

## Glossary

600-kV DC transmission line	A transmission line with a capacity of approximately 600-kilovolts of direct-current electricity.
100-year floodplain	The area that would be inundated by a flood with a recurrence interval of once in 100 years, on average. This can also be stated as areas that have a 1 percent chance of being flooded in a given year. (See <b>Floodplain</b> .)
Access road	Roads constructed to each structure site first to build the tower and line, and later to maintain and repair it. Access roads are built where no roads exist. Where county roads or other access is already established, access roads are built as track roads to the structure site (see <b>track roads</b> ). Access roads are maintained even after construction, except where they pass through cultivated land. There, the road is restored for crop production after construction is completed.
Advisory Council on Historic Preservation	Established by the National Historic Preservation Act in 1966, the Advisory Council on Historic Preservation is an independent Federal agency that promotes the preservation, enhancement, and productive use of the nation's historic resources. It serves as the primary advisory agency for the president and congress on historic preservation policy.
Aerial photography	Used to identify and verify land uses within the project corridors and right-of-ways.
Agriculture	A habitat type characterized by land planted and kept in crops.
Albedo	The amount of solar radiation reflected from an object or surface, often expressed as a percentage (USEPA 2012).
All-American Road	To be designated as an All-American Road, the road or highway should meet the criteria for at least two of the Intrinsic Qualities that are nationally significant. The road or highway should also be considered a destination unto itself (DOT 2008).
Alluvium	Deposits left by flowing water, usually clay, silt, sand, or gravel.

Alternating current/direct current (AC/DC)	An alternating current (AC) power line alternates as a rate of 50 to 60 times a second (Hz), while a direct current (DC) power line produces a static electric field that does not alternate.
Alternative/Alternate	Options that a federal agency considers to address the significant issues and meet the purpose of and need for a proposed project in an environmental analysis. Also used to describe other routes under consideration.
Alternative Connectors	Locations where routes have been proposed that connect separate alternative routes in response to scoping comments and/or to avoid areas of identified major environmental, political, or engineering constraints. Many of the alternative connectors are bi-directional; e.g. they can be used to go from Alt. A to Alt. B, or vice-versa from Alt. B to Alt. A.
Alternative Routes	Multiple individual transmission line routes that each traverse from point A to point B in a separate and distinct way. The lead agencies are identifying and comparing three to six alternative routes within each of the four geographic regions: Region I - Northern Terminal to northwest Colorado near Rangely, Colorado; Region II – northwest Colorado to Intermountain Power Plant (IPP); Region III - IPP to northern Las Vegas area; and Region IV - northern Las Vegas area to Southern Terminal. For the purposes of the DEIS analysis, three to six alternative routes (Alternatives A, B, C, D, E, F) are identified in each region, and the impacts expected from each alternative route within each region will be analyzed based on the transmission reference lines, 250-foot ROWs, and transmission line corridors.
Alternative Variations	Locations where the alternative routes have an additional option available that is not a complete route in itself. Alternative variations provide an additional path around identified major environmental, political, or engineering constraints along an alternative route. For the purposes of the DEIS, the potential impacts from these variations will be compared from the portions of the alternative route they would replace, which diverge from the same beginning and ending points.
Ampere (A)	A unit of measurement of electric current, which is the rate that electrons flow in a wire; one ampere is $6.023 \times 10^{23}$ electrons per second. The measurement is similar to gallons per minute of water in a pipe.
Animal Unit Month (AUM)	The quantity of forage typically consumed by a cow-calf pair over a month-long period.

Annual Average Daily Traffic	The total volume of traffic passing a point or segment of a roadway facility in both directions for 1 year divided by the number of days in the year.
Anthropogenic	Made by people or resulting from human activities (USEPA 2012).
Aquatic	Occurring in, or closely associated with, water.
Area of Critical Environmental Concern (ACEC)	An area where special management attention is required to protect and prevent irreparable damage to important cultural, historic, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.
Area of Potential Effect (APE)	The geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist. Additionally, the APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking (36 CFR 800.16[d]).
Attainment Area	An area considered to have air quality as good as or better than the National Ambient Air Quality standards as defined in the Clean Air Act.
Back Country Byway	Provides an “off-the-beaten-path” adventure through landscape settings as diverse as the West itself. Most Byways traverse remote country, providing solitude and spectacular scenery in landscape settings ranging from soaring mountains and alpine meadows to sagebrush prairies and saguaro cactus deserts. They are classified by four types (Type I through IV) (BLM No Date 1).
Bald and Golden Eagle Protection Act	A law that prohibits the take, possession, selling, purchasing, bartering, or transporting of live or dead bald or golden eagles, or any parts, nests, or eggs of these birds.
Bedrock	Solid rock beneath the soil and superficial rock.
Best Management Practices (BMPs)	A practice or combination of practices that are the most effective and practical means of preventing or reducing the amount of environmental impact, including but not limited to, pollution generated by nonpoint sources to a level compatible with water quality goals.
Big game	Large animals that may be taken by hunters, pursuant to local government restrictions and regulations.

Biological Assessment	Information prepared by, or under the direction of, a Federal agency to determine whether a proposed action is likely to: (1) adversely affect listed species or designated critical habitat; (2) jeopardize the continued existence of species that are proposed for listing; or (3) adversely modify proposed critical habitat. Biological assessments must be prepared for "major construction activities." See 50 CFR §402.02. The outcome of this biological assessment determines whether formal consultation or a conference is necessary. [50 CFR §402.02, 50 CFR §402.12]
Biological Opinion	Document which includes: (1) the opinion of the Fish and Wildlife Service or the National Marine Fisheries Service as to whether or not a Federal action is likely to jeopardize the continued existence of listed species, or result in the destruction or adverse modification of designated critical habitat; (2) a summary of the information on which the opinion is based; and (3) a detailed discussion of the effects of the action on listed species or designated critical habitat. [50 CFR §402.02, 50 CFR §402.14(h)]
Blading	Use of a bulldozer, grader, or other construction equipment to level or shape a travel surface.
Border Zone	A zone on each side of the wire zone to the edge of the ROW, maintained to exclude vegetation more than 25 feet tall.
Bureau of Land Management (BLM)	A federal agency under the U.S. Department of the Interior that is responsible for carrying out a variety of programs for the management and conservation of resources on 258 million acres. The BLM manages multiple resources and uses, including energy and minerals, timber, forage, recreation, wild horse and burro herds, fish and wildlife habitat, wilderness areas, and archaeological, paleontological and historical sites. The BLM has been designated as a joint-lead federal agency for the environmental review of the TransWest Express Transmission Line Project.
Bureau of Indian Affairs (BIA)	Established in 1824, the Bureau of Indian Affairs is responsible for the administration and management of 55 million surface acres and 57 million acres of subsurface minerals estates held in trust by the United States of American Indian, Indian tribes, and Alaska Natives (BIA 2012).
Bureau of Reclamation	Established in 1902, the Bureau of Reclamation manages, develops, and protects water and related resources in an environmentally and economically sound manner in the interest of the American public (BOR 2011).

Candidate species	Plant and animal taxa considered for possible addition to the List of Endangered and Threatened Species. These are taxa for which the Fish and Wildlife Service has on file sufficient information on biological vulnerability and threat(s) to support issuance of a proposal to list, but issuance of a proposed rule is currently precluded by higher priority listing actions. [61 FR 7596-7613 (February 28, 1996)]
Capacity	Refers to the amount of power a transmission facility (line, transformer, etc.) can reliably deliver. Capacity is measured in megawatts and is limited by the current (in amperes) that the facility can carry or the minimum voltage levels present at a substation (under either steady-state or outage conditions).
Carbon dioxide equivalent (CDE)	A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential (GWP). Carbon dioxide equivalents are commonly expressed as “million metric tons of carbon dioxide equivalents (MMTCO <sub>2</sub> Eq).” The carbon dioxide for a gas is derived by multiplying the tons of the gas by the associated GWP (USEPA 2012).
Carbon monoxide (CO)	An odorless and colorless gas formed from one atom of carbon and one atom of oxygen.
Center pivot irrigation system	A system for watering crops where water is pumped from a central location through a pipe supported on wheels that spins and distributes the water in a large, circular pattern.
Centerline	A line on a map or flagged on the ground that indicates the location of a linear feature such as a road or a transmission line. The linear feature is further defined by its total width, either for construction or operation, which is bisected into two equal parts by the centerline.
Checkerboard	In this document, “checkerboard” refers to a pattern of land ownership (jurisdiction) that resembles a checkerboard game surface, where federal and private ownership generally alternate every other square mile.
Circuit	An electrical device that provides a path for electrical current to flow, or along which an electrical current can be carried. In the case of high-voltage transmission, a set of wires energized at transmission voltages extending beyond a substation which has its own protection zone and set of breakers for isolation.
Class III (Pedestrian) Inventory	A Class III intensive field inventory to locate and record cultural resources and places of traditional, cultural, and religious importance to Native Americans.

Clean Air Act (CAA)	The federal law that defines the Environmental Protection Agency's responsibilities for protecting and improving the nation's air quality and the stratospheric ozone layer. The last major change in the law, the Clean Air Act Amendments of 1990, was enacted by Congress in 1990. Legislation passed since then has made several minor changes. The Clean Air Act was incorporated into the United States Code as Title 42, Chapter 85.
Clean Water Act	The framework that regulates water quality standards and pollutant discharges into waters of the United States. Sections 303d and 305b require that water quality of streams, rivers, and lakes are assessed on a regular basis, that waters found to be in violation of water quality standards are listed as impaired, and that priorities be set for actions to improve the water quality.
Colluvium	Rock fragments, sand, etc., that accumulate on steep slopes or at the foot of cliffs.
Conditional Use Permit (CUP)	A CUP is given to certain classes of land use that are not permitted by right in some or all zones of a county, but are nevertheless recognized as being desirable to the full function of the county under appropriate circumstances. The purpose is to provide a means whereby proposals for such land uses may be examined on a case by case basis to determine whether, and under what conditions, these uses may be approved at a given site (Thurston County Permitting and Land Use 2011).
Conductor	The wire cable strung between transmission towers through which electric current flows.
Conservation agreement	A formal, written document agreed to by the FWS and/or NMFS or another Federal agency, State agency, local government, or the private sector to achieve the conservation of Bureau sensitive species and federally proposed, listed, and candidate species through voluntary cooperation. It documents the specific actions and responsibilities for which each party agrees to be accountable. The objective of a conservation agreement or strategy is to reduce threats to a Bureau sensitive species and federally proposed and listed species or its habitat. An effective conservation agreement or strategy may lower species' listing priority or eliminate the need for listing (BLM 2008).
Constraint	A resource or condition that potentially limits transmission line routes, including areas that are closed by regulations (e.g. municipal airports) or where impacts would be very difficult or impossible due to resource protection and other legal requirements.

Cooperating agency	A federal, state, or local government agency that has accepted an invitation to participate in the NEPA process by the lead federal agency. The invitation is generally formal and accompanied by the signing of a Memorandum of Understanding. Typically, a cooperating agency has jurisdiction by law or special expertise with respect to any environmental issue which will be addressed by the NEPA analysis EISs (40 CFR 1508).
Corona	Corona occurs in regions of high electric field strength on conductors, insulators, and hardware when sufficient energy is imparted to charged particles to cause ionization (molecular breakdown) of the air.
Council on Environmental Quality (CEQ)	Coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives. CEQ was established within the Executive Office of the President by Congress as part of the National Environmental Policy Act of 1969 (NEPA) and additional responsibilities were provided by the Environmental Quality Improvement Act of 1970.
Critical habitat	For ESA-listed species consists of: (1) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Act on which are found those physical or biological features (constituent elements) (a) essential to the conservation of the species and (b) which may require special management considerations or protection; and (2) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Act, upon a determination by the Secretary that such areas are essential for the conservation of the species. [ESA §3 (5)(A)] Designated critical habitats are described in 50 CFR §17 and 226.
Crucial range	Can describe any particular seasonal range or habitat component (often winter or winter/yearlong range in Wyoming) but describes that component which has been documented as the determining factor in a population's ability to maintain itself at a certain level (theoretically at or above the WGFD population objective) over the long term. [ <i>Report on Standardized Definitions for Seasonal Wildlife Ranges</i> , Wyoming Chapter of the Wildlife Society, July 1990]
Cultural Property	A definite location of past human activity, occupation, or use identifiable through field inventory (survey), historical documentation, or oral evidence (BLM 2004).

Cultural Resources	The term “cultural resource” includes all landscapes, buildings, sites, districts, structures, or objects that have been created by or associated with humans and are considered to have historical or cultural value. Cultural resources also include <b>Traditional Cultural Properties</b> .
Culvert	A corrugated metal or concrete pipe used to carry or divert runoff water from a drainage; usually installed under roads to prevent washouts and erosion.
Cumulative effects	Effects that result when the effects of an action are added to or interact with other effects in a particular place and within a particular time. Such impacts may individually have minor impacts, but collectively may have significant impacts.
Current	The amount of electrical charge flowing through a conductor (as compared to voltage, which is the force that drives the electrical charge), which is measured in amperes or amps.
dB(A)	Used to measure sound level via a logarithmic unit used to describe a ratio.
Debris flow	Rapid movement of water-charged mixtures of soil, rock, and organic debris down steep stream channels.
Decibel	A decibel is a unit for expressing relative difference in power, usually between acoustic signals, equal to 10 times the common logarithm of the ratio of two levels.
Decommissioning	Removal of Project facilities at the end of the operational life of the transmission line.
Demand	1) The rate at which electric energy is delivered to or by a system or part of a system, generally expressed in kilowatts or megawatts, at a given instant or averaged over any designated interval of time. 2) The rate at which energy is being used by the customer.
Design Features	The specific measures the proponent has committed to using to decrease environmental impacts through the Project planning documents such as the POD. These have commonly been referred to as applicant committed measures in the past.
Design Options	Alternative transmission configurations, which may have the potential to meet the TWE Project purpose and need, depending on future energy market conditions and permitting decisions for other regional transmission systems. Three design options are described in the PDTR.
Dewatering	The elimination of water from waterways so that excavation can occur.

Direct effects	Direct effects are those caused by the Project at the same time and place as the impact, such as soil disturbance.
Distribution line	The structures, insulators, conductors, and other equipment used to deliver electricity directly to the customer, including commercial facilities, small factories, or residences.
Double-circuit transmission line	A transmission line composed of six electrical phases (two independent circuits of three phases each) and two lightning protection shield wires. One of the lightning protection shield wires is a steel overhead ground wire (OHGW), and the other is an optical ground wire (OPGW).
Early successional (or early seral)	An immature forest often characterized by a single-age class and open canopies; stands are between 1 and 30 years old.
Easement	A grant of certain rights to the use of a piece of land. A grant of easement across a private parcel for a transmission line typically includes the right to enter the easement area to build, maintain, and repair transmission facilities, including access roads. Permission for these activities is included in the negotiation process for acquiring easements over private land. The land itself remains in private ownership.
Ecoregion	Area where the ecosystems, and the type, quality, and quantity of environmental resources are generally similar as defined by the analysis of patterns and composition of biotic and abiotic phenomena including geology, physiography, vegetation, climate, soils, land use, wildlife, and hydrology (Bryce et al. 1999; Omernik 1987, 1995; Wiken 1986).
Edge effect	Changes in vegetation and animal communities that are caused by one habitat type being immediately adjacent to a different habitat type. Edge effects can include changes in temperature, humidity, and plant and wildlife species present in the area.
Electric and magnetic fields (EMF)	Fields describing properties of a location or point in space and its electrical environment, including the forces that would be experienced by a charged body in that space by virtue of its charge or the movement of charges. The voltage, which is the "pressure," produces an electric field that moves the electricity through wires. The current produces a magnetic field, which is a measure of how much electricity is flowing. Thus, wherever there is electric current flowing (including through any type of wiring), there is both an electric and a magnetic field.
Emergent	Plants that have their bases submerged in water.

Eminent Domain	When a utility company acquires property for public use through a court action, in which a court decides that the proposed subsequent use is in the public interest and also determines the compensation to be paid to the owner.
Encroachment Permit	Written permission from a landowner to enter a parcel of private property for the purposes of temporary activity, such as surveying, conducting environmental data gathering, etc.
Endangered species	Any species officially listed by the U.S. Fish and Wildlife Service or NOAA Fisheries as being in danger of extinction throughout all or a significant portion of their range.
Endangered Species Act of 1973 (ESA)	A law establishing a regulatory system to protect species that are at risk of extinction. NOAA Fisheries and the U.S. Fish and Wildlife Service decide whether to list species as Threatened or Endangered. Under the Act, federal agencies must avoid jeopardy to and aid the recovery of listed species.
Energy	In the electric utility industry, it represents the amount of power used or transmitted over a given amount of time.
Engineered Alignment	An engineered route, which will be prepared for the Agency Preferred Alternative. The Project Alignment will be based on engineering and design of the transmission line including specific structure locations. The Agency Preferred Alternative will be determined by the lead agencies, following the public review period on the DEIS, and in consultation with federal, state, and local cooperating agencies.
Environmental Impact Statement (EIS)	Part of compliance with the National Environmental Policy Act (NEPA), an EIS is a comprehensive public document that analyzes the impacts of a major federal action that may significantly affect the quality of the human environment. When complete, it is a tool for decision making as the EIS describes the positive and negative environmental effects of a proposed action, describes alternative actions and provides an analysis of environmental impacts and ways to mitigate such impacts across all alternatives considered in detail. An EIS examines physical and biological resources, resource uses, fire management, special designations, and social and economic conditions.
Environmental justice	A concept disproportionately high and adverse human health or environmental effects of a federal agency's programs, policies, and activities on minority or low-income populations.

Environmental Protection Measures	Environmental protection measures have been developed by the Companies to maintain environmental quality and meet requirements of various land management plans. These measures apply project-wide unless modified through negotiations with individual landowners or superseded by permits granted by federal, state, or local agencies.
Ephemeral stream	One that flows only in direct response to precipitation and whose channel is at all times above the water table.
Essential habitat	Those areas possessing the same characteristics as critical habitat for Threatened and Endangered but not species declared critical habitat by the Secretary of the Interior or Commerce (Wyoming Chapter of the Wildlife Society 1990).
Exclusion criteria	Categories assigned as exclusion criteria include locations with the highest level of sensitivity, such as areas with protective regulatory or legislative designations, or extreme physical constraints not compatible with transmission line construction or operation.
Extra-High Voltage Transmission Lines (230kV; 345 kV; 500kV)	Used for transmitting electrical energy over great distances. <ul style="list-style-type: none"><li>• Higher voltage lines are more efficient than lower voltage lines. A higher voltage transmission line will result in fewer losses than a transmission line with a lower voltage.</li><li>• Higher voltage lines often have “bundled” conductors, meaning that multiple wires are hung from the same insulator. This increases the amount of power that can be carried on a single circuit.</li></ul>
Fault	An event occurring on an electrical system such as a short circuit, a broken wire, or an intermittent connection.
Feasible	Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, regulatory, technical, and safety factors.
Federally-listed	Species listed as <b>Threatened</b> or <b>Endangered</b> by the U.S. Fish and Wildlife Service.
Files Search	A records and files search conducted through the State Historic Preservation Office to identify all previously conducted cultural resources investigations and previously recorded cultural resources within a defined distance on either side of proposed rights-of-way, roads, and other project facilities.

Fire regime	A general description of the role fire would play across a landscape in the absence of modern human mechanical intervention, but including the influence of aboriginal burning (Agee 1993; Brown 1995).
Fire Regime Condition Class (FRCC)	A discrete metric that describes how similar a landscape's fire regime is to its natural or historical state. FRCC quantifies the amount that current vegetation has departed from the simulated historical vegetation reference conditions (Barrett et al. 2010; Hann and Bunnell 2001; Hardy et al 2001; Holsinger et al. 2006). There are three condition classes (FRCC 1-3).
Floodplain	That portion of a river valley adjacent to the stream channel which is covered with water when the stream overflows its banks during flood stage.
Federal Land Policy Management Act of 1976 (FLPMA)	Public Law 94-579 of October 21, 1976. This law is often referred to as the Bureau of Land Management's Organic Act, which provides the majority of the Bureau of Land Management's legislative authority, direction, policy, and basic management guidance.
Fly yard	A Project-material staging area used specifically to support helicopter use.
Forb	An herbaceous plant that is not a grass or not grasslike.
Forest/Woodland	A habitat type characterized by being dominated by trees. Forests are densely covered by trees and have a continuous or nearly continuous canopy and little shade reaching the forest floor. In a woodland, trees are more widely scattered and sunlight reaches the floor, often supporting an understory of shrubs, grasses, and/or forbs.
Fragmentation	The breaking up of contiguous areas of vegetation/habitat into smaller patches.
Fugitive dust	Visible emissions released from sources other than stacks; for instance, dust blown from storage piles, road dust, emission leaking from sides of buildings or open areas in buildings.
Game species	Species of animals that are hunted or fished, for purposes of sport, recreation, and food capture (Coral Reef Info 2008).
Gauss	A unit of magnetic induction.

General Land Office (GLO)	The GLO was created in 1812 as an independent agency to oversee the surveying and sale of public lands and was charged with maintaining land survey data for the entire United States and its territories. The agency was later placed under the authority of the Department of the Interior and eventually merged with the Grazing Service to form the BLM. The BLM facilitates public access to GLO data through its website in the form of digital images of federal land patent and survey maps produced between 1820 and 1908.
Geographical Information System (GIS)	A computer representation of data that is geographically distributed in three dimensions. These data can be generated and displayed to show their physical location. Each data set with a certain type of information constitutes a "layer" in the GIS. GIS layers can be superimposed to show the spatial relationships of different items.
Gigawatt	A gigawatt is one billion watts, or one thousand megawatts; an electrical unit of power.
Grasslands	Habitat types dominated by grasses (family Poaceae) with little woody vegetation or other forbs. In the Analysis Area, most grasslands are dominated by introduced grass species, though some native grasslands are present.
Grazing allotments	Grazing allotments are categorized into one of three management categories: Improve (I), Maintain (M), or Custodial (C). These categories are based on present conditions, potential for improvement, other resource conflicts, and opportunities for positive economic return on public investments.
Greenfield	A piece of usually semi-rural property that is undeveloped except for agricultural use, especially one considered as a site for expanding urban development.
Greenhouse gas (GHG)	Any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include, but are not limited to, carbon dioxide, methane, nitrous oxide, and ozone (USEPA 2012).
Ground electrode facility	Built to establish and maintain electrical current continuity during normal operations, and immediately following an unexpected outage of one of the two poles (or circuits) of the $\pm 600$ -kV DC terminal or converter station equipment.
Habitat types	Communities of plants that typically occur together.
Hertz (Hz)	The unit of frequency in cycles per second; power systems in the U.S. operate with a frequency of 60 Hz.

High voltage	Lines with 230 kV or above electrical capacity.
Historic	Period wherein non-native cultural activities took place, based primarily upon European roots, having no origin in the traditional Native American culture(s).
Historic property	Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior.
Hydrology	The science of dealing with the properties, distribution, and circulation of water.
Improved roads	Actions taken physically by people to keep the road open to vehicle traffic (BLM 2012c).
Instant Study Area (ISA)	One of the 55 primitive and natural areas formally identified by the BLM through a final action published in the Federal Register before November 1, 1975. FLPMA required an accelerated wilderness review of these Wilderness Study Areas (BLM 2012d).
Indian tribe	An Indian tribe, band, nation, or other organized group or community, including a native village, regional corporation, or village corporation, as those terms are defined in section 3 of the Alaska Native Claims Settlement Act (43 U.S.C. 1602), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians. Government-to-government consultation is required for any project between the federal government and the government of any potentially impacted tribe.
Indirect effects	Effects caused by the action that are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.
Insulator	A ceramic or other non-conducting material used to keep electrical circuits from jumping over to ground.
Intermittent or seasonal stream	One which 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.
Intermountain West	The region of North American lying west of the Rocky Mountains and east of the Cascade Mountains of Washington and Oregon and the Sierra Nevada Mountains of California.

Invasive species	A species that is not native to the habitat under consideration and whose introduction causes, or is likely to cause, economic or environmental harm (Executive Order 13112). Invasive plants are typically adaptable, aggressive, and have a high reproductive capacity.
Invertebrates	Animals that lack a back bone and are represented by a wide variety of taxonomic groups in freshwater environments.
Key Observation Point (KOP)	Viewing locations chosen to be generally representative of visually sensitive areas where it can be assumed that viewers may be affected by a change in the landscape setting from the Project. Views from KOPs are described by distance zones and are based on perception thresholds (changes in form, line, color, and texture).
Kilovolt (kV)	One thousand volts (see <b>volt</b> ).
Lands with Wilderness Characteristics (LWC)	Lands with wilderness characteristics are those lands that have been inventoried and determined by the BLM to contain wilderness characteristics as defined in section 2(c) of the Wilderness Act (see <b>Wilderness Characteristics</b> ) (BLM 2012c).
Landslide	Any mass-movement process characterized by downslope transport of soil and rock, under gravitational stress, by sliding over a discrete failure surface; or the resultant landform. Can also include other forms of mass wasting not involving sliding (rockfall, etc.).
Large wood debris (LWD)	Any piece of downed wood larger than 4 inches in diameter and 6 feet long.
Lattice tower	A freestanding steel framework tower that is often used to support electrical transmission lines with voltages above 100 kilovolts.
Lead Agency	The agency or agencies preparing, or having taken primary responsibility for preparing an environmental document as required by NEPA. For the TransWest Express Transmission Project, the BLM and Western Area Power Administration are joint-lead agencies.
Lithic landscape	An area or region where aboriginal people habitually tested and procured tool stone and lithic materials.
Lithic scatter	Consists of stone material that has been left behind or dropped and can include stone tools such as projectile points, knives, or simply debris from stone tool manufacture or lithic procurement activities.

Load	The amount of electrical power or energy delivered or required at any specified point or points on a system. Load originates primarily at the energy-consuming equipment of customers.
Management Areas	Units of federal land having different management emphasis or direction.
Mass wasting	The slow downward slope of rock debris.
Megawatts (MW)	A megawatt is one million watts, or one thousand kilowatts; an electrical unit of power.
Micro-siting option	Micro-siting options are adjustments of the reference line that have been proposed to mitigate specific resource concerns. The adjustment remains within the 2-mile transmission line corridor.
Migratory bird	A bird that moves seasonally to different ranges to maximize breeding and feeding opportunities.
Migratory Bird Treaty Act	A law enacted in 1918 that prohibits pursuing, hunting, taking, capturing, killing, possessing, selling, bartering, purchasing, delivering, transporting, and receiving any migratory birds, parts, nests, or eggs.
MilliGaus (mG)	A unit used to measure magnetic field strength; one-thousandth of a <b>gauss</b> .
Mitigation	1) Avoiding or reducing possible adverse impacts to a resource by limiting the timing, location, or magnitude of an action and its implementation; 2) rectifying possible adverse impact by repairing, rehabilitating or restoring the affected environment or resource; 3) reducing or eliminating adverse impacts by preservation and maintenance operations during the life of an action.
National Ambient Air Quality Standards (NAAQS)	Established by the USEPA, the NAAQS represent maximum acceptable concentrations that generally may not be exceeded more than once per year, except the annual standards, which may never be exceeded (40 CFR 50).
National Conservation Area (NCA)	Area designated by Congress, generally, to conserve, protect, enhance, and properly manage the resources and values for which it was designated for the benefit and enjoyment of present and future generations (BLM 2012a).

National Environmental Policy Act of 1970 (NEPA)	Federal statute, signed into law on January 1, 1970, that contains procedures to ensure that federal agency decision makers take environmental factors into account. The two major purposes of the NEPA process are citizen involvement and better informed decisions. The Act establishes national environmental policy and goals for the protection, maintenance, and enhancement of the environment, and it provides a process for implementing these goals within the federal agencies. The Act also establishes the Council on Environmental Quality (CEQ) and requires an environmental impact statement on all major Federal actions significantly affecting the quality of the human environment. [42 U.S.C. 4332 2(2)(C).]
National Historic Landmark (NHL)	A historic property that the Secretary of the Interior has designated a National Historic Landmark.
National Historic Preservation Act (NHPA) of 1966, as amended	Act directing federal agencies to consider the effects of their programs and projects on properties listed or eligible for listing on the National Register of Historic Places. If a proposed action might impact any archaeological, historical, or architectural resource, this act mandates consultation with the proper agencies.
National Historic Trails (NHTs)	A congressionally designated trail that is an extended, long-distance trail, not necessarily managed as continuous, that follows as closely as possible and practicable the original trails or routes of travel of national historic significance (BLM 2012e).
National Historic Trails System Act	This Act (P.L. 90-543, as amended through P.L. 111-11, March 30, 2009) was passed in 1968 to establish a national trails system, including recreational, scenic, and historic trails. The Act specifies that the Secretary of the Interior and/or the Secretary of Agriculture is responsible for developing and administering the trails system.
National Park Service (NPS)	Established in 1916, the purpose of the National Park Service is to “conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations” (NPS 2011).
National Register of Historic Places (NRHP)	The official register of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, and culture, established by the National Historic Preservation Act of 1966, as amended, and maintained by the National Park Service on behalf of the Secretary of the Interior.

National Scenic Byway	To be designated as a National Scenic Byway, a road should have at least one of six scenic byway intrinsic qualities (archaeological, cultural, historic, natural, recreational, and scenic) that is regionally significant (DOT 2008).
National Scenic Byway (NSB) Program	The National Scenic Byways (NSB) Program was established under the Intermodal Surface Transportation Efficiency Act of 1991, and reauthorized in 1998 under the Transportation Equity Act for the 21st Century. Under the program, the U.S. Secretary of Transportation recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities. There are 150 such designated Byways in 46 states. The Federal Highway Administration promotes the collection as the America's Byways® (DOT No Date).
National Scenic Trails (NSTs)	A congressionally designated trail that is a continuous and uninterrupted extended, long-distance trail so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant resources, qualities, values, and associated settings and the primary use or uses of the areas through which such trails may pass (BLM 2012e).
National Wild and Scenic Rivers System	A system of nationally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values and are preserved in a free-flowing condition (BLM 2012b).
Native American Graves Protection and Repatriation Act (NAGPRA)	NAGPRA was established in 1990 to provide a means for museums and curation facilities to return certain collected items to Native American and Native Hawaiian groups. The act pertains to the repatriation of human remains, funerary objects, sacred objects, and objects of cultural patrimony. Federal grants are awarded to indigenous groups and institutions holding collections under the act to assist in the repatriation process, which is overseen by the Native American Graves Protection and Repatriation Review Committee.
Naturalness	The degree to which an area generally appears to have been affected primarily by the forces of nature with the imprint of people's work substantially unnoticeable (BLM 2012c).
Nitrogen oxides	A group of compounds consisting of various combinations of nitrogen and oxygen atoms.

No Action Alternative	The predicted result of the denial of the applications for Right-of-Way Grant and Special Use Permit. Under the No Action Alternative, the TransWest Express Transmission Project would not be constructed (i.e., no new transmission line, terminal converter stations and substations, or electrode bed systems).
NOAA Fisheries	The federal agency that oversees threatened and endangered anadromous fish species.
Nonattainment area	An area that does not meet air quality standards set by the Clean Air Act for specified localities and periods.
Northern Tier Transmission Group	A group of transmission providers and customers actively involved in the sale and purchase of transmission capacity that delivers electricity in the Pacific Northwest and mountain states.
Notice of Intent (NOI)	A public notice, published in the <i>Federal Register</i> , that an environmental impact statement will be prepared and considered in the decision making for a proposed action. It also provides background information on the proposed project in preparation for the scoping process.
Notice to Proceed (NTP)	Letter from a principal (client or owner) to a contractor stating the date the contractor can begin work subject to the conditions of the contract. The performance time of the contract starts from the NTP date.
Noxious weed	A legal term, meaning any plant officially designated by a federal, state, or local agency as injurious to public health, agriculture, recreation, wildlife, or property.
Off-highway vehicle (OHV)	Land vehicles mostly used for recreation purposes on public or private trails, beaches or fields, or in the woods; usually not legal to operate on public highways, streets or roads. Examples are all terrain vehicles (ATVs), off road motorcycles or dirt bikes, snow mobiles and four wheel drive vehicles such as jeeps and trucks.
Old growth	A forest type at least 200 years of age with moderate to low canopy closure; a multi-layered, multi-species canopy dominated by large overstory trees; numerous large snags; heavy accumulations of fallen wood; smaller trees in various age classes, as well as shrubs and herbaceous vegetation in the understory and on the forest floor.
Open camps or habitation sites	Defined minimally by the presence of one or more hearth features.
Opportunity	A resource or condition that can accommodate a transmission line route, including existing utility or transportation corridors.

Outage	Events caused by a disturbance on the electrical system that requires the provider to remove a piece of equipment or a portion or all of a line from service. The disturbances can be either natural or human-caused.
Overstory	Layer of foliage in a forest canopy including the trees in a timber stand. Tall mature trees that rise above the shorter understory trees (Conway 1973).
Ozone	Associated with the corona discharge of high-voltage transmission lines. Rapidly recombines back to O <sub>2</sub> .
PacifiCorp (Rocky Mountain Power)	Rocky Mountain Power is the trade name under which PacifiCorp delivers electricity to more than 955,000 customers in the Rocky Mountain Power service area, which includes portions of Utah, Wyoming, and Idaho. It transmits electricity via a grid of transmission lines throughout a six-state region. PacifiCorp serves 1.7 million retail customers through its distribution system. Rocky Mountain Power operates under oversight and regulatory controls of the public utility commissions of Wyoming, Utah, and Idaho. PacifiCorp is a public utility under the jurisdiction of the FERC.
Palustrine	Northwest Wetland Inventory system that includes wetlands dominated by trees, shrubs, and persistent emergent plants associated with water bodies that cover less than 20 acres or with water less than 6.6 feet deep.
Parturition areas	Areas where habitat is appropriate for female big game animals to seclude themselves while giving birth to young in late spring or early summer. Such areas are usually characterized by ample hiding cover and forage.
Peak Hour	The hour of the day that observes the highest traffic volumes for a roadway or intersection. Typically 2 hours are reported, one in the AM and one in the PM.
Perennial Stream	One that flows with water present continuously during an average water year.
Petitioned species	A species for which a formal request is made to the U.S. Fish and Wildlife Service to give Endangered Species Act protection as either threatened or endangered. The Service reviews the information contained in the petition and other scientific information in their files to determine if further analysis is needed.
Physiographic	Pertaining to the features and phenomena of nature.

Plan of Development (POD)	A complete description of and design for the proposed project. It includes but is not limited to proposed plans, specifications, construction methods, schedules, restoration practices, and other information pertinent to the proposal; the plan becomes a part of the ROW grant. The plan can include sections for construction maintenance, and termination. The content of the plan will vary with the complexity of the proposal (BLM No Date 2).
Power	The rate at which work is done. The basic unit of measure for power is the watt (w).
Prevention of Significant Deterioration (review)	Federal pre-construction review for affected sources located in attainment areas for air quality. It is intended to prevent a new source from causing air quality to deteriorate beyond acceptable levels.
Prime farmland	A land use classification used by the USDA (7 CFR §657.5) where a favorable growing season, adequate precipitation or irrigation source, and soil characteristics result provide good to excellent crop production.
Project Alignment	The TWE Project alignment is defined as an engineered route, which will be prepared for the Agency Preferred Alternative. The Project Alignment will be based on engineering and design of the transmission line including specific structure locations. The Agency Preferred Alternative will be determined by the lead agencies, following the public review period on the DEIS, and in consultation with federal, state, and local cooperating agencies.
Project Description Technical Report (PDTR)	The PDTR provides a description of the TWE Project for the lead agencies' use in preparing Chapter 2 (Project Description and Alternatives) of the DEIS. The PDTR addresses the proposed TWE Project and alternatives presented by the lead agencies during public scoping. The PDTR also contains detailed design, construction, operation, and maintenance information for the agencies' use in the analyses of environmental impacts and mitigation measures adopted by the Applicant for the proposed TWE Project and Draft EIS alternatives.
Programmatic Agreement (PA)	A document that records the terms and conditions agreed upon to resolve the potential adverse effects of a federal agency program, complex undertaking, or other situations in accordance with 36 CFR § 800.14(b).
Proponent	TransWest Express LLC.

Proposed Action	The Proposed Action for the federal agencies is to consider whether to issue right-of-way grants across various parcels of public lands to allow the construction and operation of a new $\pm 600$ -kV DC transmission line that would be located on federally managed lands between south-central Wyoming and southern Nevada. A 250 foot wide ROW will generally be required for the $\pm 600$ -kV DC transmission line.
Proposed Route	The route of the proposed Project as sited and proposed by TransWest Express LLC and presented to the federal agencies for their consideration in applications for right-of-way grants.
Purpose and Need (NEPA)	Under the National Environmental Policy Act of 1969 (NEPA), the need to take an action may be something the agency identifies itself, or it may be a need to make a decision on a proposal brought to it by someone outside of the agency, for example, an applicant for a permit. Alternatives are measured against how well they meet the underlying need and best achieve the purposes to be attained.
Purpose and Need (project proponent)	As identified by an applicant or proponent of a project, the purpose and need describes the intended outcome of the project and the compelling reason why it is being proposed. Alternatives are measured against how well they meet the underlying need and best achieve the purposes to be attained.
Raptor	A bird of prey that feeds upon smaller animals.
Record of Decision (ROD)	The document that is prepared to substantiate a decision based on an EIS. The Record of Decision (ROD) is the final step for the BLM and USFS in the EIS process. The ROD states the final agency decisions, identifies the alternatives considered and discusses mitigation, enforcement and monitoring commitments.
Reclamation	Returning disturbed lands to a form and productivity that will be ecologically balanced.
Recreation Opportunity Spectrum (ROS)	Forest Service classification system that uses a scale ranging from primitive to urban for the purpose of planning and managing recreational resources.

Reference Line Segments	Reference lines (see <b>Transmission Reference Lines</b> ) are divided into “segments,” which are identified by a nomenclature of letters and/or numbers. The letters correspond to the state in which they are located. The segments will be used to identify alternative end-to-end routes for the transmission line and to quantify and compare potential impacts resulting from these alternative routes. For the TWE Project DEIS analysis a series of reference line segments have been combined and follow a potential alternative route between common geographic points for analysis in the EIS.
Regeneration station	A station amplifying the signals between substations or regeneration stations when the distance between exceeds 55 miles. Regeneration stations consist of a building 12 by 32 by 9 feet tall, a fenced yard, access road, and distribution power supply from the local distribution system. They are typically built very near the transmission line and have the fiber optic cable entry and exit runs to connect to the overhead ground fiber optic cables along the transmission line.
Reliability	Transmission systems must be built with sufficient levels of redundancy to enable the transmission system to reliably operate in the event of the loss of any single element (i.e., transmission line segment or substation element). Following loss of any single element, the transmission operator has 20 minutes to readjust system flows, thereby bringing flows on lines and transformers to within normal ratings, in preparation for the next facility outage.
Revegetation	The reestablishment and development of self-sustaining plant cover. On disturbed sites, this normally requires human assistance, such as reseeding.
Right-of-way (ROW)	Refers to the area, generally centered on a specified centerline, requested by the Proponents of BLM and of other landowners and managers for the construction, operation, and maintenance of a linear feature such as a road, electric transmission line, or pipeline.
Right-of-way (ROW) grant	An authorization to use or occupy a specific piece of public land for a certain project, such as a road, pipeline, transmission line, or communication site. A ROW grant authorizes rights and privileges for a specific use of the land for a specific period of time. For a transmission line, this includes the construction, operation, maintenance, and termination of the Project. Generally, a ROW is granted for no longer than 30 years.

Riparian areas	Vegetation communities that occur adjacent to waterways such as streams, rivers, springs, ponds, lakes, or tidewater and that provide habitat for numerous plant and animal species. They generally occupy transitional areas between aquatic and upland habitats and may function as vegetative buffers for aquatic resources.
Riverine system	Wetland inventory system that includes wetlands not dominated by trees, shrubs, or persistent emergents that are contained within a river channel.
Roadless area	An area of undeveloped public land typically exceeding 5,000 acres within which there are no improved roads maintained for travel by means of motorized vehicles intended for highway use.
Safety Performance Functions	A mathematical relationship (model) between frequency of crashes by severity and the most significant causal factors on a specific highway.
Sage-grouse lek	A location used by male sage-grouse, generally every year, to assemble during the mating season and engage in competitive displays that attract females.
Scenery Management System (SMS)	The Scenery Management System (SMS) replaces the Visual Management System (VMS) used in the most recent Medicine Bow National Forest Land and Resource Management Plan. The SMS provides an overall framework for the orderly inventory, analysis, and management of scenery. The new system applies to all national forests and grasslands administered by the Forest Service and to all Forest Service management activities. The SMS process uses particular ecosystems as the environmental context for aesthetics.
Scenic Backway	A paved or dirt road reaching secluded areas of natural beauty.
Scenic Byway	A public road having special, scenic, historic, recreational, cultural, archeological, and/or natural qualities that have been recognized as such through legislation or some other official declaration (DOT 2008).
Scenic Quality Rating	The relative scenic quality (A, B, or C) assigned to a landscape by applying the scenic quality evaluation key factors; scenic quality A being the highest rating, B a moderate rating, and C the lowest rating (BLM 1984).

Scoping	Part of the federal environmental analysis process required under NEPA where significant issues are identified for detailed analysis. Scoping includes, but is not limited to, a formal scoping period early in the analysis process in which members of the public are invited to review the proposed project and identify possible issues or concerns with the project.
Section 106	Under Section 106 of the National Historic Preservation Act of 1966, as amended, federal agencies must identify and evaluate cultural resources and consider the impact of undertakings they fund, license, permit, or assist on historic properties eligible for inclusion in the National Register of Historic Places. The federal agencies must afford the State Historic Preservation Officer and the Advisory Council on Historic Preservation the opportunity to comment on these undertakings.
Sedimentation	The deposition or accumulation of sediment.
Sensitive species	Those plants and animals identified by the Regional Forester for which population viability is a concern as evidenced by significant current or predicted downward trend in populations or density and significant or predicted downward trend in habitat capability.
Sensitivity levels	Sensitivity levels are defined by the BLM as the measure of public concern for scenic quality. Public lands are assigned high, medium, or low sensitivity levels (BLM 1984).
Seral	Pertaining to the stages of ecological succession occurring in communities of plants and animals until the climax is reached.
Severe winter relief range	A documented survival range which may or may not be considered a crucial range area as defined above. It is used to a great extent, only in occasionally extremely severe winters (e.g., 2 years out of 10). It may lack habitat characteristics which would make it attractive or capable of supporting major portions of the population during normal years but is used by and allows at least a significant portion of the population to survive the occasional extremely severe winter. [Wyoming Chapter of Wildlife Society 1990]
Shrubland	A habitat type characterized by woody vegetation smaller than trees (in general, having multiple main stems and being less than 20 feet in height and six inches diameter at breast height at maturity).
Sight Distance	Distance a road user can see before the line of sight is blocked by a hill crest or an obstacle.

Single-circuit transmission line	A transmission line composed of three electrical phases and two lightning protection shield wires. One of the lightning protection shield wires is a steel OHGW, and the other is typically an OPGW.
Snag	A dead or dying tree.
Soil compaction	Operation of motorized vehicles on moist soils, especially heavy equipment, is likely to cause compaction of the surface layer, which may increase runoff, decrease infiltration and aeration, and reduce soil productivity by making it more difficult for plant roots to establish or obtain soil moisture and nutrients.
Soil creep	Slow mass movement of soil downslope due to outward expansions brought on by water infiltration, which leads to downward movements under gravity as water moves out of the soil (ITS Tutorial School 2012).
Soil erosion	The movement of soil particles, usually as a result of wind or water forces. Many factors affect soil erosion, including soil grain size, cohesion factor, soil moisture content, type and amount of vegetative cover, precipitation amount and intensity, steepness of slope, and wind speed.
Solitude	The state of being alone or remote from others; a lonely or secluded place (BLM 2012c).
Span length of transmission circuit	The distance between two transmission support structures traveled by the conductors, measured either horizontally or along the conductors from the end of one insulator string to the end of the next insulator string.
Special Recreation Management Area (SRMA)	SRMAs recognize unique and distinctive recreation values and are managed to enhance a targeted set of activities, experiences, benefits, and recreation setting characteristics, which become the priority management focus.
Special Recreation Permit (SRP)	Issued by the BLM and the USFS for some recreational uses on federal lands and waters. SRPs are issued as a means to control visitor use, protect recreational and natural resources, and provide for the health and safety of visitors.
Special Status Species	Species of plants or animals that have been designated by government agencies as needed special monitoring, conservation, or protection, usually due to declining populations. This group includes federally endangered and threatened species as well as other designations.

Special Use Permit (SUP)	A legal document that allows occupancy, use, rights, or privileges of National Forest System (NFS) land. The authorization is granted for a specific use of the land for a specific period of time.
Species	A group of interbreeding individuals not interbreeding with another such group; similar and related species are grouped into a genus.
Staging Area	A fenced, generally flat location where materials, equipment, and vehicles are stored prior to their use in construction of the transmission line or its ancillary facilities.
State Historic Preservation Office (SHPO)	Created under Section 101 of the NHPA to survey and recognize historic properties, review nominations for properties to be included in the National Register of Historic Places, review undertakings for the impact on the properties as well as support federal organizations, state and local governments, and the private sector. States are responsible for setting up their own SHPO; therefore, each SHPO varies slightly on rules and regulations.
Stray voltage	Stray voltage is an extraneous voltage that appears on grounded surfaces in buildings, barns, and other structures, including utility distribution systems.
Stream Channel	(By statute definition in Idaho) A natural water course of perceptible extent that has definite beds and banks, and which confines and conducts continuously flowing water. Continuously flowing water is defined as an amount of water capable of providing for the migration and movement of fish, but excludes those portions of streams that naturally go dry at the location of the alteration.
Subsidence (soil)	The sinking of the earth's surface because of the withdrawal of water or mineral resources.
Substation	A fenced site containing switching and transformation equipment needed to transform one voltage to another and for protecting and controlling transmission and distribution lines. A substation is used to raise voltages for long distance transmission and to lower transmission voltage for distribution to the end users.
Summer or Spring-Summer-Fall range	A population or portion of a population of animals use the documented habitats within this range annually only (from the previous winter) to the onset of persistent winter conditions (variable, but commonly this period is between 5/1 and 11/30 or shorter in Wyoming). (5/1 – 11/14, adopted by WGFD in 2004) [Wyoming Chapter of Wildlife Society 1990]

Switches	Devices used to mechanically disconnect or isolate equipment; found on both sides of circuit breakers.
System Alternatives	System alternatives are alternative transmission configurations, which may have the potential to meet the TWE Project purpose and need, depending on future energy market conditions and permitting decisions for other regional transmission systems. Three system alternatives are described in the PDTR.
Take	Harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct toward a species listed under the ESA.
Talus	Rock debris that has accumulated at the base of a cliff or steep slope.
Tap	The point at which a transmission line is connected to a substation or other electrical device to provide service to a local load.
Temporary Use Permit	A permit given for temporary use of federally managed lands. A temporary use permit is typically issued for the construction of a project, followed by a special use permit or long-term right-of-way grant for the operation of the project.
Terrestrial	Occurring on land.
Threatened and Endangered Species (TES)	Threatened and endangered species listed or candidates for listing under the federal Endangered Species Act (ESA) and those species listed by the BLM and the Forest Service as sensitive.
Threatened species	Those species officially listed by the U.S. Fish and Wildlife Service that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range. [ESA §3(20)]
Topsoil	The uppermost soil layer, generally ranging from a few inches to less than one foot in thickness. Topsoil is the site of greatest organic content, contains the most soil nutrients, and supports the greatest amount of plant life.
Track road	Unimproved dirt roads without surfacing or regular maintenance, generally 8 to 12 feet in width.
Traditional Cultural Property (TCP)	A property that is eligible for the NHRP because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community.

Transformers	Electrical equipment usually contained in a substation that is needed to change voltage on a transmission system.
Transmission line	A system of structures, wires, insulators, and associated hardware that carry electric energy from one point to another in an electric power system. Lines are operated at relatively high voltages varying from 69 kV up to 765 kV, and are capable of transmitting large quantities of electricity over long distances.
Transmission Line Corridors	Geographic areas following a route that identify a specific width (generally between two and six miles) within which the proposed 250 foot-wide TWE Project transmission line right-of-way (ROW) would be located. Corridor widths have varied among the various studies completed for TWE Project planning. For purposes of the DEIS analysis, the Proposed and Alternative Corridors have been refined to generally two miles wide. In limited areas, the corridor widths may be greater or lesser due to routing constraints, as requested by the joint lead agencies. These corridors will be evaluated in the DEIS to document the range of resource impacts which could result from transmission line construction, operation, and maintenance within the corridors. Corridor locations and widths have been, and will continue to be, refined throughout the National Environmental Policy Act (NEPA) process.
Transmission Line Routes	Conceptual paths that traverse from point A to point B, which would fulfill the Project purpose in a general sense. Routes are not defined with specific lines on the ground or depicted on a map, and do not have an area, width, or line associated with them; however route alternatives are analyzed for consideration of impacts based on reference lines that accomplish each route alternatives.
Transmission Reference Lines	Preliminary, non-engineered routes within corridors that were determined based on environmental and engineering constraints and constructability review. The reference line is generally bounded on each side by one mile of corridor. For purposes of the DEIS analysis, reference lines serve as preliminary centerlines for the location of the $\pm 600$ kV DC transmission line ROWs, and impacts expected from each will be analyzed accordingly. Reference line locations may be refined within the transmission line corridors throughout the NEPA process.

TransWest Express LLC (TransWest)	TransWest Express LLC is a wholly owned affiliate of The Anschutz Corporation (TAC), a privately held company based in Denver. Through its affiliates, TAC has been actively involved in the West for more than 75 years in the fields of ranching, agriculture, energy development and transmission, and more. TAC's activity and investments in the energy field reflect a strong commitment to responsibility developing and managing natural resources (TransWest 2012).
Trip	A single or one-direction vehicle movement with either the origin or the destination inside the study site.
Trona	A monoclinic mineral, grayish or yellowish hydrous sodium carbonate and bicarbonate, $\text{Na}_2\text{CO}_3 \cdot \text{NaHCO}_3 \cdot 2\text{H}_2\text{O}$ , occurring in dried or partly evaporated lake basins.
Turbidity	The state or condition of opaqueness or reduced clarity of a fluid, due to the presence of suspended in matter.
U.S. Army Corps of Engineers (USACE) Jurisdictional Wetlands	Wetlands that are regulated by the USACE under Section 404 of the CWA. Areas must exhibit three characteristics of wetlands (hydrology, hydrophytes, and hydric soils) and must be navigable, or hydrologically connected to navigable waters, in order to be classified as jurisdictional wetlands (USACE 1987). It is important to understand that some areas that function as wetlands ecologically, but exhibit only one or two of the three wetland characteristics, do not currently qualify as USACE jurisdictional wetlands, and thus activities in these wetlands are not regulated under the Section 404 program. In addition, artificial water conveyance systems constructed within upland areas (such as agricultural drainage ditches or converted cropland) may develop some wetland characteristics overtime, however, these areas are not considered as jurisdictional wetlands, as long as they are not located within historical wetland systems. Jurisdictional wetlands include <b>waters of the United States</b> .
U.S. Department of Agriculture, Forest Service (USFS)	A federal agency under the Department of Agriculture that manages 193 million acres of public land for multiple uses and benefits and for the sustained yield of renewable resources such as water, forage, wood, recreation, fish and wildlife habitat, wilderness areas, and archaeological, paleontological and historical sites.

U.S. Fish and Wildlife Service (USFWS)	A 1940 reorganization plan (54 Stat. 1232) in the Department of the Interior consolidated the Bureau of Fisheries and the Bureau of Biological Survey into one agency to be known as the Fish and Wildlife Service. The Bureau of Sport Fisheries and Wildlife was created as a part of the U.S. Fish and Wildlife Service in the Department of the Interior on November 6, 1956, by the Fish and Wildlife Act of 1956 (70 Stat. 1119). That act was amended on July 1, 1974, by Public Law 93-271 (88 Stat. 92) to, among other purposes, abolish the position of Commissioner of Fish and Wildlife and designate the Bureau as the U.S. Fish and Wildlife Service (USFWS 2010).
Understory	Foliage layer beneath the forest canopy. Young trees that are growing beneath the tall mature trees in a timber stand (Conway 1973).
Vegetation Communities	A combination of dominant plant species that live together in the same region or on the same landform.
Viewshed	As defined in the BLM Visual Resource Management Manual, viewshed refers to “the landscape that can be directly seen under favorable atmospheric conditions, from a viewpoint or along a transmission corridor.”
Visitor-day	An aggregate of 12 hours of recreation use by one or more individuals (BOR 2010).
Visual Contrast Rating (VCR)	A systematic process used by the Bureau of Land Management (BLM) to analyze potential visual impact of proposed projects and activities.
Visual Management System (VMS)	See <b>Scenery Management System</b> .
Visual Quality Objectives (VQO) (Forest Service)	Management standards that identify five degrees of alteration to the natural landscape based on the landscape’s diversity of natural features and the public’s concern for scenic quality.
Visual Resource Inventory (VRI) (BLM)	Visual Resource Inventory classes (I through IV) represent the relative value of the visual resources and provide the basis for considering visual values in the resource management planning process. VRI classes are the composite of scenic quality, sensitivity levels, and distance zones.

Visual Resource Management (VRM) System (BLM)	The BLM system identified four VRM Classes (I through IV) with specific management prescriptions for each class. The system is based on an inventory of the existing scenic quality, viewer sensitivity, and viewing distance zones. The management class for a given area is typically arrived at by comparing the scenic quality, visual sensitivity, and distance zone with the overall goals set forth for the area.
Volt	The international system unit of electrical potential and electromotive force—a measure of electrical “pressure”.
Voltage	The electrical potential difference between two points expressed in volts; the driving force that causes a current to flow in an electrical circuit.
Volume-to-Capacity Ratio	The ratio of flow rate to capacity for a transportation facility.
Waters of the United States	Broadly defined by statute, regulation, and judicial interpretation to include all waters that were, are, or could be used in interstate commerce such as rivers, streams (including ephemeral streams), reservoirs, lakes, and adjacent wetlands. The USACE Wetlands Delineation Manual dated January 1987 (USACE 1987) and its current supplements must be used to determine if an area has sufficient wetland characteristics to be a water of the United States.
Watershed	The area that drains to a common waterway.
Western Area Power Administration (Western)	Western, an agency of the U.S. Department of Energy (DOE), has been designated as a joint-lead federal agency for the environmental review of the TransWest Express Transmission Line Project.
West-wide Energy (WWE) Corridor	The designation of energy corridors, based on Section 368 of the Energy Policy Act of 2005, on federal lands in 11 western states, including Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.
West-wide Energy Corridor Programmatic EIS	Considers 11 contiguous western states for the possible construction, operation, maintenance, and decommissioning and dismantling of energy infrastructure such as oil and gas pipelines and electric transmission lines. The states considered are Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Wetlands	Defined for regulatory purposes as “Those areas that are inundated or saturated by surface or ground water (hydrology) at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation (hydrophytes) typically adapted for life in saturated soil conditions (hydric soils). Wetlands generally include swamps, marshes, bogs, and similar areas (CFR 328.3 and 40 CFR 232.2(r)).”
Wilderness Act of 1964	The Wilderness Act designated all previously existing Wild Areas, Canoe Areas, and Wilderness Areas as Wilderness. In 1964, these areas on national forests totaled 9.1 million acres and represented the entire National Wilderness Preservation System (USFS 2008).
Wilderness Area	An area formally designated by Congress as part of the National Wilderness Preservation System (BLM 2012d).
Wilderness Characteristics	These attributes include the area’s size, its apparent naturalness, and outstanding opportunities for solitude or a primitive and unconfined type of recreation. They may also include supplemental values (BLM 2012c).
Wilderness Study Area (WSA)	Areas with wilderness characteristics identified and designated through the inventory and study processes authorized by Section 603 of FLPMA, and prior to 2003, through the planning process authorized by Section 202 of FLPMA (BLM 2012c).
Winter range	Areas that are used by animals, primarily big game, during winter months when forage is scarce and snow is often deep.
Wire zone	A linear zone under the transmission wires, and extending 10 feet beyond them, maintained in vegetation cover less than 5 feet high.
Zoning	Regulations used to guide growth and development; typically involve legally adopted restrictions on uses and building sites in specific geographic areas to regulate private land use.