant fossils, and that are at risk of human-caused adverse impacts or natural degradation. Class 5 areas merit a high level of management focus. Mitigation of ground disturbing activities, including pre-disturbance surveys, on-site monitoring, or avoidance procedures, are nearly always necessary. These units are often the focus of illegal collecting activities. Special management designations may be appropriate for protection or interpretation.
- 560 **Prescribed fire**: is a wildland fire originating from a planned ignition to meet specific objectives identified 561 in a written, approved, prescribed fire plan for which NEPA requirements have been met prior to ignition.
- 562 Proper Functioning Condition (Lentic): Lentic riparian-wetland areas are functioning properly when 563 adequate vegetation, landform or debris is present to: dissipate energies associated with wind action, wave 564 action, and overland flow from adjacent sites, thereby reducing erosion and improving water quality; filter 565 sediment and aid floodplain development; improve flood-water retention and ground-water recharge; 566 develop root masses that stabilize islands and shoreline features against cutting action; restrict water 567 percolation; develop diverse ponding characteristics to provide the habitat and the water depth, duration 568 and temperature necessary for fish production, water-bird breeding, and other uses; and support greater 569 biodiversity.
- 570 **Proposed species**: Any species of fish, wildlife, or plant that is proposed in the *Federal Register* to be listed 571 under Section 4 of the Endangered Species Act (USFWS).
- 572 **Proprietary ACEC**: An ACEC, the location of which is not publicly available for reasons of resource 573 protection as stipulated under the NHPA (16 USC 470w-2(a)–Confidentiality of the location of sensitive 574 historic resources).
- 575 **Raptors**: Birds of prey, such as the eagle, falcon, hawk, owl, or vulture.
- 576 Reactivity: A characteristic defining a hazardous waste. A solid waste that is defined as reactive is one that 577 is normally unstable and reacts violently without detonating, reacts violently with water, forms an explosive 578 mixture with water, or generates toxic gases, vapors, or fumes when mixed with water, and is capable of 579 detonation under proscribed circumstances.
- 580 **Reclamation**: The process of converting disturbed land to its former use or other productive uses.
- 581 Regional physiography: The mode of formation and spatial occurrence of the various rock types within 582 the area, and the geologic structures and history that combined to produce the geologic conditions that 583 exist in the area.
- 584 **Regression**: Gradual contraction of a shallow sea resulting in the emergence of land.

- 585 **Reserved mineral rights**: The retention of ownership of all or part of the mineral rights by a person or 586 party conveying land to the United States. Conditions for the exercising of these rights have been defined in
- 587 the Secretary of the Interior's "Rules and Regulations to Govern Exercising of Mineral Rights Reserved
- 588 Conveyance to the United States" attached to and made a part of deeds reserving mineral rights.
- Resource Management Plan (RMP): A land use plan that establishes land use allocations, multiple-use
   guidelines, and management objectives for a given planning area. The RMP planning system has been used by
   the BLM since 1980.
- 592 **Resource Management Plan amendment**: A modification of one or more parts (e.g., decisions about 593 livestock grazing) of an existing RMP.
- 594 **Resource Management Plan revision**: A complete or near-complete rewrite of an existing RMP.
- 595 Restore/Restoration: The process of restoring site conditions as they were before land disturbance.
   596 Restoration involves restoring a site to a specific point in time.
- 597 **Rhyolite**: The aphanitic (microcrystalline) equivalent of granite.
- 598 **Right-of-way (ROW)**: Land authorized to be used or occupied for the construction, operation, 599 maintenance, and termination of a project, pursuant to a ROW authorization.
- 600 **Riparian**: Situated on or pertaining to the bank of a river, stream, or other body of water. Normally used 601 to refer to the plants of all types that grow along, around, or in wet areas.
- Riparian habitat: Riparian habitat is defined as an area of land directly influenced by permanent (surface of
   subsurface) water. They have visible vegetation or physical characteristics reflective of permanent water
   influence.
- 605 **Roadless**: Refers to the absence of roads constructed and maintained by mechanical means.
- 606 Roads: Vehicle routes that are improved and maintained by mechanical means to ensure relatively regular607 and continuous use.
- 608 **Route**: A road, course, or way, for travel from one place to another.
- 609 **Salable minerals**: Minerals that may be sold under the Material Sale Act of 1947, as amended. Included 610 are common varieties of sand, stone, gravel, and clay.
- 611 **Saturated**: When referring to soil, the maximum amount of water that can be held either when the soil is
- 612 frozen or the spaces between the soil particles are filled with water. Any additional seepage over saturated 613 soil will result in runoff.
- 614 **Scale**: The proportionate size relationship between an object and the surroundings in which the object is 615 placed.
- 616 **Scenery**: The aggregate of features that give character to a landscape.
- 617 **Scenic area**: An area whose landscape character exhibits a high degree of variety and harmony among the 618 basic elements which results in a pleasant landscape to view.
- 619 **Scenic quality**: The relative worth of a landscape from a visual perception point of view.
- 620 **Scenic quality evaluation key factors**: The seven factors (land form, vegetation, water, color, adjacent
- scenery, scarcity, and cultural modifications) used to evaluate the scenic quality of a landscape.

- 622 Scenic quality ratings: The relative scenic quality (A, B, or C) assigned a landscape by applying the scenic
- quality evaluation key factors; scenic quality A being the highest rating, B a moderate rating, and C the lowestrating.
- 625 **Scenic quality rating unit**: A portion of the landscape which displays primarily homogenous visual 626 characteristics of the basic landscape features (land and water form, vegetation, and structures).

## 627 Scenic values: see Scenic quality and Scenic quality ratings

- 628 **Schist**: A medium or coarse-grained metamorphic rock with sub-parallel orientation of the micaceous 629 minerals which dominate its composition.
- 630 **Scoping**: A term used to identify the process for determining the scope of issues related to a proposed 631 action and for identifying significant issues to be addressed in an EIS.
- 632 **Sedimentary**: Rocks formed by the accumulation of sediment in water or air.
- 633 **Seen area**: That portion of the landscape which is visible from roads, trails, rivers, campgrounds, 634 communities, or other key observation positions.
- 635 **Seldom seen distance zone**: Portions of the landscape which are generally not visible from key 636 observation points, or portions which are visible, but more than 15 miles distance.
- 637 **Sensitivity levels**: Measures (e.g., high, medium, and low) of public concern for the maintenance of scenic 638 quality.
- 639 Sensitive soils: Highly erodible soils or soils with a poor chance of successful reclamation after disturbance
   640 to the soil profile, or soils with slopes greater than 15 percent.
- 641 Sensitive soils are 1) erosion-sensitive soils that have higher susceptibility to wind or water erosion, and 2)
- 642 reclamation-sensitive soils that would be difficult to restore or reclaim with vegetation after drastic
- 643 disturbance of the soil profile has occurred. This sensitive soil description is based on detailed soil
- 644 information found in soil surveys published by the USDA Natural Resources Conservation Service in 645 cooperation with other entities, including the BLM (USDA NRCS 2011). Due to soil mapping procedures,
- 646 most soil mapping units (the individual areas outlined on soil maps) contain at least two major soil types that
- 647 have different properties: the proportions of the different soils within the mapping unit are specified, but the
- 648 spatial locations of the different soils are not shown. There is some overlap between the erosion-sensitive
- 649 soils and reclamation-sensitive soils.
- 650 Erosion-sensitive soils would include those with higher susceptibility to wind erosion as indicated by a wind
- 651 <u>erosion potential rating of "high" or "very high" in the soil survey. Soils that are rated as such are due to a</u>
- 652 <u>surface layer that has a sandy particle size, high carbonate content, low organic matter content, or no coarse</u>
- 653 <u>fragment protection.</u>
- 654 Erosion-sensitive soils also would include those with higher susceptibility to water erosion as indicated by a
- 655 water erosion potential rating of "high" or "very high" in the soil survey. Soils that are rated as such are due
- 656 to unfavorable particle sizes and low organic matter content, in combination with high runoff, that have low
- 657 <u>resistance to water erosion processes.</u>
- 658 Reclamation-sensitive soils would include those with a rating of "poor" for potential reclamation in the soil
- 659 survey, which indicates that revegetation and stabilization are expected to be difficult and costly following
- 660 drastic disturbances such as oil and gas field development, temporary road construction, or similar
- 661 disturbances. This rating of the disturbed soil and its subsequent reclamation potential are based on the soil

- 662 properties that affect erosion and stability of the surface and the vegetation productivity potential of the
- 663 <u>reclaimed soil. These properties include the content of sodium, salts, and calcium carbonate; reaction;</u>
- available water capacity; edibility; texture; content of rock fragments; and content of organic matter and
- 665 <u>other features that affect fertility.</u>
- 666 **Sensitive species**: Species not yet officially listed but that are undergoing status review for listing on the 667 USFWS official threatened and endangered list; species whose populations are small and widely dispersed or 668 restricted to a few localities; and species whose numbers are declining so rapidly that official listing may be 669 necessary.
- 670 **Seral classes**: Developmental stages in the growth of a forest from young to old.
- 671 **Shale**: Laminated sediment predominantly composed of clay.
- 672 **Shut-in well**: A well that is capable of producing, whose valves are closed to prevent production.

673 **Significant cultural resource**: Significances at the local, state, or national level is evaluated using criteria 674 for listing on the NRHP. To be eligible, a property must ordinarily be at least 50 years old, and must be 675 important in American history, architecture, archaeology, engineering, or culture. It must possess integrity 676 of location, design, setting, materials, workmanship, feeling, or association. In addition, properties must meet 677 at least one of the following four criteria:

- 678 Criterion A: Associated with events that have made a significant contribution to the broad patterns
   679 of our history
- **Criterion B**: Associated with the lives of persons significant in our past
- 681
   Criterion C: Embody the distinctive characteristics of a type, period, or method of construction,
   682 or that represents the work of a master, or possesses high artistic values, or that represent a
   683 significant distinguishable entity whose components may lack individual distinction
- **Criterion D**: Have yielded or may likely yield information important in prehistory or history

685 **Significant paleontological resource (also significant fossil resource)**: Any paleontological resource 686 that is considered to be of scientific interest, including most vertebrate fossil remains and traces, and certain 687 rare or unusual invertebrate and plant fossils. A significant paleontological resource is considered to be 688 scientifically important because it is a rare or previously unknown species, it is of high quality and well-689 preserved, it preserves a previously unknown anatomical or other characteristic, provides new information 690 about the history of life on earth, or has identified educational or recreational value.

- 691 **Simulation**: A realistic visual portrayal which demonstrates the perceivable changes in landscape features 692 caused by a proposed management activity. This is done through the use of photography, artwork, computer 693 graphics, and other such techniques.
- 694 **Soil texture**: A soil property used to describe the relative proportion of different grain sizes of mineral 695 particles in a soil. Particles are grouped according to their size into what are called soil separates. These 696 separates are typically named clay, silt, and sand. Soil texture classification is based on the fractions of soil 697 separates present in a soil. The soil texture triangle is a diagram often used to figure out soil textures.
- 698 Special Status Species: Collectively, federally listed or proposed and BLM sensitive species, which include
   699 both federally listed candidate species and delisted species within 5 years of delisting (BLM H-6840).
- **Speleology**: The scientific study of caves; a composite science based on geology, hydrology, biology, and
   archaeology.
- 702 **Speleothems**: Dripstone features including stalagmites and stalactites.

**Split estate**: Refers to land where the mineral rights and the surface rights are owned by different parties.
 Owners of the mineral rights generally have a superior right.

705 Stakeholders: Means, but is not limited to, state, tribal, and local government agencies, academic 706 institutions, the scientific community, nongovernmental entities including environmental, agricultural, and 707 conservation organizations, trade groups, commercial interests, and private landowners.

**Stand density**: I. a quantitative measure of stocking expressed either absolutely in terms of number of trees, **basal area**, or volume per unit area or relative to some standard condition. 2. A measure of the degree of crowding of trees within stocked areas commonly expressed by various growing space ratios, such as Stand Density Index.

- **Stand density index (SDI)**: An index of competitive interaction. Expressed as a maximum, it indicates the maximum density that a given species can attain at a given reference diameter. At 25 percent of maximum SDI, trees begin competing with each other (and begin to out compete understory species). At 35 percent of maximum SDI, trees fully occupy the site. At higher densities competition between trees either results in reduced growth and vigor on individual trees or may result in competitive stress and tree mortality (perhaps
- 717 due in part to secondary agents such as insects that are attracted to stressed trees).
- 718 Stewardship contracting: Stewardship end results contracting projects are those activities used to 719 accomplish the goals set forward in Section 323 of Public Law 108-7 whereby the Forest Service and the 720 BLM would enter into contract or agreement, including consideration of source under public and private
- 721 contracts, for services to achieve land management goals and meet local and rural community needs. In
- 722 addition, the contract or agreement is awarded on a best-value basis.

Agency direction provides that stewardship contracts must include at least one of the new authorities granted by the legislation: where the value of timber and other forest products is applied as an offset against the cost of services received; or multi-year contract authority greater than 5 years but not to exceed 10 years.

- 727 Stipulation (oil and gas): A provision that modifies standard oil and gas lease terms and conditions in 728 order to protect other resource values or land uses and is attached to and made a part of the lease. Typical 729 lease stipulations are no surface occupancy (NSO), timing limitations (TL), and controlled surface use (CSU). 730 Lease stipulations are developed through the RMP process.
- 731 **Stratigraphy**: Branch of geology dealing with the formation, composition, sequence, and correlation of stratified rocks of the earth's crust.
- 733 Sulfur dioxide: A gas produced by burning coal, most notably in power plants. Some industrial processes, 734 such as production of paper and smelting of metals, produce sulfur dioxide. Sulfur dioxide is closely related 735 to sulfuric acid, a strong acid. Sulfur dioxide plays an important role in the production of acid rain.
- 736 Sustained yield: The concept of steady-state management of timber, wildlife, and many other natural
   737 resources, but most often applied to forest management. Consumption is matched by production.
- 738 Syenite: A plutonic igneous rock consisting principally of alkali feldspar with one or more mafics.

**Take**: To pursue, hunt, shoot, wound, kill, trap, capture or collect or attempt to pursue, hunt, wound, kill, trap, capture or collect (50 CFR 10.12). The Executive Order further defines take to include intentional take, meaning take that is the purpose of the activity in question, and unintentional take, meaning take that results from, but is not the purpose of, the activity in question. Both intentional and unintentional take constitute take as defined by the regulation.

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- 744 **Temporary use permits (TUPs)**: A right-of-way may be supplemented by such temporary permits for 745 the use of federal lands in the vicinity of the pipeline if the Secretary of the Interior or agency head finds the
- 746 permit necessary in connection with construction, operation, maintenance, or termination of the pipeline,
- 747 or to protect the natural environment or public safety.
- 748 Terrane: A fault-bounded body of rock of regional extent characterized by a geologic history different than
   749 the surrounding rocks.
- Threatened species: The classification provided to an animal or plant likely to become endangered within
   the foreseeable future throughout all of a significant portion of its range (USFWS).
- **Timing limitation (TL)**: Areas identified for timing limitations (TL), a moderate constraint, are closed to fluid mineral exploration and development, surface-disturbing activities, and intensive human activity during identified time frames. This stipulation does not apply to operation and basic maintenance activities, including associated vehicle travel, unless otherwise specified. Construction, drilling, completions, and other operations considered to be intensive in nature are not allowed. Intensive maintenance, such as workovers on wells, is not permitted. Administrative activities are allowed at the discretion of the BLM Authorized Officer.
- **Total deposition**: The sum of airborne material transferred to the Earth's surface by both wet and dry deposition.
- Total dissolved solids (TDS): The total quantity (reported in milligrams per liter) of dissolved materials
   in water.
- **Toxicity**: A characteristic defining a hazardous waste. Toxicity refers to the ability of a material to produce
   injury or disease on exposure, ingestion, inhalation, assimilation by a living organism.
- 765 **Transgression**: Gradual expansion of a shallow sea resulting in the submergence of land.
- Transportation ROW: Land associated with highways and railroads authorized to be used or occupied
   for the construction, operation, maintenance, and termination of a project, pursuant to a ROW
   authorization.
- 769 **Trends**: Are the degree and direction of change between the present and some point in the past.
- 770 **Tuff:** Rock formed of compacted volcanic fragments, generally smaller than four mm in diameter.
- 771 **Ultramafic**: Some igneous rocks containing less than 45 percent silica (ultrabasic).
- 772 Uncharacteristic wildfire hazard: Conditions with the potential to lead to an uncharacteristic wildfire.
- **Unclassified area**: An area that cannot be classified on the basis of available information as meeting or not
   meeting the federal primary or secondary ambient air quality standard for the pollutant.
- 775 **Unconformity**: A surface of erosion that separates younger strata from older rocks.
- 776 **Underburn**: A prescribed fire ignited under the forest canopy that focuses on the consumption of surface

fuels but not the overstory vegetation. Underburning is generally used following a pre-treatment such as

- thinning and /or pile burning to further reduce the surface fuels, help maintain the desired vegetation
- conditions and enhance the overall health and resiliency of the stand.
- 780 **Underground storage tanks**: A tank with at least 10 percent of its volume beneath the ground, including
- 781 attached pipes, that is or has been used to contain hazardous substances or petroleum products.

- 782 Unknown (pertaining to condition of riparian systems): Riparian-wetland areas for which there is a
   783 lack of sufficient information to make any form of determination.
- 784 **Utility corridor**: A linear corridor usually designated for facilities such as power lines or pipeline.
- 785 Variables: Factors influencing visual perception including distance, angle of observation, time, size or scale,
   786 season of the year, light, and atmospheric conditions.
- 787 **Variety**: The state or quality of being varied and having the absence of monotony or sameness.
- 788 Viable: A [wildlife] population that has the estimated numbers and distribution of reproductive individuals
   789 to insure its continued existence.
- 790 Viewshed: the landscape that can be directly seen under favorable atmospheric conditions, from a viewpoint
   791 or along a transportation corridor.
- 792 Viga: large (6- to 12-plus inches in diameter) round logs that once peeled are used as ceiling beams in
   793 traditional Southwestern architecture
- 794 Visibility: The ability to see color, texture and contrast at a distance and can be reported as visual range,795 in units of distance such as miles.
- 796 **Visual resources**: The visible physical features of a landscape (topography, water, vegetation, animals, 797 structures, and other features) that constitute the scenery of an area.
- 798 **Visual Resource Management (VRM)**: The inventory and planning actions taken to identify visual 799 resource values and to establish objectives for managing those values.
- 800 Visual Resource Management Classes: VRM classes identify the visual quality objectives as the degree 801 of acceptable visual change within a particular landscape. A classification is assigned to public lands based on 802 guidelines established for scenic quality, visual sensitivity, and visibility.
- VRM Class I This classification preserves the existing characteristic landscape and allows for natural ecological changes only. Includes congressionally authorized areas (Wilderness) and areas approved through an RMP where landscape modification activities should be restricted.
- VRM Class II This classification retains the existing characteristic landscape. The level of change in any of the basic landscape elements (form, line, color, texture) due to management activities should be low and not evident.
- VRM Class III This classification partially retains the existing characteristic landscape. The level of change in any of the basic landscape elements due to management activities may be moderate and evident.
- VRM Class IV This classification applies to areas where the characteristic landscape has been so disturbed that rehabilitation is needed. Generally considered an interim short-term classification until rehabilitation or enhancement is completed.
- **Volatile organic compounds (VOCs)**: Organic chemicals all contain the element carbon. Organic chemicals are the basic chemicals found in living things and in products derived from living things, such as coal, petroleum, and refined petroleum products. Volatile chemicals produce vapors readily; at room temperature and normal atmospheric pressure, vapors escape easily from volatile liquid chemicals. Volatile organic chemicals include gasoline, industrial chemicals such as benzene, solvents such as toluene and xylene, and tetrachloroethylene (perchloroethylene, the principal dry cleaning solvent). Many volatile organic chemicals are also hazardous air pollutants.

- 822 Volcanic plug: The fossilized innards of a volcano. Plugs are commonly funnel shaped and taper downward
   823 into bodies increasingly elliptical or elongated in shape.
- 824 **Water rights adjudications**: A legal process conducted through a superior court to determine the extent 825 and validity of existing water rights. An adjudication can determine rights to surface water, groundwater, or
- and validity of existing water rights. An adjudication can determine rights to surface water, groundwater, or
   both. An adjudication does not create new water rights, it only confirms existing rights.
- 827 Water table: The surface in a groundwater body where the water pressure is atmospheric. It is the level 828 at which water stands in a well that penetrates the water body just far enough to hold standing water.
- 829 Watershed: The land area that drains water to a particular stream, river, or lake. It is a land feature that 830 can be identified by tracing a line along the highest elevations between two areas on a map, often a ridge.
- 831 Weed: An undesirable plant that disrupts or has the potential to disrupt or alter the natural ecosystem
- function, composition, and diversity of the site it occupies. Its presence deteriorates the health of the site, it
- 833 makes efficient use of natural resources difficult, and it may interfere with management objectives for that
- 834 site.
- 835 Wet deposition: Air pollutants deposited by precipitation, such as rain and snow.
- Wetlands: Lands including swamps, marshes, bogs, and similar areas, such as wet meadows, river overflows,
  mud flats, and natural ponds.
- 838 Wilderness Area (WA): An area officially designated as Wilderness by Congress. Wilderness areas will 839 be managed to preserve wilderness characteristics and shall be devoted to the public purposes of recreation,
- 840 scenic, scientific, educational, conservation, and historical use.
- Wilderness characteristics: sufficient size, naturalness, and either outstanding opportunities for solitude
   or primitive and unconfined recreation.
- Wilderness Study Area (WSA): Areas under study for possible inclusion as a Wilderness Area in the
   National Wilderness Preservation System.
- 845 Wildfire: unplanned ignition of a wildland fire (such as a fire caused by lightning, volcanoes, unauthorized846 and accidental human-caused fires) and escaped prescribed fires.
- 847 Wildfire risk: Wildfire risk comprises the probability of an undesired wildfire event and the outcome of it.
  848 The undesired event realizes a hazard.
- 849 Wildland fire: a general term describing any non-structure fire that occurs in the wildland.
- 850 Wildland-urban interface (WUI): The line, area, or zone where structures and other human 851 developments meet or intermingle with wildland or vegetative fuel. Interface is further delineated into the 852 following types:
- Developed areas with residential structures where many structures border wildland on a broad front.
- Developed areas with private residential structures where developments are few in number scattered over a large area surrounded by wildland.

857 Zeolite: A group of hydrous aluminosilicate minerals containing sodium, calcium, barium, strontium, and
 858 potassium.