

## **GLOSSARY AND ACRONYMS**

### **adaptive management**

A type of natural resource management in which decisions are made as part of an on-going process. Adaptive management involves testing, monitoring, evaluation, and incorporating new knowledge into management approaches based on scientific findings and the needs of society.

### **airshed**

A geographical area that shares the same air mass due to topography, meteorology, and climate.

### **air quality**

The composition of air with respect to quantities of pollution therein; used most frequently in connection with “standards” of maximum acceptable pollutant concentrations.

### **allotment (grazing)**

Area designated for the use of a certain number and kind of livestock for a prescribed period.

### **allowable sale quantity (ASQ)**

On a National Forest, the quantity of timber that may be sold from a designated area covered by the forest plan for a specified time.

### **all terrain vehicle (ATV)**

Motorized, off-highway vehicle 50 inches or less in width, having a dry weight of 600 pounds or less that travel on 3 or more low-pressure tires with a seat designated to be straddled by the operator. Low-pressure tires are 6 inches or more in width and designated for use on wheel rim diameters of 12 inches or less, utilizing an operating pressure of ten pounds per square inch (psi) or less as recommended by the vehicle manufacturer.

### **alternative**

In an Environmental Impact Statement (EIS), one of a number of possible options for responding to the purpose and need for action.

### **Animal Unit Month (AUM)**

The amount of forage required by a one thousand (1,000) pound cow, or the equivalent, for one month.

### **aquatic ecosystem**

Waters that serve as habitat for interrelated and interacting communities and populations of plants and animals.

### **beneficial use**

An actual or potential use that may be made of the waters of the state that is protected against quality degradation. Examples of beneficial uses include domestic, agricultural, and industrial water supplies, recreation, aquatic life, aesthetics, wildlife habitat, and salmon spawning.

### **best management practices (BMP)**

Practices determined by the Utah Division of Water Quality, to be the most effective and practical means of preventing or reducing the amount of pollution generated by non-point sources.

## *Preliminary Analysis of the Management Situation*

### **biological diversity (or biodiversity)**

The variety and abundance of life and its processes. It includes all living organisms, the genetic differences among them, and the communities and ecosystems in which they occur. Biological diversity also refers to the compositions, structures, and functions of species and habitats and their interactions.

### **board foot**

A measurement of wood equivalent to a board one foot square and one inch thick. Usually expressed in terms of thousand board feet (MBF) or million board feet (MMBF).

### **browse**

1. Any woody vegetation consumed, or fit for consumption, by livestock or wild animals, mainly ungulates (deer and elk). 2. To forage or graze on the buds, stems, and leaves of woody growth by livestock or wildlife.

### **carrying capacity**

The maximum number or biomass of organisms of a given species that can be sustained or survive on a long-term basis within an ecosystem; the ability of the land to support any particular maximum level of use or extraction given predetermined assumptions about type of use, quality level, or other factors.

### **carrying capacity (recreation)**

The amount of recreation use an area can sustain without deterioration of quality.

### **challenge cost share**

Cooperation on a mutually beneficial project with public and private cooperators which requires matching funds.

### **Clean Water Act**

An Act of Congress which establishes policy to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

### **collaboration**

To work together in a cooperative relationship with American Indian tribes, government agencies, and the public in order to accomplish a desired goal.

### **composition (species)**

The species that make up a plant or animal community, and their relative abundance.

### **connectivity**

The arrangements of habitats that allows organisms and ecological processes to move across the landscape; patches of similar habitats are either close together or linked by corridors of vegetation.

### **conservation agreement**

A formal written agreement for implementing the conservation strategy. It describes specific actions and responsibilities of the participating agencies.

### **conservation assessment**

A gathering of information on the life history, status, and distribution of a species, species group, or ecosystem.

**conservation strategy**

A strategy outlining current activities or threats that are contributing to the decline of a species, along with the actions or strategies needed to reverse or eliminate such a decline or threat as identified in the conservation assessment.

**cover type**

The present vegetation of an area.

**cumulative effects**

Impacts on the environment that result from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time.

**desired condition**

A portrayal of the land, resource, or social and economic conditions that are expected to result in 50-100 years if objectives are achieved; a vision of the long-term conditions of the land.

**developed recreation**

Recreation that requires facilities that in turn result in concentrated use of an area; for example, a campground or ski resort.

**dispersed recreation**

Outdoor recreation in which visitors are diffused over relatively large areas.

**disturbance**

Any actions, functions, or events that influence or maintain the structure, composition, or function of terrestrial or aquatic ecosystems. Natural disturbances include, among others, drought, flood, wind, fire, insects, and pathogens. Human-caused disturbances include actions such as recreational use, livestock grazing, mining, road construction, timber harvest, and the introduction of exotic species.

**ecological function**

The process through which the constituent living/nonliving elements of ecosystems change and interact, including biogeochemical processes and succession.

**ecological processes**

The actions or events that link organisms (including humans) and their environment such as disturbance, successional development, nutrient cycling, carbon sequestration, productivity, and decay.

**ecosystem**

A naturally occurring, self-maintained system of varied living and non-living interacting parts that are organized into biophysical and human dimension components. An ecosystem is an interacting system of living organisms and their environment.

**ecosystem 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.

**eligibility (for Wild and Scenic Rivers)**

A river is eligible for inclusion in the National Wild and Scenic River System if it is free flowing and has at least one river-related value that is considered outstandingly remarkable.

## *Preliminary Analysis of the Management Situation*

### **endangered species**

Designated by the U.S. Fish and Wildlife Service, an animal or plant that has been given federal protection status because it is in danger of extinction throughout all or a significant portion of its natural range.

### **even-aged management**

A forest management method in which all trees in an area are harvested at one time or in several cuttings over a short time to produce stands that are all the same age or nearly so. This management method is commonly applied to shade-intolerant conifers and hardwoods.

### **fire condition class**

A classification of the amount of departure from the historical natural fire regime. There are three fire condition classes:

**Condition Class I:** Within the natural (historical) range of variability of vegetation characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbances.

**Condition Class II:** Moderate departure from the natural (historical) regime of vegetation characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbances.

**Condition Class III:** High departure from the natural (historical) regime of vegetation characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbances.

### **fire exclusion**

The disruption of a characteristic pattern of fire intensity and occurrence (primarily through fire suppression).

### **fire intensity**

A general term relating to the heat energy released in a fire.

### **fire interval**

Time (in years) between two successive fires in a designated area (i.e., the interval between two successive fire occurrences).

### **fire regime**

The characteristics of fire in a given ecosystem, such as frequency, predictability, intensity, and seasonality of fire. There are five characteristic fire regimes:

**I:** 0-35 year fire frequency and low to mixed severity (less than 75% of the dominant overstory vegetation replaced). Surface fires most common.

**II:** 0-35 year fire frequency and high (stand replacement) severity (greater than 75% of the dominant overstory vegetation replaced).

**III:** 35-100+ year frequency and mixed severity (less than 75% of the dominant overstory vegetation replaced).

**IV:** 35-100+ year frequency and high (stand replacement) severity (greater than 75% of the dominant overstory vegetation replaced).

**V:** 200+ year frequency and high (stand replacement) severity.

### **fire severity**

A term which refers to the effects of fire on the ecosystem. It depends on fuel consumption and heat flux into all living components. Downward heat transfer into the soil is an important determinant of fire severity (USDA Forest Service, RMRS GTR-105).

### **fire suppression**

All work and activities connected with fire-extinguishing operations, beginning with discovery and continuing until the fire is completely extinguished.

**forage**

Plant material (usually grasses, forbs, and brush) that is available for animal consumption.

**forbs**

Broadleaf ground vegetation with little or no woody material.

**forested land**

Land at least 10% occupied by forest trees of any size or formerly having such tree cover and not developed for non-forest use. Lands developed for non-forest use include areas for crops, improved pasture, residential, or administrative areas, improved roads of any width, and adjoining road clearing and powerline clearing of any width. (36 CFR 219.3)

**fragmentation**

The splitting or isolating of patches of similar habitat. Habitat can be fragmented by natural events or development activities.

**free-flowing**

A stream that exists or flows in a natural condition without impoundment, diversion, straightening, rip-rapping, or any other modification of the waterway.

**fuel**

Combustible wildland vegetative materials, living or dead. (FSM 5105)

**fuel treatment**

Any manipulation or removal of wildland fuels to reduce the likelihood of ignition or to lessen potential damage and resistance to control, e.g., lopping, chipping, crushing, piling, and burning.

**geographic information system (GIS)**

A computer system that stores and uses spatial (mappable) data.

**goal**

A concise statement of something to be achieved sometime in the future. It is normally expressed in broad, general terms and is timeless in that it has no specific date by which it is to be completed. Goal statements form the principal basis from which objectives are developed. (36 CFR 219.3)

**greenline**

The area of (more or less) continuous cover of perennial vegetation parallel to or surrounding a perennial waterbody. The greenline width varies dependent on soil and water features.

**gully plugs**

Small rock dams placed in gullies. Gully plugs create small ponds slowing storm water runoff and results in sediment deposits upslope of the plugs eventually filling in the gullies.

**gullying**

To form a deep ditch or channel.

**habitat**

The place where a plant or animal lives and grows under natural conditions.

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### **historical range of variability (HRV)**

The natural fluctuation of components of healthy ecosystems over time. In this AMS, 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-1800s), which would have varied within certain limits over time.

### **hydric**

Characterized by, relating to, or requiring an abundance of moisture.

### **implementation**

Those activities necessary to initiate the actions in the approved land and resource management plan.

### **indicators**

A measure of or surrogate for the elements of ecosystem management.

### **invasive species**

An alien species whose introduction does or is likely to cause economic or environmental harm, or harm to human health. An alien species includes, with respect to a particular ecosystem and species, its seeds, eggs, spores, or other biological material capable of propagating that species that is not native to that ecosystem (Executive Order #13112).

### **listed species**

A species identified on the Federal lists of endangered and threatened wildlife and plants.

### **longwall mining**

A highly efficient underground mining process in which a panel or block of coal, generally 700 foot wide and often over a mile long, is completely extracted using an auger-like machine. The working area is protected by a movable hydraulic roof support system. After mining out the coal, the supports are removed and the roof is allowed to collapse.

### **macroinvertebrates**

Aquatic insects, worms, clams, snails, and other animals without backbones that can be seen without the aid of a microscope and that may be associated with or live on sediments.

### **management indicator species (MIS)**

Representative species whose habitat conditions and population changes are used to assess the impacts of management activities on similar species in a particular area.

### **maintenance level**

Defines the level of service provided by, and maintenance required for, a specific road, consistent with road management objectives and maintenance criteria (FSH 7709.58, Sec 12.3-Transportation System Maintenance Handbook).

**maintenance level 1** - Assigned to intermittent service roads during the time they are closed to vehicular traffic. The closure period must exceed one year. Basic custodial maintenance is performed to keep damage to adjacent resources to an acceptable level and perpetuate the road to facilitate future management activities. Emphasis is normally given to maintaining drainage facilities and runoff patterns. Planned road deterioration may occur at this level. Appropriate traffic management strategies are "prohibit" and "eliminate." Roads receiving level 1 maintenance may be of any type, class, or construction standard, and may be managed at any other maintenance level during the time they are open for traffic. However, while being maintained at level 1, they are closed to vehicular traffic, but may be open and suitable for non-motorized uses (FSH 7709.58).

**maintenance level 2** - Assigned to roads open for use by high clearance vehicles. Passenger car traffic is not a consideration. Traffic is normally minor, usually consisting of one or a combination of administrative, permitted,

dispersed recreation, or other specialized uses. Log haul may occur at this level. Appropriate traffic management strategies are either 1) discourage or prohibit passenger cars or 2) accept or discourage high clearance vehicles.

**maintenance level 3** - Assigned to roads open and maintained for travel by a prudent driver in a standard passenger car. User comfort and convenience are not considered priorities. Roads in this maintenance level are typically low speed, single lane with turnouts and spot surfacing. Some roads may be fully surfaced with either native or processed materials. Appropriate traffic management strategies are either “encourage” or “accept”. “Discourage” or “prohibit” strategies may be employed for certain classes of vehicles or users.

**maintenance level 4** - Assigned to roads that provide a moderate degree of user comfort and convenience at moderate travel speeds. Most roads are double lane and aggregate surfaced. However, some roads may be single lane. Some roads may be paved and/or dust abated. The most appropriate traffic management strategy is “encourage”. However, the “prohibit” strategy may apply to specific classes of vehicles or users at certain times.

**maintenance level 5** - Assigned to roads that provide a high degree of user comfort and convenience. Normally, roads are double-lane, paved facilities. Some may be aggregate surfaced and dust abated. The appropriate traffic management strategy is “encourage”.

**microsite**

A spot located on the north or east sides of stationary or transportable material which provides favorable condition for tree growth by protecting the tree from sun, wind, animals, etc.

**mitigation**

Actions that avoid, minimize, reduce, eliminate, or rectify impacts from management practices.

**monitoring**

The process of collecting information to evaluate if objectives and anticipated results of a management plan are being realized, or if implementation is proceeding as planned.

**National Environmental Policy Act (NEPA)**

An abbreviation for the National Environmental Policy Act of 1969, which requires environmental analysis and public disclosure of federal actions.

**National Forest Scenic Byway**

A road on National Forest System Land that has been designated by the Chief of the Forest Service for its exceptional scenic, historic, cultural, recreational, or natural resources.

**non-reserved timberland**

Land has not been withdrawn from tree utilization through statute or administrative designation, as in Wilderness.

**outcomes**

The impact on a resource or landscape of program activities (for example, water quality changes and improved habitat condition).

**outstandingly remarkable value**

Characteristic of a river segment that is judged to be a rare, unique, or exemplary feature that is significant at a regional or natural scale. Values can be recreational, scenic, geological, historical, cultural, biological, botanical, ecological, heritage, hydrological, paleontological, scientific, or research-related.

**pattern**

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

**population**

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The people, wildlife, fish, or plants inhabiting a specific area.

### **prescribed fire**

Any fire ignited by management actions to meet specific objectives. A written, approved prescribed fire plan must exist, and NEPA requirements must be met before ignition

### **properly functioning condition (PFC)**

Ecosystems at any temporal or spatial scale are in a properly functioning condition when they are dynamic and resilient to perturbations to structure, compositions, and processes of their biological or physical components. Risk refers to situations in which the outcome is not certain, but the chance of system degradation beyond the point of resiliency and sustainability can be estimated.

### **proposed action**

The project or set of activities that a federal agency intends to implement, as defined in NEPA regulations.

### **Recreation Opportunity Spectrum (ROS)**

A framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities. The settings, activities, and opportunities for obtaining experiences are arranged along a continuum or spectrum divided into six classes--primitive, semiprimitive non-motorized, semiprimitive motorized, roaded natural, rural, and urban.

### **recovery plan**

Documents prepared for threatened and endangered species that detail the specific tasks needed for recovery.

### **recreation visitor day (RVD)**

Twelve hours of recreation use in any combination of persons and hours (one person for 12 hours, three persons for four hours, etc.).

### **resilient, resiliency**

The ability of a system to respond to disturbances. Resiliency is one of the properties that enable the system to persist in many different states of successional stages. In human communities, refers to the ability of a community to respond to externally induced changes such as larger economic or social forces.

### **riparian**

Pertaining to land that is next to water, where plants are dependent on a perpetual source of water.

### **roadless areas**

Areas that do not have developed and maintained roads, and that are substantially natural.

### **room and pillar mining**

Rooms are cut into the coal bed leaving a series of pillars, or columns of coal, to help support the mine roof and control the flow of air.

### **scale**

Defined in this framework as geographic extent; for example, region, sub-regional, or landscape scale.

### **scoping**

The process the Forest Service uses to determine, through public involvement, the range of issues that the planning process should address.

### **seep**

A spring where the water flows out of sand, soil, or gravel with no visible outlet.

**sensitive species**

Selected plant and animal species for which population viability is a concern, as evidenced by significant current or predicted downward trends in population numbers or density, and significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution. Sensitive species are not covered in the Endangered Species Act.

**seral species**

Shade intolerant species that dominate forest stands during early development stages. These species are generally more resistant to fire damage than the shade tolerant climax species. Seral species can be maintained in stands by keeping densities low with fire or mechanical treatments.

**snag**

A standing dead tree.

**soil disturbance**

Compaction, displacement, puddling, or burning of soil resource.

**soil productivity**

The inherent capacity of a soil to support the growth of specified plants, plant communities, or sequence of plant communities (FSM 2520).

**spring**

A place where water flows out of the ground under its own volition.

**stand**

1. A continuous group of similar plants. 2. A contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable unit.

**stipulation**

A condition, requirement, or item specified in a legal instrument.

**stream-side riparian areas**

Pertaining to land that is adjacent to a stream channel, where plants are dependent on a perpetual source of water.

**structure**

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

**succession**

The replacement in time of one plant community with another. The prior plant community (or successional stage) creates conditions that are favorable for the establishment of the next stage.

**suitability (for Wild and Scenic Rivers)**

Evaluation of eligible rivers for inclusion into the National Wild and Scenic River System by determining the best use of the river corridor and the best method to protect the outstandingly remarkable values within the river corridor.

**suited land**

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Forest land designated in the Forest Plan to be managed for timber production on a regulated basis.

### **sustainability**

The ability to maintain a desired condition or flow of benefits over time.

### **terrestrial**

Pertaining to the land.

### **threatened species**

Designated by the U.S. Fish and Wildlife Service, a plant or animal species likely to become endangered throughout all or a specific portion of its range within the foreseeable future.

### **Total Maximum Daily Load (TMDL)**

TMDL is the sum of waste load allocations for point sources, non-point sources, natural background, and a margin of safety. A TMDL specifies the amount of a pollutant that needs to be reduced to meet water quality standards set by the state. TMDL is used in a process to attain water quality standards that 1) identifies water quality problems and contributing pollutant sources, 2) allocates pollution control responsibilities among sources in the watershed, and 3) provides a basis for taking actions needed to restore a water body.

### **unclassified roads**

Roads on National Forest System lands that are not managed as part of the forest transportation system, such as unplanned roads, abandoned travelways, and off-road vehicle tracks that have not been designated and managed as a trail; and those roads that were once under permit or other authorization and were not decommissioned upon the termination of the authorization. (36 CFR 212.1)

### **vegetation structural stage**

Generalized descriptions of forest growth and aging stages based on the majority of the trees in the specific diameter distribution of the stand.

### **visual quality objective**

A desired level of excellence based on physical and sociological characteristics of an area. Refers to degree of acceptable alteration of the landscape. Visual quality objectives include:

**Maximum Modification** - Activity may dominate the characteristic landscape but should appear as a natural occurrence when viewed as background.

**Modification** - Activity may dominate the characteristic landscape but must, at the same time, utilize naturally established form, line, color, and texture. It should appear as a natural occurrence when viewed in foreground or middle-ground.

**Partial Retention** - Activities may be evident but must remain subordinate to the characteristic landscape. Preservation - Provides for ecological change only.

**Retention** - Activities are not evident to the casual forest visitor.

### **wallow**

The depression, pool, or pit produced by animals as they roll around clumsily in water, snow, or mud.

### **wetland**

An area that is inundated by surface or groundwater sufficient to support vegetation or aquatic life that requires saturated conditions.

**wilderness areas**

Areas that are without developed and maintained roads, and that are substantially natural, and that Congress has designated as part of the National Wilderness Preservation System.

**wildland fire use**

The management of naturally ignited wildland fires to accomplish specific pre-stated resource management objectives in pre-defined geographic areas outlined in Fire Management Plans.

**wildland/urban interface**

The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. Because of their location, these structures may be extremely vulnerable to fire should an ignition occur in the surrounding area.

**Acronyms**

ASQ	Allowable Sale Quantity	RFDS	Reasonably Foreseeable Development Scenario
AMP	Allotment Management Plan	RNA	Research Natural Area
AMS	Analysis of the Management Situation	ROD	Record of Decision
AUM	Animal Unit Month	ROS	Recreation Opportunity Spectrum
ATV	All Terrain Vehicle	RPA	Resources Planning Act
BLM	Bureau of Land Management	RVD	Recreation Visitor Day
CFR	Code of Federal Regulations	R4	Region 4 of the USDA Forest Service
COS	Committee of Scientists	SMCRA	Surface Mining Control and Reclamation Act of 1977
DBH	Diameter at Breast Height	SMS	Scenery Management System
DEIS	Draft Environment Impact Statement	SPR	Semi-Primitive Recreation
EA	Environmental Assessment	TES	Threatened, Endangered, and Sensitive
EIS	Environmental Impact Statement	UDWR	Utah Division of Wildlife Services
ESA	Endangered Species Act	USDA	United States Department of Agriculture
FACA	Federal Advisory Committee Act	USDI	United States Department of Interior
FEIS	Final Environmental Impact Statement	USFS	United States Forest Service
FSH	Forest Service Handbook	USFWS	United States Fish and Wildlife Service
FSM	Forest Service Manual	VMS	Visual Management System
GIS	Geographical Information System	WIN	Watershed Improvement Needs
HFRA	Healthy Forest Restoration Act	WPE	Watershed Protection Emphasis
HRV	Historical Range of Variability	WSR	Wild and Scenic Rivers
LRMP	Land and Resource Management Plan		
LTSYC	Long Term Sustained Yield Capacity		
MIS	Management Indicator Species		
MLA	Mine Leasing Act		
MLNF	Manti-La Sal National Forest		
MMBF	Million Board Feet		
MOU	Memorandum of Understanding		
MWS	Municipal Water Supply		
NAL	Not Available for Leasing		
NEPA	National Environmental Policy Act		
NFMA	National Forest Management Act		
NOI	Notice of Intent		
NVUM	National Visitor Use Monitoring Survey		
OHV	Off Highway Vehicle		
OSM	Office of Surface Mining		
PFC	Properly Functioning Condition		
PL	Public Law		
RARE II	Roadless Area Review and Evaluation (1977-79)		