

9.0 GLOSSARY

Acre-foot. A measure of water volume. The amount of water it would take to cover one acre of land to a depth of 1 foot; 325,851 gallons; 43,560 cubic feet.

Alluvial fan. A pattern of sediment deposit caused by running water.

Alluvium. Any stream-laid sediment deposit.

Ambient. Surrounding or background conditions in the absence of an identifiable source.

Ambient air. That portion of the atmosphere, outside of buildings, to which the general public has access.

Ambient Air Quality Standards. Standards established on a state or federal level that define the limits for airborne concentrations of designated criteria pollutants (nitrogen dioxide, sulfur dioxide, carbon monoxide, particulate matter with aerodynamic diameters less than 10 microns [PM₁₀], ozone, and lead) to protect public health with an adequate margin of safety (primary standards) and to protect public welfare, including plant and animal life, visibility, and materials (secondary standards).

Animal unit. Considered to be 1 mature (1,000 pound) cow, or its equivalent, based on average daily forage consumption of 26 pounds of dry matter per day.

Animal unit month. The amount of forage required to sustain the equivalent of 1 cow, 1 horse, 1 elk, 5 sheep, 5 goats, 17 deer, or 19 antelope for one month.

Aquifer. A body of rock that contains enough saturated permeable material to transmit groundwater and to yield significant quantities of groundwater to wells and springs.

Army-After-Next. Follow-on concept for Army doctrine and weapon systems to Army Force XXI.

Army Force XXI. The Army has a long history of developing innovative approaches to future warfighting challenges. The future Army Force XXI and its follow-on, Army-After-Next, is being designed with organizations and capabilities that will allow it to be rapidly tailored, strategically deployable, and effectively employable in joint and multinational operations. Army Force XXI provides rapid and effective response to changing situations and local conditions. Mission planning and rehearsal will be conducted simultaneously with the build-up of decisive forces, as automated systems and simulations, capable of operating from ships and aircraft, provide the capability to plan, coordinate, and war game possible courses of action while forces are en route.

Vastly improved capabilities of long-range missiles with smart submunitions, precision weapons delivered throughout the battlespace, and attack helicopters capable of operations deep within enemy forces, integrated with an air campaign, are critical to ensuring that national objectives are met. Army Force XXI operations must be fully integrated as the land force commander draws from a suite of complementary capabilities of each service, our allies, and other government and nongovernment organizations.

Attainment area. A region that meets the NAAQS for a criteria pollutant under the CAA.

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Average annual daily traffic. For a 1-year period, the total volume passing a point or segment of a highway facility in both directions divided by the number of days in the year.

Basal area. The area of ground surface covered by the stem or stems of a range plant, usually measured 1 inch above the soil, in contrast to the full spread of forage.

Baseline. The initial environmental conditions against which the environmental consequences of various alternatives are evaluated.

Candidate species. Species for which the USFWS has on file sufficient information on biological vulnerability and threat(s) to support the issuance of a proposed rule to list but issuance of the proposed rule is precluded.

Capacity (traffic). The maximum rate of flow at which vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions.

Census block. Cluster of blocks within the same census tract. Census blocks do not cross county or census tract boundaries and generally contain between 250 and 550 housing.

Controlled access FTX sites. Field training sites where military access is subject to increased control and restricted to activities with limited ground-disturbing effects.

Criteria pollutants. The CAA required the EPA to set air quality standards for common and widespread pollutants after preparing criteria documents summarizing scientific knowledge on their health effects. Today there are standards for six criteria pollutants: sulfur dioxide, carbon monoxide, particulate matter less than 10 micrometers in diameter (PM₁₀), nitrogen dioxide, ozone, and lead.

Cumulative impact. Cumulative impact is the environmental impact resulting from the incremental impact from a particular activity when added to other past, present, or future activities. Cumulative impacts may be individually insignificant, but collectively, the individually insignificant activities may become significant.

Day-night average sound level. A-weighted SPLs averaged over a 24-hour period with 10 dBA added for events occurring between 10 p.m. and 7 a.m.

Decibel. A standard unit of measuring SPLs based on a reference sound pressure of 0.0002 dynes per square centimeter. This is the smallest sound a human can hear.

Decibel, A-weighted. Adjusted unit of sound measurement that corresponds to the relative sensitivity of the human ear at specified frequency levels. This represents the loudness as perceived by humans.

Direct effects. Beneficial or deleterious impacts that are caused by an action and occur at the same time and place.

Direct impact. Effects resulting solely from the proposed alternative(s).

Effluent. A gas or fluid discharge into the environment.

Endangered species. A plant or animal species that is threatened with extinction or serious depletion in its range and is formally listed as such by the USFWS.

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Environmental Impact Statement. A detailed written statement that helps public officials make decisions that are based on understanding of environmental consequences and to take actions that protect, restore, and enhance the environment.

Eolian. Applied to deposits arranged by the wind. Wind blown.

Ephemeral. Lasting only a brief period of time.

Ephemeral stream. A stream or portion of a stream which flows only in direct response to precipitation.

Equivalent sound level. A single number representing the fluctuating sound level in decibels over a specified period of time. The average of a fluctuating level of sound energy.

Evapotranspiration. The loss of water from the soil both by evaporation and by transpiration from the plants growing there.

Firing Fan. The fan-shaped area encompassing all firing scenario directions and their associated surface danger zones.

Fugitive dust. Particulate matter composed of soil. Fugitive dust may include emissions from haul roads, wind erosion of exposed soil surfaces, and other activities in which soil is either removed or redistributed.

Geologic. Any natural process acting as a dynamic physical force on the earth; i.e. faulting, erosion, and mountain-building resulting in rock formations.

Grazing use – light. Indicates that 20 to 40 percent of current year's forage production has been eaten or destroyed by grazing animals.

Grazing use – heavy. Indicates that 60 to 80 percent of current year's forage production has been eaten or destroyed by grazing animals.

Groundwater. Subsurface water within the zone of saturation.

Groundwater recharge. Water that infiltrates the land surface and is not lost to evaporation or consumed by plants can percolate downward and replenish the groundwater aquifers. This deep percolation is called recharge.

Hazardous waste. Wastes that are designated as hazardous by the EPA or state regulations. Hazardous waste, defined under the RCRA, is waste from production or operation activities that poses a potential hazard to human health or the environment when improperly treated, stored, or disposed. Hazardous wastes that appear on special EPA lists or possess at least one of the four following characteristics: ignitability, corrosivity, reactivity, and toxicity.

Hydric soils. Soils that are saturated to the surface sometime during the growing season.

Hydrology. A science dealing with the properties, distribution, and circulation of water on and below the earth's surface and in the atmosphere.

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Impact. The terms “impacts” and “effects” are synonymous as used in the NEPA. Impacts may be beneficial or adverse, and may apply to the natural, aesthetic, historic, cultural, and socioeconomic resources of the installation and the surrounding communities. Where applicable, impacts may be classified as direct or indirect.

Indirect impact. An indirect impact is caused by a proposed activity but is later in time or farther removed in distance, but still reasonably foreseeable. Indirect impacts may include land use changes or population density changes and the related effects these changes will have on air, water, and other natural or social systems.

Infiltration. Water that falls on the land surface that does not runoff but percolates into the ground. Some of this water evaporates, some is used by plants, and some percolates downward to the groundwater.

Infrastructure. Utilities and other physical support systems needed to operate a laboratory or test facility. Included are electric distribution systems, water supply systems, sewage disposal systems, roads, and so on.

Intermittent stream. A stream that flows only at certain times when it receives water from springs or from a surface source.

Leasable minerals and energy resources. Coal, sodium, and potassium; oil and gas, and geothermal resources.

Level of service (public services). A measure describing the amount of public services (e.g. fire protection and law enforcement services) available to community residents, generally expressed as the number of personnel providing the services per 1,000 population.

Level of service (traffic). A qualitative measure describing operational conditions within a traffic stream and how they are perceived by motorists and/or passengers.

Locatable minerals. Traditional “hard rock” minerals such as gold, silver, lead, copper, zinc, and industrial minerals such as fluorspar, barite, and high-calcium limestone.

Long-term impacts. Long-term impacts are neither temporary nor reversible. They may occur either during the construction or operational phases of an activity. For example, the construction of a new building may create long-term impacts during both the construction and operational phases. Draining of a wetland for the construction of a new building will create long-term and permanent impacts on biological resources. Likewise, once operational, the new building may create additional long-term impacts such as increased population density, waste generation, etc.

Low-altitude flight. Flight at less than 300 feet above the ground.

Military training route. A route developed for the high-speed (greater than 250 knots) low-altitude training of tactical aircrews. Instrument flight rules military training routes are mutually developed by the FAA and the DoD. Visual flight rules military training routes are developed by the DoD. Military training routes are published on aeronautical charts. Each military training route has its own unique number consisting of either three or four digits. Three digits indicate that at least one segment of the route is 1,500 feet above ground level, and four digits indicate that the entire route is at or below 1,500 feet above ground level. The number is preceded by either IR or VR, specifying instrument flight rules or

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visual flight rules, respectively. Since routes are one way, the same route flown the opposite direction will have a separate, distinct number.

Mitigation. Mitigation generally includes: avoiding the impact altogether by stopping or modifying the proposed action; minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; compensating for the impact by replacing or providing substitute resources or environments.

Nap-of-the-earth. Flight as close to the ground surface as possible.

National Ambient Air Quality Standards. Section 109 of the CAA requires the EPA to set nationwide standards for widespread air pollutants. Currently, six pollutants are regulated: sulfur dioxide, carbon monoxide, PM₁₀, nitrogen dioxide, ozone, and lead.

Nitrogen dioxide. Gas formed primarily from atmospheric nitrogen and oxygen when combustion takes place at high temperature. Nitrogen dioxide emissions contribute to acid deposition and formation of atmospheric ozone. See *Criteria Pollutants*.

Nitrogen oxide. Gases formed primarily by fuel combustion, which contribute to the formation of acid rain. Hydrocarbons and nitrogen oxides combine in the presence of sunlight to form ozone, a major constituent of smog.

No impact. “No impact” implies that a particular activity creates neither a direct nor indirect impact, does not have long- or short-term implications, and is neither beneficial nor negative.

Noise. Any sound that is undesirable because it interferes with speech and hearing or is intense enough to damage hearing.

Nonattainment area. An area that has been designated by the EPA or the appropriate state air quality agency as exceeding one or more national or state AAQS.

Nonpotable. Water that is unsafe or unpalatable to drink because it contains pollutants, contaminants, minerals, or infective agents.

Off-road vehicle. Any motorized vehicle designated for cross-country travel over any type of natural terrain.

Ozone (ground level). A major ingredient in smog. Ozone is produced from reactions of hydrocarbons and nitrogen oxides in the presence of sunlight and heat.

Particulate. Fine liquid or solid particles such as dust, smoke, mist, fumes, or smog, found in air or emissions.

Peak hour (traffic). The hour of highest traffic volume on a given section of roadway.

Playa. A dry, vegetation free, flat area at the lowest point of an undrained basin.

Radiation. The emissions, either electromagnetic or particulate, resulting from the transformation of an unstable atom or nucleus.

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Record of Decision. A public document that explains which alternative will be selected for the area of concern.

Riparian. The banks of a body of water.

Salable minerals. Common variety mineral materials such as sand, gravel, cinders, and building stone, that are sold on a permit basis.

Short-term impacts. Short-term impacts are temporary and either direct or indirect. Short-term impacts usually occur during the construction phase of the activity.

Significance. Significance requires consideration of the context and intensity of the impact or effect, under consideration. Significance can vary in relation to the context of the proposed action. At Fort Bliss, the significance of the proposed actions may include consideration of the effects on a national, regional, and local basis. Both short- and long-term effects may be relevant. Impacts may also be evaluated in terms of their intensity or severity.

Sortie. A sortie represents a flight of a single military aircraft from take-off through landing.

Stakeholder. Interested and/or affected people or groups.

Stratigraphic. Division of geology dealing with the definition and description of rocks and soils, especially sedimentary rocks.

Subsurface. A zone below the surface of the earth whose geologic features are principally layers of rock that have been tilted or faulted and are interpreted on the basis of drill hole records and geophysical (seismic or rock vibration) evidence. Generally, it is all rock and solid materials lying beneath the earth's surface.

Surface danger zone. The safety area required for a single missile trajectory.

Swale. A low-lying or depressed and often wet stretch of land.

Threatened species. A species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Trip generation. A determination of the quantity of trip ends associated with a parcel of land.

Unemployment rate. The number of civilians, as a percentage of the total civilian labor force, without jobs but actively seeking employment.

Vegetative cover. Living vegetation, which covers a point on the ground surface, when viewed from directly overhead. Includes canopies of trees and shrubs within 20 feet or less of the ground surface, and lichens and mosses 1/16 of an inch or more in thickness.

Waters of the U.S. "Water such as intrastate lakes, rivers, streams (including intermittent streams)."

Wetlands. An area that is regularly saturated by surface water or groundwater and subsequently supports vegetation that is adapted for life in saturated soil conditions. To qualify as a USACE jurisdictional wetland, it must have hydric soil, be saturated to the surface sometime during the growing season, and contain wetland plant species.