Grand Mesa, Uncompahgre and Gunnison National Forest
Accelerated Watershed/Vegetation Restoration Plan
GLOSSARY

Assessment (Focused) -The collection, integration, examination and evaluation of information and values for a given purpose.

Biological Diversity - The variety and variability among living organisms and the ecological complexes in which they occur.

Broadcast burning – Burning forest fuels as they are, with no piling or windrowing.

Canopy – In a forest, the branches from the uppermost layer of trees; on rangeland the vertical projection downward of the aerial portion of vegetation.

Canopy Closure - The amount of ground surface shaded by tree canopies as seen from above. Used to describe how open or dense a stand of trees is, often expressed in 10 percent increments.

Collaborative- Working together.

Conserve- Refers to a management emphasis on protection and maintenance of forest, rangeland and aquatic conditions, health, and integrity, recognizing that natural processes dominate the landscape and gradual change will occur.

Condition Class- Relative ranking of wildfire risk to ecosystems. The risk of loss of key ecosystem components from unwanted wild fire is based on an assigned condition class descriptor of Condition Class 1 (lowest risk) to Condition Class -3 (highest risk)

Cover- The area of ground covered by plants of one or more species.

Cultural resources- Remains of sites, structures, or objects used by people in the past.

Data- Facts used in an analysis.

Degradation- Reduction in value or quality.

Density (stand) - The number of trees growing in a given area, usually expressed in terms of trees per acre.

Desired Range of Future Conditions - A portrayal of the land, resource, or social and economic conditions that are expected to result in a pre-determined period of years if objectives are achieved; portrayed as a range of conditions. A vision of the long-term conditions of the land (50-100 years).

Disturbance- Refers to events that alter the structure, composition, or function of terrestrial or aquatic ecosystems. Natural disturbances include, among others, drought, floods, wind, fires, wildlife grazing, and insects and pathogens. Human-caused

disturbances include actions such as timber harvest, livestock grazing, roads, and the introduction of exotic species.

Disturbance-recovery regime - A natural pattern of periodic disturbances, such as fire or flood followed by a period of recovery from the disturbance (such as re-growth of a forest after a fire).

Ecological Integrity –In general, ecological integrity refers to the degree which the elements of biodiversity and the functions that link them together and sustain the entire system are complete and capable of performing the desired functions. Absolute measures of integrity do not exist. Proxies provide useful measures to estimate the integrity of major ecosystem components (forestland, rangeland, aquatic and hydrologic). Estimating these integrity components in a relative sense across a project area/landscape helps to explain current conditions and to prioritize future management. Areas of high integrity would represent areas where ecological functions and processes are better represented and functioning than areas rated as low integrity.

Ecological processes - The flow and cycling of energy, materials and organisms in an ecosystem.

Ecosystem - A complete, interacting system of living organisms and the land and water that make up their environment: the home places of all living things, including humans.

Ecosystem health - A condition where the parts and functions of an ecosystem are sustained over time and where the systems capacity for self-repair is maintained, such that goals for uses, values, and services of the ecosystem are met.

Ecosystem-based management - Scientifically based land and resource management that integrates ecological capabilities with social values and economic relationships, to produce, restore, or sustain ecosystem integrity and desired conditions, uses, products, values and services over the long term.

Epidemic (outbreak) - The rapid spread, growth, and development, of pathogen or insect populations that affect large numbers of a host population throughout an area at the same time.

Fire-dependent systems - Forests, grasslands, and other ecosystems historically composed of species of plants that evolved with and are maintained by fire regimes.

Fire-independent systems - Forests, grasslands and other ecosystems whose primary natural disturbances historically were decomposition, windthrow, flooding, and other disturbances other than fire.

Fire-intolerant - Species of plants that do not grow well or die from the effects of too much fire. Generally these are shade-tolerant species.

Fire Regime - The characteristics of fire in a given ecosystem, such as the frequency, predictability, intensity, duration, scale and seasonality of fire.

Fire return interval - The average time between fires in a given area.

Fire-tolerant - Species of plants that can withstand certain frequency and intensity of fire. Generally these are shade-intolerant species.

Forest Health - The condition in which forest ecosystems sustain their complexity, diversity, resiliency, and productivity while providing for human needs and values. It is a useful way to communicate about the current condition of the forest, especially with regard to resiliency, a part of forest health that describes the ability of the ecosystem to respond to disturbance. Forest health and resiliency can be described in part, by species composition, density and structure.

Fuel (fire) - Dry dead parts of trees, shrubs, and other vegetation that can burn readily.

Fuel ladder - Vegetative structures or conditions such as low-growing tree branches, shrubs, or smaller trees that allow fire to move vertically from surface fire to crown fire.

Fuel load - The dry weight of combustible materials per unit area; usually expressed as tons per acre.

Ground fire - A fire that burns the organic material in the soil layer and the decayed material or peat below the ground surface.

Habitat - A place that provides seasonal or year-round food, water, shelter, and other environmental conditions for an organism, community or population of plants and animals.

Healthy landscape systems - Those landscapes whose processes are in balance. The balance is dynamic. Healthy landscape systems show resiliency and have predictable responses to disturbance, while providing for human values. Key ecological systems that interact in dynamic balance include: human, hydrologic-land, carbon-nutrient, food web, and evolutionary systems.

Historical Range of Variability (HRV) - The natural fluctuation of components of healthy ecosystems over time. Refers to the range of conditions and processes that are likely to have occurred prior to settlement of the project area by people of European descent (approximately the mid to late-1800s), which would have varied over certain limits over time. Historical conditions and processes include forest and range vegetation

types, compositions, and structures; fish and wildlife habitats and populations; and primary disturbance regimes related to fire, and insects and disease. For purposes of comparison to current conditions, historical conditions represent an estimated mid-point within the historical range of variability. HRV is used as a reference point, to establish a baseline set of conditions for which scientific or historical information is available to enable comparison to current conditions.

Infrastructure - The basic facilities, equipment, and installations needed for the functioning of a system: commonly refers to items like roads, bridges, power facilities etc.

Invasion (plant)- The movement of a plant species into a new area outside its former range.

Landscape - All the natural features such as grassland, hills, forest and water, which distinguish one part of the earth's surface from another part; usually the portion of land that the eye can comprehend in a single view, including all its natural characteristics.

Landscape composition - The types of stands or patches present across a given area of land.

Landscape structure - The mix and distribution of stand or patch sizes across a given area of land. Patch sizes, shapes, and distribution are a reflection of the major disturbance regimes operating on the landscape.

Mitigation - Measures designed to counteract environmental impacts or to make impacts less severe.

Mixed Severity fire - Severity of fire either causes selective mortality in the dominant vegetation, depending on different tree species' susceptibility to fire, or varies between understory and stand replacement.

Monitoring - A process of collecting information to evaluate whether or not objectives of a project and its mitigation plan are being realized.

Mosaic- A pattern of vegetation in which two or more kinds of plant communities are interspersed in patches.

Natural areas - Areas that are mainly in a natural state and are being managed to maintain or restore a degree of naturalness for research, monitoring, inventory, habitat protection, education or social needs.

Nonfire regime - Little or no occurrence of natural fire.

Nonlethal fire (Understory fire regime)- In forests, fires in which 70 percent of the basal area or more that 90 percent of the canopy cover survives; in rangelands, fires in which more than 90 percent of the vegetative cover survives.

Noxious Weed- A plant species designated by Federal or State law as generally possessing one or more of the following characteristics; aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or non-native, new or not common to the United States.

Old Forest- (a) Old single story forests refer to mature forests characterized by a single canopy layer consisting of large or old trees. Understory trees are often absent, or present in randomly spaced patches. It generally consists of widely spaced, shade-intolerant species such as ponderosa pine, adapted to a non-lethal, high frequency fire regime. (b) Old multi-story forest refers to mature forest characterized by two or more canopy layers with generally large or old trees in the upper canopy. Understory trees are also usually present, as a result of a lack of frequent disturbance to the understory. It can include both shade-tolerant and shade-intolerant species, and is generally adapted to a mixed fire regime of both lethal and nonlethal fires.

Overstory - The upper canopy layer.

Park-like stands - A stand havening scattered large overstory trees, few or no understory trees, and open growing conditions usually maintained by frequent ground fires.

Patch- An area of uniform vegetation that differs from what surrounds it in structure and composition. As an example, a patch of dense young forest surrounded by a patch of open old forest.

Pathogen- An agent such as a fungus, virus or bacterium that causes disease.

Pattern- The spatial arrangement of landscape elements (patches, corridors, matrix) that determines the function of a landscape as an ecological system.

Potential Vegetation-(Potential Natural Vegetation)-Vegetation that would likely develop if all successional sequences were completed without human interference under current site conditions. It can also refer to vegetation that would grow on a site in the presence of frequent disturbance that is an integral part of the ecosystem and its development.

Prescribed fire - Intentional use of fire under specified conditions to achieve specific management objectives.

Prescribed natural fire (Wildfire Use)- A fire ignited by lightning but allowed to burn within specified conditions of fuels, weather, and topography, top achieve specific objectives.

Productivity- (a) Soil productivity: the capacity of a soil to produce plant growth, due to the soil's chemical, physical, and water holding properties (such as depth, temperature, waterholding capacity, and mineral, nutrient and organic matter content). (b) Vegetative productivity: the rate of production within a given period. (c) General: the innate capacity of an environment to support pant and animal life over time.

Proper Functioning Watersheds- The functioning condition of a watershed as an interaction between geology, soil, water and vegetation.

Rangeland health- The degree to which the integrity of the soil and the ecological processes of rangeland ecosystems are sustained.

Recovery- (a) Return of an ecosystem to a specified condition after a disturbance: (b) return of a previously threatened or endangered species to a condition of population viability.

Resilient, resiliency- The ability of a system to respond to disturbances. Resiliency is one of the properties that enable a system to persist on many different states or successional stages.

Restoration- Holistic actions taken to modify an ecosystem to achieve desired, healthy, and functioning conditions and processes.

Restore- Refers specifically to a management emphasis designed to move ecosystems to desired conditions and processes, and/or to healthy forests, rangelands and aquatic systems; a variety of management-induced activities dominate the landscape. Generally "restore" strategies are applied to areas of low to moderate ecological integrity.

Revegetation- Establishing or re-establishing desirable plants on an area where desirable plants are absent or of inadequate density, by management alone (natural revegetation) or by seeding or transplanting (artificial revegetation).

Salvage- The harvest of trees that are dead, dying, or deteriorating due to fire, wind, insect or other damage, or disease.

Scale- The level of resolution under consideration (for example, broad or fine scale).

Seral- Refers to the sequence of transitional plant communities during succession. Early seral refers to plants that are present soon after disturbance or at the beginning of a new successional process (such as seedling or sapling growth stages in a forest); mid-seral in a

forest would refer to pole or medium saw timber growth stages; late-seral refers to plants present during a later stage of plant community succession (such as mature and old forest stages).

Seral stage - The developmental phase of a forest stand or rangeland with characteristic structure and plant species composition.

Silviculture - The practice of manipulating the establishment, composition, structure, growth and rate of succession of forests to accomplish specific objectives.

Stand density- Refers to the number of trees growing in a given area, usually expressed in trees per acre.

Stand-replacing fires- In forests, fires in which less than 20 percent of the basal area or less than 10 percent of the canopy cover remains; in rangelands, fires in which most of the shrub overstory or encroaching trees are killed.

Stand structure - The mix and distribution of tree sizes, layers, and ages in a forest (single, two- storied and multi-storied stands of various age and sizes).

Structure - The size and arrangement, both vertically and horizontally, of vegetation.

Subwatershed- A drainage area of approximately 20,000 acres, equivalent to a 6^{th}-field Hydrologic Unit Code (HUC) also Hydrologic Unit Boundary (HUB) .

Succession- A predictable process of changes in structure and composition of plant communities over time. Conditions of the prior plant community or successional stage create conditions that are favorable for the establishment of the next stage.
The different stages are referred to as seral stages.

Surface fire - A fire that burns surface litter, dead woody fuels, other loose debris on the forest floor, and some small vegetation, without significant movement into the overstory, usually with a flame length of less than a few feet high.

Sustainability - (a) Meeting the needs of the present without compromising the abilities of future generations to meet their needs; emphasizing and maintaining the underlying ecological processes that ensure long-term productivity of the land. (b) In a commodity production, refers to the yield of a natural resource that can be produced continually at a given intensity of management.

Underburn- A burn by a surface fire that can consume ground vegetation and ladder fuels.

Understory - Plants that grow beneath the canopy of other plants. Usually refers to grasses, forbs, and low shrubs under a tree or shrub canopy.

Weed - A plant considered undesirable, or troublesome, usually introduced and growing without intentional cultivation.

Wildland Urban Interface (WUI) - WUI areas include those areas where flammable wildland fuels are adjacent to homes and communities.

Wilderness - Refers to specific lands designated by Congress as Wilderness Areas and protected and managed to preserve their natural condition.

Windthrow - Trees blown over by the wind.