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7.2 Index

7.3 Acronyms

ABA	Acid Base Accounting
AGP	Acid-Generating Potential
AIRFA	American Indian Religious Freedom Act
AIZ	Aquatic Influence Zone
AMP	Allotment Management Plan
AMSL	Above Mean Sea Level
ANFO	Ammonium Nitrate/Fuel Oil
ANP	Acid-Neutralizing Potential
ANPR	Advanced Notice of Proposed Rulemaking
AOC	Administrative Order on Consent
AOI	Annual Operating Instructions
AQI	Air Quality Index
ARD	Acid Rock Drainage
ARPA	Archaeological Resource Protection Act
ASQ	Allowable Sale Quantity
ATSDR	Agency for Toxic Substances and Disease Registry
ATV	All-Terrain Vehicle
AWC	Available Water Capacity
BA	Biological Assessment
BE	Biological Evaluation
BERA	Baseline Ecological Risk Assessment
BLM	Bureau of Land Management
BLS	Bureau of Labor Statistics
BMP	Best Management Practices
BURP	Beneficial Use Reconnaissance Program
CC	Crow Creek
CCC	Criteria for Continuous Concentration
CCD	Census County Division
Cd	Cadmium
CDC	Conservation Data Center
CEA	Cumulative Effects Area
CEC	Cation Exchange Capacity
CEQ	Council of Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CHC	Criteria for Human Consumption
CFR	Code of Federal Regulations
CMC	Criteria for Maximum Concentration
CNF	Caribou National Forest
CO	Carbon Monoxide
COC	Contaminants of Concern
COPC	Contaminants of Potential Concern
CTNF	Caribou-Targhee National Forest
CWA	Clean Water Act
DAP	Diammonium Phosphate
DC	Deer Creek
DEIS	Draft Environmental Impact Statement

DFC	Desired Future Condition
DL	Detection Limit
DO	Dissolved Oxygen
DOI	Department of Interior
DOT	Department of Transportation
EA	Environmental Assessment
EC	Electrical Conductivity
EE/CA	Engineering Evaluation/Cost Analysis
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act of 1972
FEIS	Final Environmental Impact Statement
FHA	Federal Housing Administration
FR	Forest Road
FS	Forest Service
FSEIS	Final Supplemental Environmental Impact Statement
FSH	Forest Service Handbook
GIS	Geographic Information Systems
GLEC	Great Lakes Environmental Center
GLO	General Land Office
GPS	Geographic Positioning System
GYE	Greater Yellowstone Ecosystem
HGM	Hydrogeomorphic Methodology
HUC	Hydrologic Unit Code
IARC	International Agency for Research on Cancer
IDAPA	Idaho Administrative Procedures Act
IDEQ	Idaho Department of Environmental Quality
IDFG	Idaho Department of Fish and Game
IDL	Idaho Department of Lands
IDWR	Idaho Department of Water Resources
IGS	Idaho Geological Survey
IMA	Idaho Mining Association
IMNH	Idaho Museum of Natural History
INEEL	Idaho National Engineering and Environmental Laboratory
IPM	Integrated Pest Management
IRA	Inventoried Roadless Area
ISCOT	Industrial Source Complex Short Term
ISHPO	Idaho State Historic Preservation Office
ISHS	Idaho State Historical Society
ISO	International Organization for Standardization
IWI	Index of Watershed Indicators
JBR	JBR Environmental Consultants, Inc.
KPLA	Known Phosphate Lease Area
LAU	Lynx Analysis Unit
LDS	Church of Jesus Christ of Latter Day Saints
LOM	Line of Mine
MAP	Monoammonium Phosphate
Maxim	Maxim Technologies, Inc.

MDT	Montana Department of Transportation
MIS	Management Indicator Species
MP	Management Prescriptions
MPRA	Meade Peak Roadless Area
MSHA	Mine Safety and Health Administration
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industrial Classification System
ND	Not Detected
NEPA	National Environmental Policy Act
NFDC	North Fork Deer Creek
NFS	National Forest System
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NO_x	Nitrogen Oxide Compounds
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NTU	Nephelometric Turbidity Units
NWI	National Wetland Inventory
OHV	Off-Highway Vehicle
OHWM	Ordinary High Water Mark
OMRD	Open Motorized Road Density
ORP	Oxidation-Reduction Potential
OSHA	Occupational Safety and Health Administration
PA	Proposed Action
Pb	Lead
PEL	Permissible Exposure Limit
PEM	Palustrine Emergent
PFC	Proper Functioning Condition
$PM_{2.5}$	Particulate Matter Smaller than 2.5 Microns
PM_{10}	Particulate Matter Smaller than 10 Microns
PPI	Producer Price Index
PR	Partial Retention
PSD	Prevention of Significant Deterioration Air Quality Program
PSS	Palustrine Scrub-Shrub
RACI	Roadless Area Conservation Initiative
RACR	Roadless Area Conservation Rule
RARE	Roadless Area Review and Evaluation
RCRA	Resource Conservation and Recovery Act
RFP	Revised Forest Plan
RM	Road-Modified
RMP	Resource Management Plan
RNA	Research Natural Area
ROD	Record of Decision
ROM	Run of Mine
ROS	Recreation Opportunity Spectrum
ROW	Right of Way
RS	Revised Statute
SC	Specific Conductance
SCRA	Sage Creek Roadless Area

SDI	Stream Diatom Index
Se	Selenium
SEIS	Supplemental Environmental Impact Statement
SeWG	Selenium Working Group
SFDC	South Fork Deer Creek
SFI	Stream Fish Index
SFSC	South Fork Sage Creek
SHI	Stream Habitat Index
SI	Site Inspection/Investigation
SIC	Standard Industrial Classification
SIO	Scenic Integrity Objective
SIP	State Implementation Plan
Simplot	J.R. Simplot Company
SMI	Stream Macroinvertebrate Index
SMS	Scenery Management System
SO_2	Sulfur Dioxide
SO_4	Sulfate
SOPA	Schedule of Proposed Action
SPA	Super Phosphoric Acid
SPCC	Spill Prevention Control and Countermeasure Plan
SPM	Semi-Primitive Motorized
SSL	Soil Screening Level
SUA	Special Use Authorization
SUP	Special Use Permit
SWANCC	Solid Waste Agency of Northern Cook County
SWEQ	Snow Water Equivalent
SWPPP	Storm Water Pollution Prevention Plan
TCP	Traditional Cultural Property
TDS	Total Dissolved Solids
TEC	Threshold Effect Concentration
TEPC	Threatened, Endangered, Proposed, and Candidate
TEPCS	Threatened, Endangered, Proposed, Candidate, and Sensitive (Species)
TMDL	Total Maximum Daily Load
TRC Mariah	TRC Mariah Associates, Inc.
TSP	Triple Sugar Phosphate
TSS	Total Suspended Solids
TST	Tentatively Sustainable Timber
TtEMI	Tetra Tech EM Inc.
UN	United Nation
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VES	Visual Encounter Surveys
VMS	Visual Management System
VOC	Volatile Organic Compound
VQO	Visual Quality Objective

WBAG	Water Body Assessment Guidance
WC	Wells Canyon
WEG	Wind Erodibility Group
WEPP	Water Erosion Prediction Project
WOUS	Waters of the US
WPPA	Wet Process Phosphoric Acid
WRCC	Western Regional Climate Center
WUS	Waters of the US (acronym used by Maxim)
WYNDD	Wyoming Natural Diversity Database
Zn	Zinc
ZnS	Sulfide Mineral Sphalerite

7.4 Units of Measure

BCY	bank cubic yards
C	Celsius
cfs	cubic feet per second
dB	decibel
dBA	A-weighted decibel sound scale
dw	dry weight
F	Fahrenheit
ft	feet
g	grams
gal	gallon
gpm	gallons per minute
ha	hectares
in	inch
kg/ha	kilograms per hectare
kV	kilovolt
kW	kilowatt
lb	pound
LCY	loose cubic yards
m	meters
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
mi	miles
mm	millimeters
MM	million
mph	miles per hour
ppm	parts per million
%	percent
µmhos/cm	micromhos per centimeter
$\mu g/m^3$	micrograms per cubic meter

7.5 Glossary

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

Acid Generation Potential (AGP). The concentration of acid generating minerals in a rock or soil material, measured in tons of $CaCO_3$ equivalents per kiloton of rock.

Acid Neutralization Potential (ANP). The concentration of acid neutralizing minerals in a rock or soil material, measured in tons of $CaCO_3$ equivalents per kiloton of rock.

Acute. Severe; having a sudden onset, sharp rise, and short duration.

Acid Rock Drainage (ARD). Water with pH less than 5, elevated TDS, SO_4, and trace metal concentrations that result from the oxidation of acid generating sulfide minerals with subsequent dissolution and transport of the oxidation products.

Alluvial. Pertaining to material or processes associated with transportation or deposition of soil and rock by flowing water (e.g., streams and rivers).

Alluvium. Soil and rock deposited by flowing water (e.g., streams and rivers); consists of unconsolidated deposits of sediment, such as silt, sand, and gravel.

Alteration. A geochemical process involving mineralogic and geochemical changes due to reaction with fluids moving through rock or soil under natural conditions, particularly in association with mineral deposits. Transformation of feldspar minerals to clay through chemical weathering is considered alteration.

Ambient. Surrounding, existing, background conditions.

Anticline. A fold in rock where the interior of the fold is comprised of rocks older in age than the rocks on the exterior of the fold.

Assay. Qualitative or quantitative analysis of a substance (e.g., ore body).

Basic Elements (visual). The four major elements (form, line, color, and texture) that determine how the character of a landscape is perceived.

Best Management Practices (BMPs). Vegetative and structural methods to control erosion and sedimentation.

Biological Assessment. 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. 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.

Capillary Break. A layer of specified material (usually cobble-sized) used to prevent capillary movements of fluids from one material to another.

Cation Exchange Capacity. The number of sites on a solid surface where reversible cation adsorption and desorption can occur.

Chert. A hard, dense microcrystalline or cryptocrystalline sedimentary rock, consisting chiefly of interlocking crystals of quartz less than about 30 Φm in diameter; it may contain amorphous silica (opal). It has conchoidal fracture, and may be white or variously colored. Chert occurs principally as nodular or concretionary segregations, or nodules in limestone and dolomite, and less commonly as layered deposits, or beded chert; it may be an organic or inorganic precipitate or a replacement product.

Chronic. Marked by long duration or frequent recurrence.

Column Test. A leaching laboratory test where water or other leaching solution is percolated through a vertical column of earth material and the resulting leachate is collected and analyzed for dissolved parameters.

Contrast (visual). The effect of a striking difference in form, line, color, or texture of the landscape features within the area being viewed.

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

dBA. The sound pressure levels in decibels measured with a frequency weighing network corresponding to the A-scale on a standard sound level meter. The A-scale tends to suppress lower frequencies (e.g., below 1,000 Hz).

Decant. To remove or pour off a liquid without disturbing associated sediment or solids.

Decibel (dB). One-tenth of a Bel is a measure on a logarithmic scale that indicates the ratio between two sound powers. A ratio of 2 in power corresponds to a difference of 3 decibels between two sounds. The decibel is the basic unit of sound measure.

Dissolution. The process of dissolving.

Electrical Conductivity (or Specific Conductance). The ability of a water or a soil-water paste to transmit electrical current, used to estimate ion concentration.

Endangered Species. Species in danger of extinction throughout all or a significant portion of its range.

Eolian. Soil and silt deposited by wind, such as loess.

EPA Synthetic Precipitation Leachability Procedure (SPLP) – Method 1312. A weak acid bottle roll extraction conducted to simulate metal release from mined material due to exposure to ambient conditions.

Ephemeral Stream. A stream or portion of a stream which flows briefly in direct response to precipitation in the immediate vicinity, and whose channel is at all times above the water table.

Evapotranspiration (ET). The portion of precipitation returned to the air through evaporation and transpiration by plants.

Fate and Transport. Description of the movement of a contaminant through a groundwater system which may include the effects of dilution, dispersion, attenuation and various chemical reactions.

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.

Flux. Volume of groundwater per unit time that travels through a solid permeable medium, such as alluvium and bedrock.

Folds. A bend in planar features in rocks - like an extended wrinkle. A fold is usually the product of geologic deformation.

Forage. Vegetation used for food by wildlife, particularly big game wildlife and domestic livestock.

Forbs. Any herbaceous plant other than a grass.

Fry. The young of fish.

Game Species. Animals commonly hunted for food or sport.

HELP3 Model. A computer model written by Paul Schroeder et al at the U.S. Army Corps of Engineers Waterways Experiment Station and distributed by the U.S. Environmental Protection Agency that estimates the water balance (water inputs and outputs) of landfills.

Hertz (Hz). The unit of frequency (i.e., sound) formerly designated as cps - cycles per second.

Host Rock. A rock body or wall rock enclosing mineralization.

Hydraulic Conductivity (K). A coefficient of proportionality describing the rate at which water can move through a permeable medium.

Hydraulic Gradient. For groundwater, the rate of change of total head per unit of distance of flow at a given point and in a given direction.

Hydrograph. A graph that shows some property of groundwater or surface water as a function of time.

Hydrophytic Vegetation. The total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present.

Hydrostratigraphic Unit. A formation, part of a formation, or group of formations in which there are similar hydrologic characteristics allowing for grouping into aquifers or confining layers.

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.

Isopleth. A line, on a map or chart, drawn through points of equal size or abundance.

Key Observation Point (KOP). An observer position on a travel route used to determine visible area.

Land Use Plan. The organized direction or management of the use of lands and their resources to best meet human needs over time, according to the land's capabilities.

Limestone. A sedimentary rock consisting chiefly of the mineral calcite (calcium carbonate, CaCO3), with or without magnesium carbonate. Common impurities include chert and clay. Limestone is the most important and widely distributed of the carbonate rock and is the consolidated equivalent of limy mud, calcareous sand, and/or shell fragments. It yields lime on calcination.

Lithic Scatter. A discrete grouping of flakes of stone created as a byproduct in the tool-making process. Often includes flakes used as tools as well as formal stone tools such as projectile points, knives, or scrapers.

LRMP. Land and Resource Management Plan. 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.

Maximum Credible Earthquake. The largest conceivable earthquake that could occur in an area.

MCL. Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water.

Mesic. Moist habitats associated with springs, seeps, and riparian areas.

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

Modified Mercali Scale. Logarithmic scale of earthquake intensity.

Overburden. Sub-economic non-ore rock or soil associated with a mineral deposit.

Oxidation. A geochemical process involving chemical and mineralogic changes to rock or soil under chemical weathering conditions. Oxidation is typically associated with exposure of buried materials to atmospheric oxygen and water. The process occurs naturally, but is accelerated by mining activity.

Peak Flow. The greatest flow attained during melting of winter snowpack or during a large precipitation event.

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

Permeability. The capacity of porous rock, sediment, or soil to transmit a fluid.

pH. The negative $\log_{10}$ of the hydrogen ion activity in solution; measure of acidity or alkalinity of a solution.

$PM_{2.5}$. Particulate matter less than 2.5 microns in aerodynamic diameter.

PM_{10}. Particulate matter less than 10 microns in aerodynamic diameter.

Probable Maximum Precipitation (PMP). The greatest depth of precipitation for a given duration that is physically possible over a given storm area at a particular location at a certain time of year.

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

Richter Magnitude. Logarithmic scale of earthquake intensity.

Riparian. Situated on or pertaining to the bank of a river, stream, or other body of water. Riparian is normally used to refer to plants of all types that grow along streams, rivers, or at spring and seep sites.

RMP. Resource Management Plan. Document that establishes direction for the use of resources to best meet the needs of humans over time, according to the resource potential or capability.

Run-of-Mine Overburden. Sub-economic rock mined from the phosphate deposit, which is and placed in surface dumps or as pit backfill.

Salinity. Measure of solute concentration, in grams per kilogram; “saltiness”.

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 Load. The amount of sediment (sand, silt, and fine particles) carried by a stream or river.

Seepage Collection System. A system of drains, ponds, and pumps to collect and return tailing impoundment and embankment seepage.

Sensitive Species. Those plant or animal species that are susceptible or vulnerable to activity impacts or habitat alterations.

Shale. A fine-grained detrital sedimentary rock, formed by the compaction of clay, silt, or mud. It has a finely laminated structure, which gives it a fissility along which the rock splits readily, especially on weathered surfaces. Shale is well indurated, but not as hard as argillite or slate. It may be red, brown, black, or gray.

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).

SPLP Test. Synthetic Precipitation Leachability Procedure. A laboratory testing procedure established by the U.S. Environmental Protection Agency where a prescribed amount of solid material is mixed for a set time with a prescribed amount of acidified water. The leachate is then separated from the solid and analyzed for parameters of interest.

Sodium Adsorption Ratio (SAR). Ratio of dissolved sodium to calcium+magnesium in water; provides a prediction of cation exchange reaction potential.

Storage Coefficient (S). Volume of water that an aquifer absorbs or releases from storage per unit surface area of aquifer per unit decline in the component of hydraulic head normal to the surface; S is dimensionless.

Sulfides. That part of a lode or vein not yet oxidized by air or surface water and containing sulfide minerals.

Sulfide Oxidation. Chemical conversion of reduced sulfide compound to an oxidized sulfate compound, with associated release of iron and formation of secondary iron oxide mineralization.

Swell. The increase in volume exhibited by certain soils and rocks on absorption of water; an enlarged place in an orebody; a general, imprecise term for dome or arch.

Syncline. A folded rock sequence where the interior of the fold is younger than the rock on the exterior.

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

Total Suspended Particulate (TSP). Particulates less than 100 microns in diameter (Stokes equivalent diameter).

Total Dissolved Solids (TDS). Total amount of dissolved material, organic or inorganic, contained in a sample of water.

Total Suspended Solids (TSS). Undissolved particles suspended in liquid.

Transmissivity (T). The rate at which water will flow through a vertical strip of aquifer of one unit width and extending through the full saturated thickness, under a hydraulic gradient of 1.0.

Ungulate. A hoofed mammal.

Visual Quality Objective (VQO). A desired level of excellence based on physical and sociological characteristics of an area. Refers to degree of acceptable alteration of the characteristic landscape.

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

Wetlands. Areas 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.

Wetland Functions. Dynamic biological, chemical, and physical processes that characterize wetland ecosystems.

Wetland Values. Based on societal properties by which wetlands are determined to be useful, or impart public good.

7.6 Explanations of Impacts

Negligible – The impact is at the lowest levels of detection

Minor – The impact is slight, but detectable

Moderate – The impact is readily apparent

Major – The impact is a severe or adverse impact or of exceptional benefit