

**ACTIVE PREFERENCE:** The total number of animal unit months of forage that can be licensed.

**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. Class II areas permit moderate deterioration of existing air quality.

**ALLOCATION:** Process to specifically assign use between and ration among competing users for a particular area of public land or related waters.

**ALLOTMENT:** An area allocated for livestock use by one or more qualified grazing permittees including prescribed numbers and kinds of livestock under one plan of management.

**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).

**ALL-TERRAIN VEHICLE (ATV):** All-terrain vehicle - 42" width or smaller. A small, amphibious motor vehicle with wheels or tractor treads for traveling over rough ground, snow, or ice, as well as on water.

**ALTERNATIVE:** One of at least two proposed means of accomplishing planning objectives.

**ANALYSIS:** The examination of existing and/or recommended management needs and their relationships to discover and display the outputs, benefits, effects, and consequences of initiating a proposed action.

**ANIMAL UNIT MONTH (AUM):** The amount of forage required to sustain the equivalent of 1 cow for 1 month; 1 wild horse for 1 month; or 5 sheep for 1 month; 8.9 deer for 1 month (winter season), 5.8 deer for 1 month (summer season); 9.6 antelope for 1 month; 5.5 bighorn sheep for 1 month; 2.2 burros for 1 month; 1.2 elk for 1 month (winter season) or 2.1 elk for 1 month (year-long) (usually 800 lbs. of useable air-dried forage).

**AQUATIC:** Living or growing in or on the water.

**AQUIFER:** Stratum or zone below the surface of the earth capable of producing water, as from a well. A saturated bed, formation, or group of

formations which yield water in sufficient quantity to be of consequence as a source of supply. An aquifer acts as a transmission conduit and storage reservoir.

**ARCH:** A natural opening through a narrow wall or plate of rock.

**ARCHAEOLOGY:** The scientific study of the life and culture of past, especially ancient, peoples, as by excavation of ancient cities, relics, artifacts, etc.

**AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC):** An area of public lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life/provide safety from natural hazards.

**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 local biodiversity.

## Glossary

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**BIOLOGICAL SOIL CRUSTS:** Composed of cyanobacteria, green and brown algae, mosses, and lichens that bind together with soil particles to create a crust.

**BITUMEN:** Any of various mixtures of hydrocarbons such as asphalt, tar, or petroleum.

**CENOMANIAN-SANTONIAN AGES:** Span of geologic ages including Cenomanian, Turonian, Coniacian, and Santonian during Late Cretaceous time, 98 to 84 million years ago.

**CONCESSIONAIRE:** Someone who holds a long term authorization to possess and use public lands to provide recreation facilities and services for a fixed period of time authorized under BLM regulations.

**CONSULTATION:** A meeting to discuss, decide, or plan something.

**CRYPTOBIOTIC CRUST:** See BIOLOGICAL SOIL CRUSTS

**CRYPTOGAM:** A plant that bears no flowers or seeds but propagates by means of spores. Cryptogamic organisms make up a cryptogamic crust or surface on certain soils.

**CUBIC FEET PER SECOND (cfs):** As a rate of stream flow, a cubic foot of water passing a referenced section in 1 second of time. One cfs flowing for 24 hours will yield 1.983 acre-feet of water.

**CULTURAL RESOURCES:** Those resources of historical and archaeological significance.

**CUMULATIVE IMPACTS:** Additional and interactive combinations of activities that are not necessarily individually quantitatively different, but together require different management techniques and applications. Cumulative impacts occur when there are multiple infringements on the same values.

**DIRT BIKE:** Non-street legal motorcycle.

**EASEMENT:** A right or privilege one may have on another's land.

**ECOSYSTEM:** A system made up of a community of animals, plants, and bacteria and its interrelated physical and chemical environment.

**ELIGIBLE RIVER SEGMENT:** A section of a river that qualifies for inclusion into the National Wild and Scenic River System through determination that it is free-flowing and with its adjacent land area possessing at least one river-related value considered to be outstandingly remarkable.

**ENDANGERED SPECIES:** Any animal or plant species in danger of extinction throughout all of a significant portion of its range. These species are listed by the U. S. Fish and Wildlife Service.

**EPHEMERAL STREAM:** A stream that flows only in direct response to precipitation, and whose channel is at all times above the water table.

**EQUESTRIAN:** Of horses, horsemen, or horseback riding.

**FAUNA:** The animals of a specified region or time.

**FLOODPLAIN:** A plain along a river, formed from sediment deposited by floods.

**FLORA:** The plants of a specified region or time.

**FORAGE:** Vegetation of all forms available and of a type used for animal consumption.

**FORESTRY PRODUCT AREAS:** Forest lands stocked with other than timber species (i.e., piñon, juniper, mountain mahogany, etc.). Uses of the products are generally limited to firewood, posts, and harvest of piñon pine nuts

**FORMATION:** The primary unit in stratigraphy consisting of a succession of strata useful for mapping or description. Most formations possess certain lithologic features that may indicate genetic relationships.

**FOSSIL:** The remains or traces of animals or plants which have been preserved by natural causes in the earth's crust exclusive of organisms

which have been buried since the beginning of historic times.

**FOUR-WHEEL-DRIVE (4WD):** Four-wheel-drive, differential transfer case disperses 50/50 front and rear displacement. Trucks, cars, buses, or sport utility vehicles with high clearance and the ability to operate off-pavement as well as on highways.

**FUNCTIONING-AT-RISK:** Riparian-wetland areas that are in functional condition but an existing soil, water, or vegetation attribute makes them susceptible to degradation.

**GEOLOGY:** The science which studies the Earth, the rocks of which it is composed, and the changes it has undergone or is undergoing.

**GRAZING ALLOTMENT CATEGORIES:** Direction under which all grazing allotments are categorized for management purposes into three groups. The overall objectives are: M-maintain the current resource conditions; I-improve the current resource conditions; and C-custodial manage the existing resource values.

**GRAZING PERMIT:** An authorization which allows grazing on public lands. Permits specify class of livestock on a designated area during specified seasons each year. Permits are of two types: preference (10 year) and temporary nonrenewable (1 year).

**GRAZING PREFERENCE:** The total number (active and suspended non-use) of animal unit months of livestock grazing on public land apportioned and attached to base property owned or controlled by a permittee.

**GRAZING SYSTEM:** A prescribed method of grazing a range allotment having two or more pastures or management units to provide periodic rest for each unit.

**HABITAT:** A specific set of physical conditions in a geographic area(s) that surrounds a single species, a group of species, or a large community. In wildlife management, the major components of habitat are food, water, cover, and living space.

**HANGING GARDEN:** Small pockets of vegetative associations surrounding Acanyon-wall@springs that often contain a wide variety of unique plant and insect species. Hanging gardens are characteristic of flat-lying strata with deeply incised canyons of the Colorado Plateau.

**HYDROCARBON:** An organic compound containing only hydrogen and carbon, such as petroleum or crude oil.

**HYDROLOGY:** The science dealing with the properties, distribution, and circulation of water.

**IMPACT:** Synonymous with effects. Includes ecological, aesthetic, historic, cultural, economic,

social, or health, whether direct, indirect, or cumulative. Impacts may also include those resulting from actions which may have both beneficial and detrimental (adverse) effects. Impacts may be considered as direct, indirect, or cumulative:

**C Direct:** Impacts caused by an action occurring at the same time and place.

**C Indirect:** Impacts caused by the proposed action and occurring later in time or farther removed in distance, but are still reasonably foreseeable.

**C Cumulative:** Those which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions.

**INHOLDING:** A non-Federal parcel of land that is completely surrounded by Federal land.

**INSTANT STUDY AREA (ISA):** A designation of all primitive or natural areas formally identified prior to November 1, 1975, that were to be studied for wilderness suitability and recommended to the President by July 1, 1980 as mandated under Section 603 of FLPMA.

#### **INTERIM MANAGEMENT POLICY**

**(IMP):** An interim measure governing lands under wilderness review. This policy protects Wilderness Study Areas from impairment of their suitability as wilderness.

## Glossary

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**INTERMITTENT STREAM:** Seasonal stream. A stream that flows only at certain times of the year when it receives water from springs or from some surface source, such as melting snow in mountainous areas.

**INVERTEBRATE SPECIES:** Any animal without a backbone or spinal column.

**KIND OR CLASS OF LIVESTOCK:**

**C Kind:** The species of domestic livestock-cattle and sheep.

**C Class:** The age class (i.e., yearling or cows) of a species of livestock.

**KNOWN GEOLOGIC STRUCTURES:**

Technically, the known geologic structure of a producing oil or gas field is construed by the Geological Survey to be the trap, whether structural or stratigraphic, in which an accumulation of oil or gas has taken place, and the limits of said trap, irrespective of the degree to which it may be occupied by oil or gas. Known geologic structures are frequently much more extensive than the pools of oil or gas they may contain, and the extent and place of any oil or gas accumulation therein, though influenced by structure, is finally determined by such factors as stratigraphy, hydrocarbon supply, sand conditions, and hydrostatic pressure. The Geological Survey seeks to evaluate the net effect of these several factors in terms of reasonably presumptive productive acreage and, as far as practicable, to conform the results, modified to include a fair safety margin, to the subsurface

contours of the dominant structural feature involved.

**LAND USE PLAN:** A plan that reflects an analysis of activity systems and a carefully studied estimate of future land requirements for expansion, growth control, and revitalization or renewal. The plan shows how development in the area should proceed in the future to insure the best possible physical environment for living, the most economic and environmentally sensitive use of land, and the proper balance in use. The land use plan embodies a proposal as to how land should be used in the future, recognizing local objectives and generally accepted principals of health, safety, convenience, economy, and general living amenities.

**LEASE:** An authorization or contract by which one party (lessor) conveys the use of property, such as real estate, to another (lessee) in return for rental payments. In the case of oil, gas, and coal leases in the Monument, the U.S. Department of Interior is a lessor and has conveyed the right to explore and develop these resources to corporations or individuals on various land tracts. In addition to rental payments, lessees also pay royalties (a percentage of value) to the lessor from resource production.

**LEASABLE MINERAL:** A mineral such as coal, oil shale, oil and gas, phosphate, potash, sodium, geothermal resources, and all other minerals that may be developed under the Mineral Leasing Act of 1920, as amended.

**LOCATABLE MINERAL:** Any valuable mineral that is not saleable or leasable including gold, silver, copper, uranium, etc., that may be developed under the General Mining Law of 1872.

**MANAGEMENT IGNITED FIRE:**

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

**MIGRATORY:** A group of people, or of birds, fishes, or plants that move from one region to another with the change of seasons or climate.

**MINERAL ENTRY:** The location of mining claims by an individual to protect his/her right to a valuable mineral.

**MINERAL MATERIALS:** Refer to saleable minerals.

**MINERAL POTENTIAL:**

**C High:** Those lands currently producing oil or gas or having high current industry interest.

C **Moderate:** Those lands which have had oil and gas shows in favorable geologic environments.

C **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 potential.

**MINERAL WITHDRAWAL:** A withdrawal of public lands which are potentially valuable for leasable minerals. This precludes the disposal of the lands except with a mineral reservation, unless the lands are found to not be valuable for minerals.

**MINIMUM IMPACT FILMING:** A filming activity which does not involve:

C impact to sensitive habitat or species

C impact to Native American Indian sacred rites

C use of explosives or major use of pyrotechnics

C more than minimum impacts to land, air, or water

C use of exotic species with danger of introduction into the area

C adverse impacts to sensitive resources including historic, cultural, or paleontological sites; sensitive soils; relict environments; wetlands or riparian areas.

C use of heavy equipment

C use of vehicles off designated routes

C set construction

C significant restriction of public access

C significant use of domestic livestock

C aircraft taking off, landing, or flying less than 1,000 feet above the site

C 15 or more production vehicles, or 75 or more people

C continue in excess of 10 days

**MITIGATING MEASURES:** Constraints, requirements, or conditions imposed to reduce the significance of or eliminate an anticipated impact to environmental, socioeconomic, or other resource value from a proposed land use. Committed mitigating measures are those measures BLM is committed to enforce (i.e., all applicable laws and their implementing regulations).

**MOUNTAIN BICYCLE:** Bicycle designed for off-pavement use. Generally are multi-geared with fat knobby tires. Frames and tire rims are stronger than road bicycles. Sometimes referred to in this document as a mechanized vehicle.

#### **NATIONAL WILD AND SCENIC RIVERS**

**SYSTEM:** Established by the Wild and Scenic Rivers Act of 1958 to protect rivers and their immediate environments that have outstanding scenic, recreation, geologic, fish and wildlife, historic, cultural, and other similar values and are preserved in free-flowing conditions. The system

provides for the designation of three types of rivers:

C **Recreation:** Rivers or sections of rivers readily accessible by road or railroad that may have some development along their shorelines and may have undergone some impoundment or diversion in the past.

C **Scenic:** Rivers or sections of rivers free of impoundments, with shorelines or watersheds still largely undeveloped, but accessible in places by road.

C **Wild:** Rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with essentially primitive watersheds or shorelines and unpolluted waters.

**NATURALNESS:** An area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." (Section 2c, WILDERNESS ACT).

**NON-FUNCTIONING:** Riparian-wetland areas that clearly are not providing adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows.

**OFF-HIGHWAY VEHICLES (OHV):** Any motorized vehicle designed for or capable of cross-country travel over lands, water, sand, snow, ice, marsh, swamp-land, or other terrain.

## Glossary

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### **OFF-HIGHWAY VEHICLE DESIGNATIONS:**

- C **Open:** Designated areas where OHVs may be operated.
- C **Limited:** Designated areas and trails where the use of an OHV is subject to restrictions, such as limiting the dates and times of use (seasonal restrictions); limiting use to designated roads and trails; limiting use to existing roads and trails. Combinations of restrictions are possible.
- C **Closed:** Designated areas, roads, and trails where the use of an OHV is permanently or temporarily prohibited. Emergency use of vehicles is allowed.

**OUTSTANDING:** Standing out among others of its kind; distinguished; excellent.

**OUTSTANDING NATURAL AREA (ONA):** These are established to preserve scenic values and areas of natural wonder. The preservation of these resources in their natural condition is the primary management objective. Access roads, parking areas, and public use facilities are normally located on the periphery of the area. The public is encouraged to walk into the area for recreation purposes wherever feasible.

**PALEONTOLOGY:** The branch of geology that deals with life forms from the past, especially prehistoric life forms, through the study of plant and animal fossils.

**PERCHED WATER TABLE:** Water table above an impermeable bed underlain by

unsaturated rocks of sufficient permeability to allow movement of ground water.

**PERENNIAL STREAM:** A stream that flows continuously. Perennial streams are generally associated with a water table in the localities through which they flow.

**PERMIT:** A short-term, revocable authorization to use public lands for specific purposes.

**PERMITTEE: (Livestock Operator)** A person or organization legally permitted to graze a specific number and class of livestock on designated areas of public land during specified seasons each year.

**PETRIFIED WOOD:** Fossilization of wood through introduction or replacement by silica (silicified wood) in such a manner that the original form and structure of the wood is preserved.

**PHYSIOGRAPHIC REGION:** Region of similar geologic structure and climate with a unified history of land formation.

**PLACER DEPOSIT:** A mass of gravel, sand, or similar material derived from weathering and erosion of bedrock. These masses often contain heavy mineral grains concentrated due to the action of water.

**PREY SPECIES:** An animal taken by a predator as food.

**PROPERLY FUNCTIONING CONDITION (PFC):** Riparian-wetland areas are functioning properly when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality; filter sediment; capture bedload, and aid floodplain development; improve flood-water retention and ground-water recharge; develop root masses that stabilize streambanks against cutting action; develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity.

**RANGELAND IMPROVEMENTS:** Any activity or program on or relating to rangelands that is designed to improve forage production, change vegetation composition, control patterns of use, provide water, stabilize soil and water conditions, and enhance habitat for livestock, wildlife, and wild horses and burros. Rangeland improvements include land treatments (e.g., chaining, seeding, burning, etc.), stockwater developments, fences, and trails.

**RAPTORS:** Birds of prey, such as the eagle, falcon, hawk, owl, or vulture.

**RELICT PLANT COMMUNITY:** Areas of plants that have persisted despite the pronounced warming and drying of the interior west over the last few thousand years and/or have not been

influenced by settlement and post-settlement activities.

**RESEARCH NATURAL AREA (RNA):** A natural area established and maintained for research and education, which may include:  
 C typical or unusual plant or animal types, associations, or other biotic phenomena  
 C characteristic or outstanding geologic, soil, or aquatic features or processes.  
 The public may be excluded or restricted from such areas to protect studies.

**RIGHT-OF-WAY:** Federal land authorized to be used or occupied for the construction, operation, maintenance, and termination of a project, pursuant to a ROW authorization.

**RIPARIAN HABITAT:** Riparian habitat is defined as an area of land directly influenced by permanent (surface or subsurface) water. They have visible vegetation or physical characteristics reflective of permanent water influence. Lake shores and stream-banks are typical riparian areas. Excluded are such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil.

**RIPARIAN VEGETATION:** Plants adapted to moist growing conditions along streams, waterways, ponds, etc.

**ROUTE:** A path, way, trail, road, or other established travel corridor.

**SALEABLE MINERALS:** Minerals that may be sold under the Material Sale Act of 1947, as amended. Included are common varieties of sand, stone, gravel, and clay.

**SEASON-OF-USE:** The timing of livestock grazing on a rangeland area.

**SPECIAL STATUS SPECIES:** Wildlife and plant species either Federally listed or proposed for listing as endangered or threatened; state-listed or BLM determined priority species.

**STRATIGRAPHY:** The branch of geology which treats the formation, composition, sequence, and correlation of stratified rocks as part of the Earth's crust.

**STREET LEGAL MOTORCYCLE:** Utah law defines this as a motorcycle which has a tail light, headlight, turn signal, and is registered.

**SUSPENDED:** Term used when describing an administrative state of mining operations or oil, gas, and mineral leases, whereby the operation or lease is suspended or on standby while an administrative action is contemplated. When mineral leases are suspended, the lessee cannot explore, develop, or otherwise enjoy the benefits of the lease. Also, the term (time period) of the lease is suspended.

**TAR SAND:** A commonly used name to describe a sedimentary rock reservoir

impregnated with a very heavy, viscous crude oil which cannot be produced by conventional production techniques. Tar-sand infers a sandy sedimentary rock as the host, but this is not always the case as other porous rocks such as siltstone and fractured carbonates have also been classified as tar-sand.

**THREATENED SPECIES:** Any animal or plant species likely to become endangered within the foreseeable future throughout all of a significant portion of its range. These species are listed by the U.S. Fish and Wildlife Service.

**TINAJAS:** Surface depressions in rock formations, particularly sandstone, that collect water and provide habitat for specialized plant and animal species.

**TOPOGRAPHY:** The accurate and detailed description of a place.

**TOTAL DISSOLVED SOLIDS (TDS):** The total quantity (reported in milligrams per liter) of dissolved materials in water.

**TREND IN RANGE CONDITION:** An interpretation of the direction of change in range condition. These determinations may relate to ecological site or forage conditions. Also vegetation trend that is improving (upward) not changing (static) and declining (downward).

## Glossary

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**TWO-WHEEL-DRIVE (2WD):** Vehicle clearance generally lower than with a 4WD. Not designed to travel off-pavement.

**UTILITY:** A service provided by a public utility, such as electricity, telephone, or water.

### **VEGETATION RESTORATION**

**METHODS:** Mechanical, chemical, biological, and fire vegetation treatments used to restore and promote a natural range of native plant associations. Treatments are designed for specific areas and differ according to the area's suitability and potential. The most common land treatment methods alter the vegetation by spraying with pesticides, burning, or plowing, followed by seeding with native plant species.

**VERTEBRATE SPECIES:** Any animal with a backbone or spinal column.

**VISITOR DAY:** Twelve visitor hours which may be aggregated by one or more persons in single or multiple visits.

**VISITOR USE:** Visitor use of a resource for inspiration, stimulation, solitude, relaxation, education, pleasure, or satisfaction.

### **VISUAL RESOURCE MANAGEMENT**

**(VRM) CLASSES:** Management classes are determined on the basis of overall scenic quality, distance from travel routes, and sensitivity to change.

**C Class I:** Provides primarily for natural ecological changes only. It is applied to wilderness areas, some natural areas, and similar situations where management activities are to be restricted.

**C Class II:** Changes in the basic elements caused by a management activity may be evident in the characteristic landscape, but the changes should remain subordinate to the visual strength of the existing character.

**C Class III:** Changes in the basic elements caused by a management activity may be evident in the characteristic landscape, but the changes should remain subordinate to the visual strength of the existing character.

**C Class IV:** Changes may subordinate the original composition and character but must reflect what could be a natural occurrence within the characteristic landscape.

**WATERSHED:** All land and water within the confines of a drainage divide.

**WETLANDS:** Lands including swamps, marshes, bogs, and similar areas, such as wet meadows, river overflows, mud flats, and natural ponds.

**WILD AND SCENIC RIVERS:** See National Wild and Scenic River System.

**WILDERNESS AREA:** An area officially designated as wilderness by Congress. Wilderness areas will be managed to preserve wilderness characteristics and shall be devoted to

"the public purposes of recreation, scenic, scientific, educational, conservation, and historical use."

### **WILDERNESS STUDY AREA (WSA):**

Areas under study for possible inclusion as a Wilderness Area in the National Wilderness Preservation System.

**WILDFIRE:** A free-burning fire requiring a suppression response.

**WITHDRAWAL:** Removal or withholding of public lands from operation of some or all of the public land laws (settlement, sale, mining, and/or mineral leasing). An action which restricts the use or disposal of public lands, segregating the land from the operation of some or all of the public land and/or mineral laws and holding it for a specific public purpose. Withdrawals may also be used to transfer jurisdiction of management to other Federal agencies.

Betencourt, J. 1984. Late Quaternary Plant Zonation and Climate in Southeastern Utah. *Great Basin Naturalist* 44:1-32.

Welsh, S.L. and C.A. Toft. 1981. Biotic Communities of Hanging Gardens in Southeastern Utah. *National Geographic Society Research Reports* 13:663-681.

United States Department of Agriculture, Natural Resources Conservation Service. 1997. Introduction to Microbiotic Crusts.

United States Department of the Interior, Fish and Wildlife Service. 1999. Utah Field Office Guidelines for Raptor Protection From Human and Land Use Disturbances. Salt Lake City, Utah. 41 pp.

**CHAPTER 2**

\$ Alternative A reads: ~~A~~Animal damage control activities within the Monument would be limited to the taking of individual animals responsible for verified livestock kills.@ Alternative A should read: ~~A~~The BLM would urge Animal and Plant Inspection Service, through amendments to existing agreements and other measures, to target individual predators rather than predator populations.@

\$ Alternative B: Corrected route mileage:

Administrative routes: 310 miles  
 Public (no ATVs): 227 miles  
 Public ATVs allowed: 591 miles  
 Total: 1,128 miles

\$ Wild and Scenic River DEIS Maps 2.2 and 2.7 are incorrect. Replace with new DEIS Maps 2.2 and 2.7 found on the following pages.

**CHAPTER 3**

\$ Information received from Conoco Inc. during the comment period revealed an error in the Draft on page 3.56 under the heading Oil and Gas. The Reese Canyon State 32 well, drilled in 1997, encountered hydrocarbons and methane rather than trace amounts of CO<sub>2</sub> as indicated in the Draft Management Plan/Draft Environmental Impact Statement. The Cambrian Tapeats Sandstone tested 54.4 percent hydrocarbons (C1 through C6), 45 percent nitrogen and only 0.5 percent CO<sub>2</sub>. The Cambrian Muav Limestone tested 99 percent methane and 1 percent CO<sub>2</sub>.

**CHAPTER 4**

\$ The Summary of the Environmental Consequences Table - Alternative D, pages S.24 and 4.70, is incorrect. The text in Chapter 4, page 4.40, is correct. Change table (under Alternative D) to read ~~A~~Visitor experience would not be impacted by animal damage control activities, because they would not be allowed.@instead of ~~A~~Animal damage control activities would directly and indirectly impact visitor experiences.@

\$ During the comment period it was brought to the BLM's attention that there was a math error in the economic analysis under Alternative C on pages S.27, 4.47, and 4.73. The following is a correction to the Draft: ~~A~~Local government revenues attributable to this alternative would be \$288,000 in 2012, with expenditures of \$245,000, for a net revenue of \$236,000 to local governments...@ The net revenue figure was brought forward from Alternative B. The reference table in Appendix 19 (A19.2) notes that the net revenue is \$43,000, which is also the correct calculation if \$245,000 is subtracted from \$288,000. The \$236,000 figure has been replaced with \$43,000.

**APPENDICES**

\$ The scientific names used for Brewer's blackbird and for the mallard in Appendix 15 of the DEIS are in error and are corrected as follows: Brewer's blackbird should be *Euphagus cyanocephalus*. Mallard should be *Anas platyrhynchos*.

\$ Appendix 4 (page A4.11) in the DEIS incorrectly identified the Bonneville cutthroat trout as being present in the West Fork of Boulder Creek. It should have read the Colorado cutthroat trout.

\$ A word is missing on page A6.1 in the Areas of Critical Environmental Concern discussion. The missing words, ~~A~~these resources,@has been added to the text in Appendix 10 of this document.

# Map 2.2: (Corrected 10/30/98) Wild and Scenic Rivers Suitable Segments Alternatives B and E (DEIS)



- ⊙ Principal Communities
- ∩ Monument Boundary
- RIVER CLASSES**
- ∩ Wild
- ⋯ Scenic
- ∩ Recreational

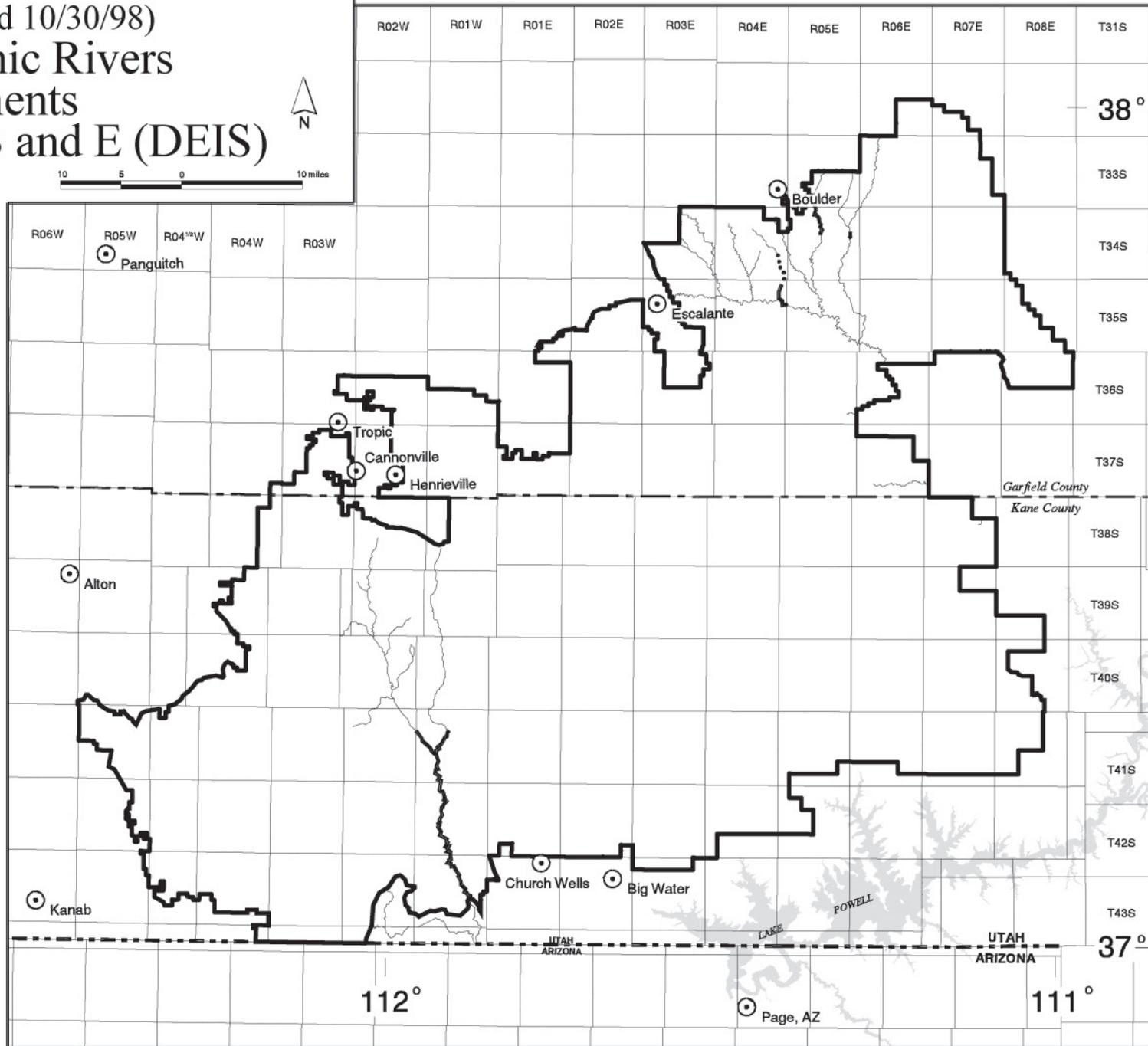


## Location Map

Data has been gathered from a variety of sources and has been integrated to provide a planning context. The data shown outside the Monument may not have been verified. This map represents available information, and should not be interpreted to alter existing authorities or management responsibilities.



Produced by  
Grand Staircase-Escalante  
National Monument  
1999



112°

111°

38°

37°

# Map 2.7: (Corrected 10/30/98) Wild and Scenic Rivers Suitable Segments Alternative D (DEIS)

- ⊙ Principal Communities
- ∇ Monument Boundary
- RIVER CLASSES
- ∕ Wild
- ⋯ Scenic
- ∕ Recreational

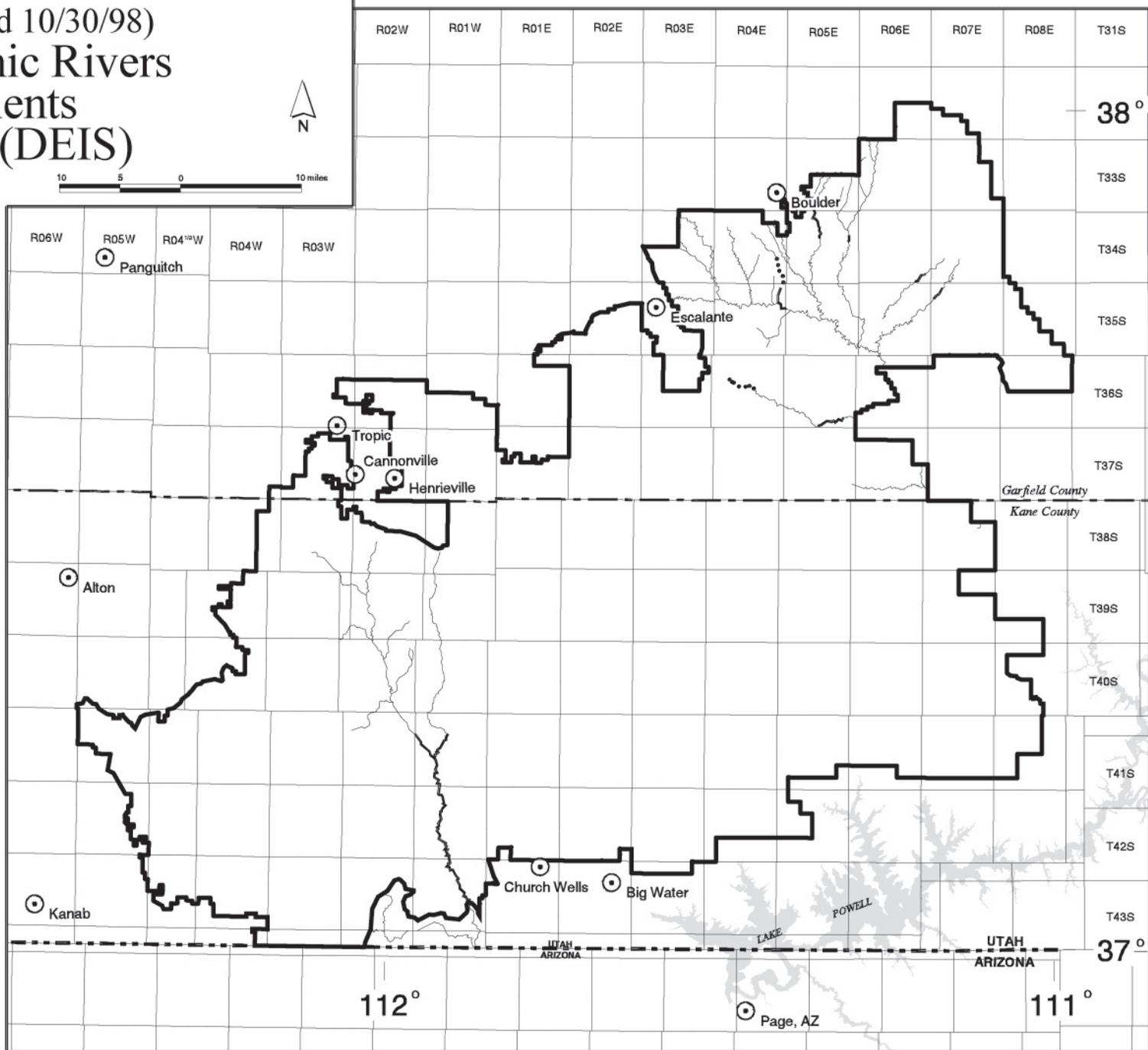


## Location Map

Data has been gathered from a variety of sources and has been integrated to provide a planning context. The data shown outside the Monument may not have been verified. This map represents available information, and should not be interpreted to alter existing authorities or management responsibilities.



Produced by  
Grand Staircase-Escalante  
National Monument  
1999



112°

111°

38°

37°