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7.2 List of Acronyms & Abbreviations

AO	Approval Order (permit-to-construct)
APD	Application for Permit to Drill
AQI	Air Quality Index
BE	Biological Evaluation
Bext	Beta Extinction
BLM	Bureau of Land Management
BMP	Best Management Practice
BOE	Barrels of Oil Equivalent
CAA	1970 Clean Air Act
CEA	Cumulative Effects Area
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COA	Conditions of Approval
CP	Colorado Plateau
CSU	Controlled Surface Use
CWCS	Comprehensive Wildlife Conservation Strategy
DBH	Diameter at Breast Height
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FSM	Forest Service Manual
FY	Fiscal Year
GIS	Geographic Information System
HFRA	Healthy Forests Restoration Act
HUC	Hydrologic Unit Code
IRA	Inventoried Roadless Area
LN	Lease Notice
MIS	Management Indicator Species
NA	Not Available for Leasing
NAAQS	National Ambient Air quality Standards
NEPA	National Environmental Policy Act
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NL	No Lease
NOI	Notice of Intent (air permit application)
NOx	oxides of nitrogen
NP	National Parks
NSO	No Surface Occupancy
NSPS	New Source Performance Standards
NWR	National Wildlife Refuge
O&G	Oil and Gas
O3	ozone
OHV	Off-Highway Vehicle
PAC	Protected Activity Center
Pb	Lead
PCIF	Permanent Community Impact Fund
PFA	Post Fledgling Area
PILT	Payments in Lieu of Taxes
PM	Particulate matter (airborne)

PM₁₀	Particulate matter less than 10 microns in diameter
PM_{2.5}	Particulate matter less than 2.5 microns in diameter
Ppm	parts per million
PSD	Prevention of Significant Deterioration
RD	Ranger District
RFDS	Reasonable Foreseeable Development Scenario
RHR	Regional Haze Rule
RNA	Research Natural Area
ROS	Recreation Opportunity Spectrum
ROW	Right-of-Way
SIO	Scenic Integrity Objective
SIP	State Implementation Plan (Utah)
SITLA	State of Utah Institutional Trust Lands Administration
SLT	Standard Lease Terms
SMP	Smoke Management Plan
SMS	Scenery Management System
SO₂	Sulfur Dioxide
SUPO	Surface Use Plan of Operations
TDS	Total Dissolved Solids
TEC	Threatened, Endangered, or Candidate
TES	Threatened, Endangered, and Sensitive
TESP	Threatened, Endangered, Sensitive, and Proposed
TL	Timing Limitation
Tpy	tons per year (air emissions)
UDAQ	Utah Division of Air Quality
UDEQ	Utah Department of Environmental Quality
UDOT	Utah Department of Transportation
UDWR	Utah Division of Wildlife Resources
ug/m³	micrograms per meter cubed
UGS	Utah geological society
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
VMS	Visual Management System
VOC	Volatile organic compounds
VQO	Visual Quality Objective
WA	Wilderness Areas
WRAP	Western Regional Air Partnership

7.3 Glossary

Acre-feet: The volume required to cover 1 acre to a depth of 1 foot, which is equivalent to 43,560 cubic feet.

Affected environment: The natural, physical, and human-related environment that is sensitive to changes from the alternatives.

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): An area designated for the use of a certain number and kind of livestock for a prescribed period of time according to an Allotment Management Plan.

Ambient: Surrounding, existing, background conditions.

Best Management Practices (BMPs): A practice or combination of practices that are the most effective and practical means of achieving resource protection objectives during resource management activities.

Big game: Those species of large mammals normally managed as a sport hunting resource.

Biological Assessment (BA): Information prepared by or under the direction of the federal agency concerning listed species that may be present in the action area and the evaluation of potential effects of the action on such species and habitats. The purpose of the biological assessment is to evaluate the potential effects of the action on listed or proposed species or designated or proposed critical habitat, and determine whether any such species and habitats are likely to be adversely affected by the action. Biological Assessments are conducted for major federal construction projects requiring an EIS.

Biological Evaluation (BE): A Forest Service document of activities in sufficient detail to determine how an action or proposed action may affect any threatened, endangered, proposed, or sensitive species.

Biological soil crust: A thin crust made up of mosses, lichens, algae, and bacteria, known collectively as cryptogams. Cryptogams function as soil builders, forming a spongy layer that helps protect soil from erosion, absorbs moisture, and provides nitrogen and other nutrients for plant growth. These soils or crusts are also referred to as cryptobiotic, cryptogamic, microbiotic, or microphytic.

Capability: The potential of an area of land to produce resources, supply goods and services, and allow resource uses. Capability depends upon current conditions and site conditions such as climate, slope, landform, soils, and geology, as well as the application of management practices such as protection from insects and disease.

Cave: Any naturally occurring void, cavity, recess, or system of interconnected passages beneath the surface of the earth or within a cliff or ledge and large enough to permit a person to enter, whether the entrance is excavated or naturally-formed. Such term shall include any

natural pit, sinkhole, or other opening that is an extension of a cave entrance or that is an integral part of the cave (36 CFR 290).

Cave resources: Any materials or substances occurring in caves including, but not limited to, biotic, cultural, mineralogic, geologic, hydrologic, and paleontological resources (36 CFR 290).

Code of Federal Regulations (CFR): A codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the federal government.

Community: A group of one or more populations of plants and/or animals in a common spatial arrangement; an ecological term used in a broad sense to include groups of various sizes and degrees of integration.

Conifer: Any of a group of needle and cone bearing evergreen.

Conservation agreement: A requirement under section seven of the Endangered Species Act for federal agencies to consult with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service with regard to federal actions that may affect listed threatened and endangered species or critical habitat.

Corridor: A natural or restored pathway for a population of organisms to use in order to breed and/or remain contiguous.

Cover: The present vegetation and litter of an area.

Critical (Crucial) Habitat: Habitat that is present in minimum amounts and is a determining factor for population maintenance and growth.

Cultural resources: The physical remains of human activity (artifacts, ruins, burial mounds, petroglyphs, etc.) having scientific, prehistoric, or social values.

Cultural site: Any location that includes prehistoric and/or historic evidence of human use, or that has important sociocultural value.

Cumulative effect: The impact on the environment that results from the incremental impact of the action when added to other actions over time and space. Individual impacts can either amplify or negate each other depending on the location, timing, and types of interactions involved. Individually minor but collectively significant actions can result from cumulative effects.

Cumulative effects area (CEA): An area with a mapable boundary where individual impacts can accumulate and result in cumulative effects. Cumulative effects areas are often different for each resource or plant and animal species, and often require consideration of more than one spatial temporal scale.

Developed recreation: Recreation that requires facilities and results in the concentrated use of an area (e.g., campgrounds or ski resorts).

Direct effects: Effects on the environment that occur at the same time and place as the initial cause of action.

Dispersed campsite: Temporary undeveloped campsites that are typically created and maintained by forest users. Existing temporary campsites can be distinguished by evidence of rock fire rings, old tent sites, and tracks from earlier vehicle accesses. On the Dixie National Forest, motorized vehicles are used to access most of these sites.

Dispersed recreation: Recreation that occurs outside a developed setting (e.g., hunting, scenic driving, or backpacking).

Disturbance: Any event that alters the structure, composition, or function of an ecosystem, including grazing, human trampling, logging, foraging by wildlife ungulates, wind, flood, insects, disease, and fire.

Diversity: The relative distribution and abundance of different plant and animal communities and species within an area.

Down woody debris: Dead woody material, such as limbs and large roots, on the ground or in streams.

Ecosystem: A naturally occurring, self-maintained system of varied living and non-living interacting parts that are organized into biophysical and human dimension components.

Effects: Environmental consequences (the scientific and analytical basis for comparison of alternatives) because of a proposed action. Effects may be either direct, which are caused by the action and occur at the same time and place, or indirect, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable of cumulative.

Endangered species: “[...]ny species which is in danger of extinction throughout all or a significant portion of its range...” which is designated by the Secretary of the Interior or the Secretary of Commerce (Endangered Species Act of 1973 Sec. 3(6)).

Environment: The aggregate of physical, biological, economic, and social factors affecting organisms in an area.

Environmental impact statement (EIS): A detailed statement prepared by the responsible official when a major federal action that significantly affects the quality of the human environment is described, alternatives to the proposed action provided, and effects analyzed.

Erosion: Detachment or movement of soil or rock fragments by water, wind, ice, or gravity. Accelerated erosion is much more rapid than normal, natural, or geologic erosion, primarily because of the influence of activities of people, animals, or natural catastrophes.

Even-aged stand: A group of trees of a single age class.

Floodplain: The low and relatively flat areas adjacent to rivers and streams. A 100-year floodplain is that area subject to a 1 percent or greater chance of flooding in any given year.

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

Forest road or trail: A road or trail wholly or partly within or adjacent to and serving the National Forest System that the Forest Service determines is necessary for the protection, administration, and utilization of the National Forest System and the use and development of its resources (36 CFR 212.1).

Fragmentation: The process by which aquatic or terrestrial habitats are increasingly subdivided into smaller units, resulting in their increased insularity as well as losses of total habitat area.

Geographic Information System (GIS): A computer software platform designed to facilitate the assembly and analysis of diverse data sets pertaining to specific geographic areas using spatial locations.

Habitat: The place where a plant or animal lives and grows.

Hibernacula: A place where bats or other animals hibernate during the winter to conserve energy.

Hydrologic Unit Code (HUC): The U. is divided and sub-divided into successively smaller hydrologic units, which are classified into four levels: regions, sub-regions, accounting units, and cataloging units. The hydrologic units are arranged within each other, from the smallest (cataloging units) to the largest (regions). Each hydrologic unit is identified by a unique hydrologic unit code (HUC) consisting of two to eight digits based on the four levels of classification in the hydrologic unit system (<http://water.usgs.gov/GIS/huc.html>).

Indirect effects: Secondary effects that occur in locations other than the location of the initial action or significantly later in time.

Interdisciplinary team: A group of resource professionals with different expertise that collaborates to develop and evaluate resource management decisions.

Intermittent stream: Stream that flows only part of the time or during part of the year; some segments of the stream may flow year-round.

Invasive plants: Nonnative aquatic and terrestrial species that have the capacity to dominate, overwhelm, and replace native vegetation. A species is considered invasive if it is nonnative to the ecosystem under consideration, and if its introduction causes or is likely to cause economic or environmental harm or harm to human health. Noxious weeds are a subset of invasive plants.

Irretrievable impact or commitment: The elimination of a resource, its productivity, and/or its utility for the life of the project.

Irreversible impact: The start of a chemical, biological, and/or physical process that could not be stopped. As a result, the resource or its productivity and/or its utility would be consumed, committed, or lost forever.

Landscape: The aspect of the land that is characteristic of a particular region or area.

Leasable minerals: Minerals subject to exploration and development under leases, permits, and licenses under various mineral leasing acts. Leasable minerals include oil, gas, coal, and geothermal resources. The Forest Service determines which lands are available for leasing and under what conditions, while the Bureau of Land Management (BLM) determines whether or not to offer the lease.

Lek: A specific location where male grouse congregate and strut to attract and breed with female grouse. Most male grouse return to the same lek every year.

Life history: Biological traits of an organism or population that form a strategy for persistence in a varied environment.

Locatable minerals: Minerals subject to appropriation under the General Mining Law of 1872. Locatable minerals include gold, silver, copper, gypsum, uranium, and other hard rock minerals. The BLM is responsible for subsurface rights, while the Forest Service is responsible for the surface rights. By agreement with the BLM, the Forest Service administers locatable mining activities on National Forest System lands.

Land and Resource Management Plan (LRMP): Document that established direction for future decisions of the use of lands and resources in the planning area to best meet human needs over time, according to the land and resource capabilities.

Macroinvertebrate: An invertebrate animal (an animal without a backbone) too small to be seen without magnification.

Management direction: A statement of multiple use and other goals and objectives, along with the associated management prescriptions and standards and guidelines to direct resource management.

Management Indicator Species (MIS): A species of wildlife, fish, or plant whose health and vigor are believed to accurately reflect the health and vigor of other species having similar habitat and protection needs to those of the selected indicator species.

Mitigation: Actions to avoid, minimize, reduce, eliminate, replace, or rectify the impact of a management practice.

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

National Ambient Air Quality Standards: Standards for maximum acceptable concentrations of pollutants in the ambient air to protect public health.

National Environmental Policy Act of 1969 (NEPA): An act mandating an environmental analysis and public disclosure of federal actions.

National Forest Management Act (NFMA): A law passed in 1976 as amendments to the Forest and Rangeland Renewable Resources Planning Act that requires the preparation of regional and forest plans and the preparation of regulations to guide that development.

Nest area (for northern goshawk): The nest tree and stand(s) surrounding the nest that contain prey handling areas, perches, and roosts.

Off-highway vehicle (OHV)/off-road vehicle (ORV): Any motor vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain (36 CFR 212.1). Vehicle types include but are not limited to sport utility vehicles, jeeps, ATVs, mini-bikes, amphibious vehicles, over-snow vehicles, off-highway motorcycles, go-carts, motorized trail bikes, and dune buggies. Wheelchairs that are designed solely for use by a mobility-impaired person for travel are not included in this definition.

Operational Maintenance Level: The maintenance level currently assigned to a road considering today's needs, road condition, budget constraints, and environmental concerns. It defines the level to which the road is currently being maintained (FSH 7709.58 Sec 12.3 – Transportation System Maintenance Handbook).

Perennial stream: A stream that flows throughout the year and from source to mouth.

Population: A community of individuals that share a common gene pool.

Post-fledgling Area (for northern goshawk): An area of concentrated use by the goshawk family after the young leave the nest.

Prescribed fire: Any fire ignited by management actions to meet specified objectives.

Ranger district: An administrative subdivision of a national forest, supervised by a district ranger who reports to the forest supervisor.

Raptor: A bird of prey (e.g., eagles, hawks, falcons, and owls).

Record of Decision (ROD): A concise public document disclosing the decision made following preparation of an EIS and the rationale used to reach that decision.

Recreation Opportunity Spectrum (ROS): A framework for stratifying and defining classes of outdoor recreation based on environments, activities, and experience opportunities. The settings, activities, and opportunities for obtaining experiences are arranged along a continuum or spectrum divided into seven classes: Primitive, Semi-Primitive Non-Motorized, Semi-Primitive Motorized, Roded Natural, Roded Modified, Rural, and Urban. The Dixie National Forest does not contain any Roded Modified, Rural, or Urban ROS classes.

Recreation residence: A residence on National Forest System lands generally located in an established tract and built for recreation purposes with agency approval. These residences are authorized by special use permit.

Research Natural Area: "Research Natural Areas are part of a national network of ecological areas designated in perpetuity for research and education and/or to maintain biological diversity on National Forest System lands. Research Natural Areas are principally for non-manipulative research, observation, and study. They also may assist in implementing provisions of special acts, such as the Endangered Species Act of 1973 and the monitoring provisions of the National Forest Management Act of 1976" (FSM 4063).

Right-of-way: An accurately located strip of land with defined width, beginning of point, and point of ending. It is the area within which the user has the authority to conduct operations approved or granted by the landowner in an authorizing document, such as a permit, easement, lease, license, or Memorandum of Understanding.

Riparian: Related to, living, or located in conjunction with a wetland, on the bank of a river or stream, or at the edge of a lake or tidewater.

Rock garden community: A localized herbaceous plant community occurring on unshaded rock outcrops in shallow soils.

Scoping: Procedures by which agencies determine the extent of analysis necessary for a proposed action, (i.e., the range of actions, alternatives, and impacts to be addressed; identification of significant issues related to a proposed action; and the depth of environmental analysis, data, and task assignments needed).

Sediment: Any material carried in suspension by water that will ultimately settle to the bottom. Sediment has two main sources: from the channel area itself and from disturbed sites.

Sensitive species: Those species identified by the Regional Forester for which population viability is a concern as evidenced by significant current or predicted downward trends in population numbers or density, or habitat capability that would reduce a species' existing distribution.

Significant: As used in NEPA, requires consideration of both context and intensity. Context means that the significance of an action must be analyzed in several contexts such as society as a whole, and the affected region, interests, and locality. Intensity refers to the severity of impacts (40 CFR 1508.27).

Snag: A standing dead tree.

Species: A unit of classification of plants and animals consisting of the largest and most inclusive array of sexually reproducing and cross-fertilizing individuals, which share a common gene pool.

Stipulation (lease): Special provisions placed in mineral leases specifying requirements or restrictions for lease development. The Forest Service has authority to require the addition of stipulations in federal leases by the leasing agency for the protection of non-mineral interests on National Forest System lands.

Summer range: A range, usually at higher elevation, used by deer and elk during summer. A summer range is usually much more extensive than a winter range.

Threatened species: Any species of plant or animal that is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

Unauthorized road or trail: A road or trail that is not a Forest System road or trail or a temporary road or trail and that is not included in a Forest Transportation Atlas (36 CFR 212.1). The term "unclassified" was used in some of the earlier project file documentation that predated the Travel Rule.

Ungulate: A hoofed mammal.

Water right: A water claim that has been put to beneficial use and has been perfected according to state law.

Watershed: Drainage basin for which surface water flows to a single point.

Wetland: Area inundated by surface water or groundwater with a frequency sufficient to support vegetation or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction.

Wilderness: As defined by the Wilderness Act of 1964, “an area where earth and its community of life are untrammled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value” (16 USC 1131).

Wilderness area: An area designated by Congress as part of the National Wilderness Preservation System, according to the criteria established in the Wilderness Act of 1964.

Wildfire: An unplanned, unwanted wildland fire, including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to put the fire out.

Wildland urban interface: The line, area, or zone where structures and other human developments meet or intermingle with undeveloped wildland or vegetative fuels.

Winter range: A range, usually at lower elevation, used by migratory deer and elk during the winter months; usually better defined and smaller than summer ranges.

Woodland: Forested areas largely composed of tree species such as pinyon, juniper, and oak. The term is used to distinguish these areas from forests of tree species normally favored for commercial timber harvest such as ponderosa pine, Engelmann spruce, and Douglas-fir.

7.4 Index

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