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8.0 ACRONYMS AND GLOSSARY

8.1 ACRONYMS

AADT	Annual Average Daily Traffic
AARC	Average Annual Rate of Change
AASHTO	American Association of Safe Highways and Transportation Officials
ACEC	Areas of Critical Environmental Concern
ACGIH	American Conference of Governmental Industrial Hygienists
ACHP	Advisory Council on Historic Preservation
A.D.	Anno Domini
ADT	Average Daily Traffic
AML	Appropriate Management Levels
AMS	Accelerator Mass Spectrometry
ANC	Acid Neutralization Capacity
APD	Applications for Permit to Drill
APE	Area of Potential Effects
API	American Petroleum Institute
AO	Authorized Officer
AQRV	Air Quality Related Value
ATV	All-Terrain Vehicle
AU	Assessment Unit
AUM	Animal Unit Month
BBC	Bill Barrett Corporation
bbls	Barrels
bbl	Barrel
B.C.	Before Christ
BCF	Billion Cubic Feet
bcfe	billions of cubic feet equivalent
BCS	Barrier Canyon Style
BEBR	University of Utah Bureau of Business and Economic Research
b_{ext}	light-extinction coefficient
BGEPA	Bald and Golden Eagle Protection Act
bgs	below ground surface
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BMP	Best Management Practices
BOD	Biological Oxygen Demand
B.P.	Before Present
BTEX	Benzene, Toluene, Ethylbenzene, Xylene
CA	Cooperating Agencies
CAA	Clean Air Act
CaCO ₃	Calcium Carbonate
CASTNet	Clean Air Status and Trends Network
CBM	Coalbed methane
CDOT	Colorado Department of Transportation
CDP	Census Designated Place
CEQ	Council on Environmental Quality

CEU	College of Eastern Utah
CFR	Code of Federal Regulations
cfs	Cubic Feet per Second
CH ₄	Methane
CIAA	Cumulative Impact Analysis Area
cm	Centimeter
CMT	Culturally Modified Tree
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
COA	Condition of Approval
CPAA	Colorado Plateau Archaeological Alliance
CPO	Hopi Cultural Preservation Office
CPRU	Colorado Plateau Recovery Unit
CR	County Road
CRCT	Colorado River Cutthroat Trout
CRM	Cultural Resource Management
CWA	Clean Water Act
CX	Categorical Exclusion
DAQ	Utah Division of Air Quality
DAP	Di-ammonium phosphate
dB	Decibel
dBA	A-weighted Decibel
DEIS	Draft Environmental Impact Statement
DEM	Digital Elevation Model
DO	Dissolved Oxygen
DOC	U.S. Department of Commerce
DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
DOL	U.S. Department of Labor
DOT	U.S. Department of Transportation
DPM	Diesel exhaust particulate matter
dv	Deciview
EA	Environmental Assessment
EDA	Economic Development Agency
EIA	Energy Information Administration
EIS	Environmental Impact Statement
EIS Consultants	EIS Consultants, Inc.
EO	Executive Order
EPA	Environmental Protection Agency
ERMA	Extensive Recreation Management Area
ESA	Endangered Species Act
ESAL	Equivalent Single Axle Loads
famsl	feet above mean sea-level
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FLAG	Federal Land Managers' Air Quality Related Values Workgroup
FLM	Federal Land Manager
FLPMA	Federal Land Policy Management Act

FMU	Fire Management Unit
FO	Field Office
FR	Federal Register
FWS	Fish and Wildlife Service
FY	Fiscal Year
GAP	Geographic Approach to Planning
GEG	Golden Engineering Group LLC
GIS	Geographic Information System
GOED	Utah Governor's Office of Economic Development
GOPB	Utah Governor's Office of Planning and Budget
gpm	Gallons Per Minute
GPS	Global Positioning System
GWP	Global Warming Potential
ha	hectare
HAP	Hazardous Air Pollutant
HMA	Herd Management Area
HMAP	Herd Management Area Plan
hp	horsepower
IDT	Interdisciplinary Team
IMACS	Intermountain Antiquities Computer System
IMPROVE	Interagency Monitoring of Protected Visual Environments
kg	kilograms
km	kilometers
KOP	Key Observation Points
KOSLA	Known Oil Shale Leasing Areas
LAC	Limits of Acceptable Change
lbs	pounds
LOC	Levels of Concern
LOP	Life of Project
LTAP	Local Technical Assistance Program
LUP	Land Use Plan
MACT	Maximum Achievable Control Technology
MBTA	The Migratory Bird Treaty Act
MCL	Maximum Contaminant Levels
MEI	Maximally Exposed Individual
Meq/L	Milliequivalents per Liter
MFP	Management Framework Plan
mg/L	Milligrams per Liter
MLA	Mineral Leasing Act of 1976
MLE	Most Likely Exposure
MLRA	Major Land Resource Area
MMBtu	Million Btu
MMBTU	Thousands British Thermal Units
MMscf	Million Standard Cubic Feet

MOAC	Montgomery Archaeological Consultants, Inc.
MOU	Memorandum of Understanding
MPL	Multiple Property Listing
MPR	Mineral Potential Report
MPS	Multiple Property Submission
Mscf	Thousand Standard Cubic feet per day
MSDS	Material Safety Data Sheet
MSO	Mexican spotted owl
MSP	Minimum School Program
n	nitrogen
n-hexane	normal hexane
N/A	Not Applicable or Not Available
NAAQS	National Ambient Air Quality Standards
NADP	National Atmospheric Deposition Program
NAGPRA	Native American Graves Protection and Repatriation Act of 1990
NCHRP	National Cooperative Highway Research Program
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHL	National Historic Landmark
NG	Non-game Species
NHPA	National Historic Preservation Act
NMCAD	Nine Mile Canyon Archaeological District
NMCC	Nine Mile Canyon Coalition
NO ₂	Nitrogen Dioxide
NOA	Notice of Availability
NOA	Notice of Intent to Abandon
NOI	Notice of Intent
NOS	Notice of Staking
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSO	No Surface Occupancy
NTHP	National Trust for Historic Preservation
NTL	Notice to Lessees
NWPS	National Wilderness Preservation System
O ₃	Ozone
OD	Outer Diameter
ODFW	Oregon Department of Fish & Wildlife
ODOT	Oregon Department of Transportation
OHWM	Ordinary High Water Mark
OHV	Off Highway Vehicles
ORV	Outstandingly Remarkable Values
OSHA	Occupational Safety and Health Administration
P	Primitive
PCIB	Permanent Community Impact Board
PCIF	Permanent Community Impact Fund

PDO	Property Damage Only
PFC	Proper Functioning Condition
PILT	Payments-in-lieu of taxes
POD	Plan of Development
PM ₁₀	Particulate Matter Less Than 10 Microns Diameter
PM _{2.5}	Particulate Matter Less Than 2.5 Microns Diameter
ppb	parts per billion
PPM	Parts Per Million
PPP	Pollution Prevention Plan
PSD	Prevention of Significant Deterioration
RCRA	Resource Conservation and Recovery Act
REL	Reference Exposure Levels
RFFA	Reasonable Foreseeable Future Action
RfC	Reference Concentrations
RFD	Reasonably Foreseeable Development
RIPRAP	Recovery Implementation Program Recovery Action Plan
RMA	Recreation Management Area
RMP	Resource Management Plan
RN	Roaded Natural
ROD	Record of Decision
ROS	Recreation Opportunity Spectrum
ROW	Right of Way
RPD	Relative Percent Difference
RU	Recovery Units
RUSLE2	Revised Universal Soil Loss Equation Version 2
RV	Recreation Vehicle
RVD	Recreation Visitor Days
S	Sulfur
SAR	Sodium Adsorption Ratio
SARA Title III	<i>Consolidated List of Chemicals Subject to Reporting Under Title III of the Superfund Amendments and Reauthorization Act of 1986</i>
SGU	Small Game Unit
SHPO	State Historic Preservation Office
SITLA	State Institutional Trust Lands Administration
SMA	Surface Management Agency
SMCL	Secondary Maximum Contaminant Level
SO _x	Sulfur
SO ₂	Sulfur dioxide
SPCC	Spill Prevention, Control, and Countermeasure Plan
SPM	Semi-Primitive Motorized
SPNM	Semi-Primitive Non-Motorized
SRCMA	Special Recreation and Cultural Management Area
SRMA	Special Recreation Management Area
SRP	Special Recreation Permit
SSD	Special Service Districts
STSA	Special Tar Sand Area
SUP	Surface Use Plan
SUWA	Southern Utah Wilderness Alliance
SWCA	SWCA Environmental Consultants

SWD	Salt Water Disposal
SWPPP	Storm Water Pollution Prevention Plans
SWWF	Southwestern Willow Flycatcher
TCF	Trillion Cubic Foot
TCP	Traditional Cultural Properties
TDS	Total Dissolved Solids
TG	Trophy Game
TLV	Threshold Limit Values
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TSL	Toxic Screening Levels
TSP	Total Suspended Particulates
T&E	Threatened and Endangered
UCAT	Utah College of Applied Technology
UDEQ	Utah Department of Environmental Quality
UDFFSL	Utah Division of Forestry, Fire and State Lands
UDNR	Utah Department of Natural Resources
UDOGM	Utah Division of Oil, Gas, and Mining
UDOT	Utah Department of Transportation
UDWR	Utah Division of Natural Resources
UPAC	Utah Professional Archaeological Council
UPDES	Utah Pollutant Discharge Elimination System
UPIF	Utah Partners in Flight
URARA	Utah Rock Art Research Association
USACE	U.S. Army Corps of Engineers
USAS	Utah Statewide Archaeological Society
USC	U.S. Code
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USDOE	United States Department of Energy
USDOI	United States Department of Interior
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USU	Utah State University
UTM	Universal Transverse Mercator Coordinates
UW	University of Wyoming
UWQB	Utah Water Quality Board
VOC	Volatile Organic Compound
VR	Visual Range
VRM	Visual Resource Management
WAAQS	Wyoming Ambient Air Quality Standards
WEPP	Water Erosion Prediction Project
WGFD	Wyoming Game and Fish Department
WIA	Wilderness Inventory Area
WPU	Weighted Pupil Unit
WRAP	Western Regional Air Partnership

WRCC	Western Regional Climate Center
WSA	Wilderness Study Area
WSR	National Wild and Scenic River
WTP	West Tavaputs Plateau
WTPCRD	West Tavaputs Plateau Cultural Resource Database
WTPMOC	West Tavaputs Plateau Mitigation Oversight Committee
WTP PA	West Tavaputs Plateau Programmatic Agreement
WYBC	Western Yellow-Billed Cuckoo
WYDOT	Wyoming Department of Transportation
$\mu\text{g/l}$	Micrograms per liter
$\mu\text{g/m}^3$	Micrograms of pollutant per cubic meter air
3D	Three-dimensional

8.2 GLOSSARY

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

ALLUVIUM. Unconsolidated terrestrial sediment composed of sorted or unsorted sand, silt, gravel, and clay that had been deposited by water.

AMBIENT. The environment as it exists at the point of measurement and used as a basis to measure changes or impacts. Synonymous with background.

AMBIENT NOISE LEVEL. Cumulative effect from all noise generating sources in the area.

ANTHROPOMORPHIC. Ascribing human form or attributes to a being or thing not human or resembling or made to resemble a human form.

ANTICLINAL. Pertaining to anticline which is a convex upward rock fold in which strata have been bent into an arch; the strata on each side of the core of the arch are inclined in opposite directions away from the axis or crest; the core contains older rocks than does the perimeter of the structure.

AQUIFER. A body of rock or unconsolidated sediments that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

ARABLE. Land that can be used for growing crops.

ABNEGATION. The denial and rejection of a doctrine or belief.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC). Areas within the public lands where special management attention is required to protect or prevent irreparable damage to important resources.

ARTESIAN AQUIFER. Synonymous with confined aquifer.

ARTESIAN WELL. A well deriving its water from an artesian or confined aquifer, in which the water level stands above the top of the aquifer.

ASSOCIATION. Organisms living together in any given combination of environmental conditions.

ATHABASKAN. A large group of indigenous peoples of North America, located in two main Southern and Northern groups in western North America, and of their language family.

ATLATL. A tool that uses leverage to achieve greater velocity in dart-throwing, and includes a bearing surface which allows the user to temporarily store energy during the throw. It consists of a shaft with a cup or a spur, which may be integrated into the weapon or made separately and attached, in which the butt of the projectile, properly called a dart, rests.

ATMOSPHERIC DEPOSITION. Atmospheric deposition refers to the processes by which air pollutants are removed from the atmosphere and deposited on terrestrial and aquatic ecosystems, and is reported as the mass of material deposited on an area (kilograms per hectare or kg ha^{-1}). Air pollutants are deposited by wet deposition (precipitation) and by dry deposition (gravitational settling of particles and adherence of gaseous pollutants).

ATMOSPHERIC DISPERSION. The process by which pollutants are transported and vertically mixed in the atmosphere.

ATMOSPHERIC STABILITY. A measure of turbulence in the atmosphere. Three general classes of stability include neutral, unstable, and stable. Influenced by vertical temperature gradients and wind profiles.

BASKETMAKER. In southwest archaeology, a period of human occupation dating to the beginning of the Christian era; people were growing crops but had not yet invented pottery. The Basketmaker period is subdivided into Basketmaker II and Basketmaker III. Early archaeologists thought that a Basketmaker I culture might yet be discovered, so they left the name for that hypothetical phase. But there is still no evidence for a distinct period between Archaic and Basketmaker II.

BACKGROUND. The environment as it exists at the point of measurement and used as a basis to measure changes or impacts.

BENTONITE. Absorbent aluminum silicate clay formed from volcanic ash.

BERM. Barrier constructed to confine water or other substances.

BEST MANAGEMENT PRACTICES (BMP). Best management practices (BMPs) are innovative, dynamic, and improved environmental protection practices applied to oil and natural gas drilling and production to help ensure that energy development is conducted in an environmentally responsible manner. BMPs protect wildlife and landscapes as we work to develop vitally needed domestic energy sources.

BROOD. Hatchlings in a given nest or being raised by a given female bird.

BROWSER. An animal, which feeds on leaves, wigs, and young shoots of trees or shrubs; i.e., deer.

BURDEN BASKET. Native American people used burden baskets to transport and collect herbs, berries, twigs for starting fires, and many other plants and objects that might have been useful. Some believe burden baskets are associated with traveling and migration.

CARNIVORE. An organism, which acquires life-sustaining nutrients by using animals as food.

CATION. An ion that has a positive electrical charge. That is, an atom that has lost one or more electrons.

CHARACTERISTIC LANDSCAPE. The established landscape within an area being viewed. This does not necessarily mean a naturalistic character. It could refer to an agricultural setting, an urban landscape, a primarily natural environment, or a combination of these types.

CHERT. A sedimentary form of amorphous or extremely fine-grained siliceous, partially hydrous, found in concretions and beds.

CHRONOMETRICALLY. The measurement of time by periods or divisions.

CIST. A prehistoric tomb, box or chest made of stone slabs or hollowed out of rock that was used for storage of food and other items.

CLAYSTONE. A consolidated rock that consists of any mineral fragments smaller than 1/255 mm in diameter.

CLEAN AIR ACT (CAA). Public Law 84-159, established July 14, 1955, and amended numerous times since. The Clean Air Act establishes Federal standards for air pollutants emitted from stationary and mobile sources; authorizes States, Tribes, and local agencies to regulate polluting emissions; requires the agencies to improve air quality in areas of the country that do not meet Federal standards; and to prevent significant deterioration in areas where air quality is cleaner than the standards.

CLIMATOLOGY. Science of climate and its causes.

CLUTCH. The eggs of birds, reptiles, or amphibians of a given nest.

COLLUVIUM. Unconsolidated terrestrial sediment composed of sorted or unsorted sand, silt, gravel, and clay that had been deposited due to the action of gravity.

COMMERCIAL WATER USE. Water for motels, hotels, restaurants, office buildings, other commercial facilities, and institutions. The water may be obtained from a public supply or may be self-supplied.

COMMUNITY. A group of plants and animals, which occupy a given locale.

COMPLETION PIT. For this EIS, a completion is defined as a pit where water for completion activities on multi-well pads would be stored during the completion process. Completion pits would be larger than standard reserve pits in order to accommodate the greater volume of water needed to complete multiple wells from a single pad.

COMPRESSOR BUILDING. A building or cluster of buildings that house the required equipment to pressurize underground gas lines for the purposes of gas transport.

COMPRESSOR STATION. A facility consisting of one or more compressor engines, auxiliary treatment equipment, and pipeline installations to pump natural gas under pressure over long distances.

CONDENSATE. A low-density liquid hydrocarbon phase that generally occurs in association with natural gas. Its presence as a liquid phase depends on temperature and pressure conditions in the reservoir allowing condensation of liquid from vapor.

CONFINED AQUIFER. An aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined groundwater.

CONFINING BED. A body of impermeable or distinctly less permeable material stratigraphically adjacent to one or more aquifers.

CONGLOMERATE. A clastic sedimentary rock composed of lithified beds of rounded gravel mixed with sand.

CONSUMPTIVE USE. Recreational activities, such as hunting, fishing, and trapping that involve the taking of wild animals.

CONTRAST. Opposition or unlikeness of different forms, lines, colors, or textures in a landscape.

CONTRAST RATING. A method of analyzing the potential visual impacts of proposed management activities.

COPULATION. To engage in coitus or sexual intercourse.

COVER. That part of the environment, living or dead, utilized by animals for resting, feeding, nesting, and protection.

COVER TYPE. The part of the environment or landscape characterized by a predominant plant community.

CRITERIA POLLUTANTS. Six common air pollutants for which the Environmental Protection Agency (EPA) has established national air quality standards, including (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), ozone (O₃), and particulate matter less than 10 microns in diameter (PM₁₀) and less than 2.5 microns in diameter (PM_{2.5}), and lead.

CROSS-BEDDED. Arrangement of laminations of strata transverse to the main planes of stratification.

CRUCIAL RANGE. Any particular seasonal range or habitat component that is documented as the determining factor in a big games species' ability to sustain a viable population. A viable population is defined as the species' capability to maintain and reproduce itself at a certain population level specific to that species.

CULTIGEN. A plant that has been deliberately altered or selected by humans

CULTURAL MODIFICATION. Any man-caused change in the landform, water form, vegetation, or the addition of a structure, which creates a visual contrast in the basic elements (form, line, color, texture) of the naturalistic character of a landscape.

CUMULATIVE IMPACT. The impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions regardless of what agency (Federal or non-Federal) or person

undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant actions taken place over a period of time (40 CFR 1508.7).

DECIBEL (dB). The measurement unit commonly used to describe sound levels. The A-weighted decibel (dBA) scale is a logarithmic function that emphasizes the audio frequency response curve audible to the human ear and thus more closely describes how one perceives sound.

DECIVIEW (dv). A unit of measure for visibility. The deciview index was developed as a linear perceived visual change.

DENDROCHONOLOGICAL. The study of climate changes and past events by comparing the successive annual growth rings of trees or old timber also known as tree-ring dating.

DIACHRONIC. A technical term for something happening over time.

DIRECT IMPACTS. Effects that are caused by the action and occur at the same time and place (40 CFR 1508.8).

DIRECTIONAL DRILLING. The intentional deviation of a wellbore from vertical to reach subsurface areas some distance from the well pad.

DISSOLVED SOLIDS. The portion of solids in water that can pass through a 0.45-micron filter.

DOLOMITE. A mineral, calcium-magnesium carbonate ($\text{CaMg} [\text{CO}_3]_2$); also the name applied to sedimentary rocks composed largely of the mineral. It is white, colorless, or tinged yellow, brown, pink or gray; has perfect rhombohedral cleavage; appears pearly to vitreous; effervesces feebly in cold dilute hydrochloric acid.

DOMESTIC WATER USE. Water for household purposes, such as drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns and gardens. Also called residential water use. The water may be obtained from a public supply or may be self-supplied.

DRAIN. A ditch that removes surplus water from irrigated land and returns it to the surface watershed.

EASEMENT. An interest in land owned by another that entitles its holder to a specific limited use or enjoyment.

ECOLOGY. The science of the relationships between organisms and their environments.

EPHEMERAL. A stream that flows only in direct response to a runoff event.

EPIFAUNA. Part of the benthos living on the sediment surface.

ETHNOGENESIS. The emergence of an ethnic group; the creation of a new ethnic group identity.

ETHNOGRAPHIC. The branch of anthropology that deals with the scientific description of specific human cultures.

ETHNOHISTORIC. The study of especially native or non-Western peoples from a combined historical and anthropological viewpoint, using written documents, oral literature, material culture, and ethnographic data.

ETHNOLOGY. The branch of anthropology that compares and analyzes the origins, distribution, technology, religion, language, and social structure of the ethnic, racial, and/or national divisions of humanity.

EVAPORATION POND (PIT) OR RESERVE PIT. A pit dug to contain drilling fluids, drill cuttings, and other wastes from drilling operations that disposes of the liquids by evaporation. Some evaporation ponds are lined with plastic or asphalt to keep water from filtering through and contaminating nearby aquifers.

FAUNA. All animal life associated with a given habitat.

FLORISTIC. All plant life associated with a given habitat.

FORAGE. Vegetation utilized by animals as food.

FORB. Flowering herbaceous plants.

FUGITIVE DUST. Dust that escapes the general vicinity of an area where activity is occurring. Dust can be generated by construction traffic, surface clearing operations etc., and can then be carried by wind into the air, creating a plume that may be visible from greater distances than the activity directly causing the dust.

GEOMORPHOLOGY. The study of landforms.

GROUNDWATER, CONFINED. Confined groundwater is under pressure substantially greater than atmospheric throughout, and its upper limit is the bottom of a bed of distinctly lower permeability than that of the material in which the confined water occurs.

GROUNDWATER, UNCONFINED. Unconfined groundwater is water in an aquifer that is under atmospheric pressure and is considered under water table conditions.

HABITAT. A place where a plant or an animal lives.

HAZARDOUS AIR POLLUTANTS (HAPs). Pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental impacts. The Environmental Protection Agency (EPA) has classified 189 air pollutants as HAPs.

HERBACEOUS. Having little or no woody tissue and persisting usually for a single growing season.

HERBIVORE. An organism, which acquires life-sustaining nutrients by feeding on vegetation.

HISTORIC PROPERTIES. Historic Places composed of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture that are included in or eligible for inclusion in the National Register of Historic Places

HYDROCARBONS. A molecule that is entirely made up of hydrogen and carbon.

HYDROGRAPH. A graph showing fluctuations in stream flow, stream level, or water levels in wells over time.

INDIRECT IMPACTS. Effects, which are caused by the action but occur later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include reduced reproduction, population density or growth rate in wildlife. Other effects may be related to induced changes in the patterns of land use and effects on air, water, and other natural systems, including ecosystems (40 CFR 1508.8).

INDUSTRIAL WATER USE. Water used for industrial purposes such as fabrication, processing, washing, and cooling, and includes such industries as steel, chemical and allied products, paper and allied products, mining, and petroleum refining. The water may be obtained from a public supply or may be self-supplied.

INSTREAM WATER USE. Water that is used, but not withdrawn from a groundwater or surface water source for such purposes as hydroelectric power-generation, navigations, water-quality improvement, fish propagations, and recreation. Sometimes called non-withdrawal use or in-channel use.

INTERBEDDED. Rock beds that lie within rock beds of different material.

INTERDISCIPLINARY TEAM. A group of individuals with different training, representing the physical sciences, social sciences, and environmental design arts, assembled to solve a problem or perform a task. The members of the team proceed to a solution with frequent interaction so that each discipline may provide insights to any stage of the problem and disciplines may combine to provide new solutions.

INTERMITTENT. A stream that flows only part of a year along which the bed intercepts the groundwater table.

INVERTEBRATES. All animals without vertebrae.

KATSINA. Benevolent spirit beings, who visit the Hopi for about half of every year. According to Hopi tradition, the katsinam once visited in person, but now come as clouds down from the mountains or up from the earth. They begin arriving in late December, at the winter solstice. Masked and costumed Hopi men assume their powers and prestige in ceremonies and dances held until the katsinam depart in July.

LANDSCAPE CHARACTER. The arrangement of a particular landscape as formed by the variety and intensity of the landscape features and the four basic elements of form, line, color, and texture. These factors give the area a distinctive quality, which distinguishes it from its immediate surroundings.

LANDSCAPE FEATURES. The land, water, vegetation, and structures that compose the characteristic landscape.

LEKS. A place where males of some species of birds, such as grouse gather and perform courtship displays in a group.

LINE. The path, real or imagined, that the eye follows when perceived abrupt differences in form, color, or texture. Within landscapes, line may be found as ridges, skylines, structures, changes in vegetative types, or individual trees and branches.

LITHIC. Relating to or composed of stone

LITHOLOGY. The systematic description of rocks, in terms of mineral composition and texture.

LIMESTONE. A sedimentary rock composed primarily of calcium carbonate.

LONG TERM IMPACTS. Effects that persist beyond the construction, drilling and reclamation phases, or continue for the LOP.

MAIZE. A grass domesticated by indigenous peoples in Mesoamerica in prehistoric times commonly known as corn.

MANAGEMENT ACTIVITY. A surface disturbing activity undertaken on the landscape for the purpose of harvesting, traversing, transporting, protecting, changing, replenishing, or otherwise using resources.

MASSIVE. Sandstone rock without any distinctive bedding planes.

MIDDEN. A mound or deposit containing shells, animal bones, and other refuse that indicates the site of a human settlement.

MITIGATION. Avoiding, minimizing, reducing, rectifying, or compensating for impacts to resources from an action. The complete definition is provided in 40 CFR 1508.8.

MITIGATION MEASURES. Methods or procedures designed to reduce or lessen the adverse impacts caused by management activities.

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

NIGHT-LIGHTING. Lights used to illuminate facilities for work or safety. These lights can be mounted on poles, buildings, other equipment and fences. The lighting can consist of two types: area and accent. Area lighting provides general illumination over a broad zone for safety, while accent lighting provides concentrated illumination for work areas, doorways, pathways, stairs and other areas that require distinction.

NON-CONSUMPTIVE USES. Recreational activities, such as wildlife observation and wildlife photography, where wild animals are not taken.

NUMIC. A branch of the Uto-Aztecan language family which includes seven languages spoken by Native American peoples traditionally living in the Great Basin, Colorado River basin, and southern Great Plains.

OUTCROP. Rock strata exposed at the surface.

PARTURITION AREAS. Documented birthing areas commonly used by females. These areas may be used as nursery areas by some big game species.

PERENNIAL. A stream or river that flows all year.

PERMEABILITY. The capacity of material to transmit water or other fluids. Primary permeability is the capacity of interconnected pores to transmit fluids. Secondary permeability is the capacity of interconnected fractures, bedding planes, solution voids, etc. to transmit fluids.

PETROGLYPHS. Images created by removing part of a rock surface by incising, pecking, carving, and abrading.

pH. A measure of the acidity or alkalinity of water. It is defined as the negative logarithm of the hydrogen-ion concentration. This parameter is dimensionless and generally has a range from 0 to 14, with a pH of 7 representing neutral water. A pH of greater than 7 indicates the water is alkaline, whereas a pH value of less than 7 indicates acidic water.

PHYSIOGRAPHIC PROVINCE. An extensive portion of the landscape normally encompassing many hundreds of square miles, which portrays similar qualities of soil, rock, slope, and vegetation of the same geomorphic origin.

PHYSIOGRAPHY. The study and classification of the surface features of the earth.

PICTOGRAPH. A graphic painted character used in picture writing

PLANT ASSOCIATION. The basic unit of vegetation classification representing a plant community containing a defined flora, composition, and uniform habitat conditions.

PLANT COMMUNITY. A group of plants that occupy a given locale.

POLYCHROME. The use of multiple colors in one entity.

POTENTIOMETRIC SURFACE. A groundwater surface that describes the static head, as related to an aquifer, it is defined by the levels to which water will rise in tightly cased wells. A water table is a particular potentiometric surface.

PREVENTION OF SIGNIFICANT DETERIORATION (PSD). A regulatory program under the Clean Air Act (Public Law 84-159, as amended) to limit degradation of air quality in areas that currently achieve the National Ambient Air Quality Standards. The PSD program established air quality classes that allow differing amounts of additional air

pollution above a legally defined baseline level. Almost any additional air pollution would be considered significant in PSD Class I areas (certain large national parks and wilderness areas in existence on August 7, 1977, and specific Tribal lands re-designated since then). PSD Class II areas allow deterioration associated with moderate, well-controlled growth (most of the country).

PROGRAMMATIC AGREEMENT. A programmatic agreement, or PA, is a document that establishes a process for consultation, review, and compliance with one or more federal laws, most often with those federal laws concerning historic preservation.

In the context of Section 106 of the National Historic Preservation Act, a PA differs from a Memorandum of Agreement (MOA) in that MOAs are used to resolve known and definable adverse effects on historic properties that result from a federal undertaking. PAs are used when the effects of an undertaking are not fully known. PAs are also a tool for implementing approaches that do not follow the normal Section 106 process. This is done to streamline and enhance historic preservation and project delivery efforts.

A PA has been completed for the WTP project to resolve potential effects to cultural resources.

PROTOHISTORIC. The period or stage of human development or of a particular culture immediately prior to the emergence of writing. The transitional period between history and prehistory.

RANGELANDS. Typically non-irrigated lands managed primarily for grazing cattle, sheep, goats, horses etc.

REHABILITATION. A management alternative and/or practice, which restores landscapes to a desired scenic quality.

RELIEF. The vertical difference in elevation between the highest and lowest points of a land surface within a specified horizontal distance or in a limited area.

RESERVE PIT. Reserve pits are generally used for storage or disposal of water, drill mud, and cuttings during drilling operations.

SANDSTONE. A sedimentary rock composed of mineral grains from 1/16 to 2 millimeters in diameter, bound together by a cement of silica, carbonate, or other minerals or a matrix of clay minerals.

SECONDARY COVER TYPE. Land cover type occupying the second largest area within the polygon.

SEDIMENTARY ROCK. A rock formed by the accumulation and cementation of mineral grains transported by wind, water, or ice to the site of deposition or chemically precipitated at the depositional site.

SHALE. A fine-grained sedimentary rock formed by the consolidation (esp. by compression) of clay, silt, or mud. It is characterized by finely laminated structure, approximately parallel to the bedding, along which the rock breaks readily into thin layers.

SHAMAN. A member of certain tribal societies who acts as a medium between the visible world and an invisible spirit world and who practices magic or sorcery for purposes of healing, divination, and control over natural events.

SHORT-TERM IMPACT. Effects of short duration that occur during construction, drilling, completion and reclamation of a well.

SIDE-SLOPES. The rising area of land that forms the transition between a relatively flat condition and a hilltop, mesa top or ridgeline.

SILTSTONE. A rock composed of silt having the texture and composition of shale but lacking its fine lamination or fissility.

SPECIES. The basic category of biological classification intended to designate a single kind of animal or plant.

SPECIFIC CAPACITY. The rate of discharge of water from a well divided by the drawdown of the water level within the well.

SPECIFIC CONDUCTANCE. A measure of the water's ability to conduct an electrical current. Specific conductance is expressed in microsiemens per centimeter ($\mu\text{S}/\text{cm}$) at 25 degrees Centigrade (25°C). For water containing between 100 and 5,000 mg/L of dissolved solids, specific conductance in $\mu\text{S}/\text{cm}$ at 25°C multiplied by a factor between 0.55 and 0.71 will approximate the dissolved solids concentration in mg/L. For most water, reasonable estimates can be obtained by multiplying the specific conductance value by 0.44 to obtain dissolved solid concentrations.

STRATIGRAPHIC UNIT. A body of rocks recognized as a unit in the classification of the rocks of Earth's crust with respect to any specific rock character, property, or attribute or for any purpose such as description, mapping, and correlation.

STRATIGRAPHY. The science of the description, correlation, and classification of rock strata, including the interpretation of the depositional environments of those strata.

TEMPERATURE INVERSION. An atmospheric condition in which warmer air lies above colder air and is said to have an inverted temperature gradient, where temperature increases with altitude.

TERRITORY. An area defended by a male, both members of a pair or an unmated species.

TEXTURE. The visual manifestations of the interplay of light and shadow created by the variations in the surface of an object or landscape.

THERIANTHROPES. The metamorphosis of humans into other animals.

TOTAL DEPOSITION. Total deposition refers to the sum of airborne material transferred to the Earth's surface by both wet and dry deposition.

UNCONFINED AQUIFER. An aquifer that has a water table.

UPLAND GAME BIRDS. Game birds such as sage-grouse, chukar and partridge.

UTO-AZTECAN. A Native American language family that is one of the largest (both in geographical extension and number of languages) and most well-established linguistic families of the Americas.

VIBROSEIS. A method used in exploration seismology to propagate energy signals into the earth over an extended period of time as opposed to the near instantaneous energy provided by an impulsive source such as explosives or Weight-Drop Trucks.

VIEWSHED. The landscape that can be directly seen under favorable atmospheric conditions, from a viewpoint or along a transportation corridor.

VISIBILITY. The ability or inability to view scenic vistas. It is usually characterized by two parameters, visual range (VR) and the light-extinction coefficient (b_{ext}). The visual range parameter represents the greatest distance that a large dark object can be seen. The light extinction coefficient represents the attenuation of light per unit distance due to scattering and absorption by gases and particulate matter in the atmosphere.

VISITOR DAY. A standard measure of visitor use equal to one person visiting a site for 12 hours.

VISUAL IMPACT. Any modification in landform, 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).

VISUAL RESOURCE. The visible physical features on a landscape (e.g., land, water, vegetation, animals, structures, and other features).

VISUAL RESOURCE MANAGEMENT (VRM). The inventory and planning actions taken to identify visual values and to establish objectives for managing those values; and the management actions taken to achieve the visual management objectives.

VISUAL RESOURCE MANAGEMENT CLASSES. Categories assigned to public lands based on scenic quality, sensitivity level, and distance zones. There are four classes. Each class has an objective, which prescribes the amount of change allowed in the characteristic landscape.

WATERS OF THE U.S. Includes 1) all waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; 2) all interstate waters including wetlands; 3) all other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce; 4) all impoundments of waters otherwise defined as waters of the United States under the definition; 5) tributaries of waters identified in paragraphs (a) (1)-(4) of this section; 6) territorial seas; 7) Wetlands adjacent to waters (other than waters that are themselves wetlands); 8) Waters of the United States do not include prior converted cropland (33 CFR Part 328).

WATERSHED. The line of division between two adjacent rivers or lakes with respect to the flow of water by natural channels into them; the natural boundary of a basin.

WATER TABLE. The water table is that surface in an unconfined water aquifer at which the pressure is atmospheric. It is defined by the levels at which water stands in wells that penetrate the water body just far enough to hold standing water.

WETLANDS. Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR Part 328).

WILDLIFE. In this summary, the term "wildlife" refers to any wild plant, mammal, bird, reptile, amphibian, or other aquatic or terrestrial organism.

WINTER RANGE. The range that large game animals use in substantial numbers only during winter periods

WICKIUP. A small, temporary dwelling or shelter of grass, brush, etc. over a frame, traditionally used by Indian peoples of the Great Basin and southwestern United States.

ZOOMORPH. Art that imagines humans as animals or art that creates patterns using animal imagery, or animal style.