

Appendix N Acronyms and Definitions

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ACRONYMS	
AADT	Average Annual Daily Traffic
ACBM	Asbestos Containing Building Materials
ACC/MVM	Accidents per million vehicle miles
ACOE	United States Army Corps of Engineers
ADT	Average Daily Traffic
APE	Area of Potential Effects (for cultural resources)
ARG	Agricultural Supply
AST	Aboveground Storage Tank
AUM	Animal-Unit Months
BMP	Best Management Practice
CAAA	Federal Clean Air Act Amendments of 1990
CDFG	California Department of Fish and Game
CEQA	California Environmental Quality Act of 1970
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
COD	Chemical Oxygen Demand
CTC	California Transportation Commission
CWA	Clean Water Act
dBA	Noise measurement
DRIR	Draft Relocation Impact Report
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
ft	Foot or feet
ha	Hectare(s)
HASR	Historic Architectural Survey Report
HOV	High Occupancy Vehicle
HPSR	Historic Property Survey Report
ISA	Initial Site Assessment
kph	Kilometers per hour
L_{dn}	Sound level, day and night
LEDPA	Least Environmentally Damaging Practicable Alternative.
L_{eq}(h)	Sound level equivalent
LOS	Level of Service
M	Meter(s)
NEPA	National Environmental Policy Act, 1969
NHPA	National Historic Preservation Act

<i>NMFS</i>	National Marine Fisheries Service; also referred to as NOAA (see below)
<i>NOAA</i>	National Oceanic and Atmospheric Administration, Fisheries Division; also referred to as NMFS (see above)
<i>NOD</i>	Notice of Determination
<i>NOI</i>	Notice of Intent
<i>NOP</i>	Notice of Preparation
<i>NPDES</i>	National Pollutant Discharge Elimination System
<i>NRHP</i>	National Register of Historic Places
<i>ROD</i>	Record of Decision
<i>RTP</i>	Regional Transportation Plan
<i>RWQCB</i>	Regional Water Quality Control Board
<i>SMARA</i>	Surface Mining and Reclamation Act
<i>SHPO</i>	State Historic Preservation Officer
<i>STIP</i>	State Transportation Improvement Program
<i>SWPPP</i>	Storm Water Pollution Prevention Plan
<i>TASAS</i>	Traffic Accident Surveillance and Analysis System
<i>TEA-21</i>	The Transportation Equity Act for the 21st Century
<i>TIP</i>	Transportation Improvement Program
<i>TSM</i>	Transportation Systems Management
<i>USEPA</i>	United States Environmental Protection Agency
<i>USFWS</i>	United States Fish and Wildlife Service
<i>USGS</i>	United States Geological Survey
<i>vph</i>	Vehicles per hour

DEFINITIONS

404 Permit - The Corps of Engineers requires this permit for all projects that involve dredging or filling of lakes, streams, tidelands, marshes, or low-lying areas behind dikes or levees, as well as for disposal of dredged materials to any waterway or ocean.

Aboveground Storage Tanks (ASTs) – These tanks typically contain motor vehicle fuel.

Agricultural Supply (ARG) - Includes crop, orchard, and pasture irrigation, stock watering support of vegetation for range grazing, and all uses in support of farming and ranching operations.

Anadromous - Migrating up rivers from the sea to breed in fresh water.

Area of Potential Effects (APE) – The defined geographic area within which there is a potential for an undertaking to either directly or indirectly cause changes in the character or use of historic properties.

Asbestos Containing Building Materials (ACBM) – These are typically common building materials such as ceiling or floors tiles, mastics, wallboards or insulation manufactured prior to the 1970s.

Base Flood – The flood or tide having a one percent (1%) chance of being exceeded in any given year (100-year flood event).

Base Flood Elevation (BFE) – The elevation shown on the Flood Insurance Rate Map for Zones AE, AH, A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE that indicates the water surface elevation resulting from a flood that has a one percent chance of equaling or exceeding that level in any given year.

Base Floodplain Development - To encourage, allow, serve, or otherwise facilitate additional development within the base floodplain, either directly or indirectly.

Basin Plan - A specific plan for control of water quality within one of the nine hydrologic basins of the State under the regulation of a Water Quality Control Board.

Beneficial Impact - A beneficial impact is one that would result in a positive contribution or improvement in environmental conditions. These types of impacts do not require mitigation measures.

Beneficial Use - A use of a natural water resource that enhances the social, economic, and environmental well-being of the user. Twenty-one beneficial uses are defined for the waters of California.

Best Management Practice (BMP) - Any program, technology, process, siting criteria, operating method, measure, or device that controls, prevents, removes, or reduces pollution.

Bypass – An arterial highway that permits traffic to avoid all or part of a certain area such as an urban area or park.

California Native Plant Society (CNPS) -- The CNPS produces an inventory of rare and endangered plants and vascular plants of California. The inventory includes five lists, which categorize the degree of concern for the plant, List 1A, 1B, 2, 3, and 4. Plants in List 1A, 1B and 2 are protected under Section 1901, Chapter 10 (Native Plant Protection Act) and Sections 2062 and 2067 of the California Endangered Species Act and are eligible for State listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

Caltrans – California Department of Transportation. Responsible, as owner/operator of the state

highway system, for its safe operation and maintenance.
Chemical Oxygen Demand (COD) - A monitoring test that measures all the oxidizable matter found in a runoff sample, a portion of which could deplete dissolved oxygen in receiving waters.
Community Noise Equivalent Level (CNEL) -- A noise level that takes into account all the noise energy measured in dBA from a source during 24 hours and adds 5 dBA to evening noise, and adds 10 dBA to night noise during the period.
Conventional Highway - A highway with no control of access (no control of access roads onto the highway) which may or may not be divided or have grade separations at intersections.
Cooperating Agency - An agency other than the lead agency, which has jurisdiction by law or other expertise, involved in a proposed project.
Corridor - A strip of land between two termini within which traffic, topography, environment, and other characteristics are evaluated for transportation purposes.
Cultural Resource – An inclusive term used for any historic or prehistoric site, district, building, structure, or object, regardless of whether it is unevaluated or whether it is eligible or ineligible for the National Register of Historic Places (see also, Historic Property).
Cumulative Effects - Whether the action is related to other actions with individually insignificant, but cumulatively significant, impacts.
Design Speed - A speed selected to establish specific minimum geometric design elements for a particular section of highway
Detention Basin - A basin, usually surrounded by a dike or levee, which holds stormwater runoff until the receiving waters are low enough for the contained water to be discharged.
Discharge - Instantaneous rate of flow expressed in terms of volume per unit time.
Draft EIR/EIS - Draft Environmental Impact Report (state), Environmental Impact Statement (federal)
Drainage Basin - The area in which all surface water will accumulate into one given stream.
Ecosystem - The total dynamic complex of a community of organisms and its controlling environment functioning as a unit.
Elevation(s) - All elevations are based on the National Geodetic Vertical Datum of 1929 (NGVD-29).
Encroachment - An action within the limits of the base floodplain. Any construction activity within a base floodplain constitutes an encroachment.
Endangered – Plant or animal species that are in danger of extinction throughout all or a significant portion of its range.
Environmentally Sensitive Area -- Defines area to be avoided by project construction activities and by future facility maintenance activities.
Erosion - The wearing away of the land surface by running water, wind, ice, or other geological agents.
Expressway - An arterial highway with at least partial control of access, where limits are placed on number and types of intersecting streets, roads and driveways. An expressway may or may not be divided or have separations at intersections.
Feasibility (of noise abatement) -- A minimum of 5 dBA noise reduction must be achieved at the impacted receivers in order for the proposed noise abatement measure to be considered <i>feasible</i> . The feasibility criterion is not necessarily a noise abatement design goal; greater noise reductions are encouraged if they can be achieved reasonably. Feasibility may be restricted by (1) topography; (2) access requirements for driveways, ramps, etc.; (3) the presence of local cross streets; (4) other noise sources in the area; and (5) safety considerations.

Federal Register - A federal publication which provides official notice of federal administrative hearings and issuance of proposed and final federal administrative rules and regulations.
Fishery - A stream capable of supporting angling activities. Usually streams which show evidence of spawning and nursery grounds.
Flood Insurance Rate Map (FIRM) -- The official map of the community on which FEMA has delineated both the special flood hazard areas and the risk premium zones applicable to the community.
Floodplain - Normally dry land areas subject to periodic temporary inundation by stream flow or tidal overflow. Land formed by deposition of sediment by water; alluvial land.
Floodway - The channel of a stream, plus any adjacent floodplain areas, that must be kept free of encroachment so that a 100-year flood event can be carried without substantial increase in flood elevations. FEMA's minimum standards limit such increases in flood heights to 0.30 m (1.0 ft), provided hazardous velocities are not produced.
Freeway - A divided arterial highway with full control of access and with grade separations at intersecting roadways.
Fresh Water Replenishment (FRSH) - Provides a source of fresh water for replenishment of inland lakes and streams of varying salinity.
Grade Separation - Utilized when two roads intersect at different grades (vertical planes). Normally provided as part of an interchange; in lieu of an at-grade intersection.
Groundwater Recharge (GWR) - Includes natural or artificial recharge for future extraction for beneficial uses and to maintain salt balance or halt saltwater intrusion into freshwater aquifers.
Habitat - The place or type of site where a plant or animal naturally or normally lives and grows.
Heavy Metals – These are metals such as lead and copper that are typically found as contaminants resulting from motor vehicle fluid (such as used motor oil) discharge.
Hectare (Ha) -- A measure of land area.
High Occupancy Vehicle (HOV) – Refers to carpooling.
Historic Property – Any prehistoric or historic site, district, building, structure, or object that is included in, or eligible for inclusion in, the National Register of Historic Places. This term also includes artifacts, records, and remains that are related to and/or located within such properties. The term also includes properties that have been determined to be of traditional religious and cultural importance to an Indian Tribe and that meet the National Register criteria for eligibility (see also, Cultural Resource).
Hummock – A rounded or conical knoll, mound, or hillock or other small elevation; a slight rise of ground above a level surface.
Hydric Soil - Inundated or saturated soil conditions resulting from permanent or periodic inundation by groundwater or surface water.
Initial Site Assessment (ISA) – This is a Caltrans term for a study that determines hazardous waste issues on a project.
Intermittent Stream - A stream, which flows only during part of the year, usually during wet weather.
L_{dn} – “Sound level, day and night” averages total acoustical energy over a 24-hour period. In addition, a 10 dBA “penalty” is added to L _{dn} , to take into consideration nighttime sleeping hours and this is factored into the 24-hour average.
Least Environmentally Damaging Practicable Alternative (LEDPA) -- The Section 404(b)(1) Alternative Analysis is a specific evaluation to determine the alternative with the least overall environmental impacts, while meeting the project's purpose. A Section 404 Permit can only be

issued for the LEDPA.
Less-than-Significant Impact - Under CEQA, a less-than-significant impact is one that would not result in a substantial detrimental change in the environment. This impact is below the threshold of significance, and therefore, does not require mitigation (see Threshold).
$L_{eq}(h)$ – “Sound level equivalent” averages the total acoustical energy over one hour. For example, the 50 dBA of a quiet residential area next to an airport and the 105 dBA of an aircraft taking off would be averaged over a one-hour period, so that the L_{eq} measurement would lie somewhere between 50 dBA and 105 dBA.
Level of Service (LOS) - a measurement of the capacity of the roadway.
Median - The portion of a divided highway separating the traveled ways for traffic in opposite directions.
Metric System – A decimal system of weights and measures in which the gram, the meter, and the liter are the basic units of weight, length, and volume, respectively. Names for the most common other units are formed by the addition of the following prefixes to these three terms: deca-, hecto-, kilo- (ten, hundred, thousand) and deci-, centi-, milli-, (tenth, hundredth, thousandth). This system is an internationally accepted system of weights and measures. Starting in 1994, Caltrans began the several year process of converting to the use of SI (the International System of Units) as metric is sometimes called.
Mitigation Measures - When impacts are identified, Caltrans and FHWA have the responsibility of first avoiding the impacts, by proposing feasible alternatives or modifications to the proposed project. If the impacts cannot be avoided, the next steps are to minimize, eliminate, or compensate for these effects. These actions, steps, procedures, or conditions are called mitigation measures, which may involve rectifying an impact by repairing, rehabilitating, or restoring the affected environment.
Municipal and Domestic Supply – Includes usual uses in community or military water systems and domestic uses from individual water supply systems.
National Pollution Discharge Elimination System (NPDES) Permit – All storm water and non-storm water discharges to waters of the United States are regulated through the USEPA NPDES permit system. The USEPA has, for the most part, delegated the adoption and regulation of NPDES permits to the States. Caltrans obtained a statewide NPDES Permit in 1999. The statewide NPDES permit also incorporates conditions of California’s Statewide Construction General Permit (Order 99-08-DWQ). Any discharge from Caltrans rights-of-way, properties, facilities, and activities within those rights-of-way that is not composed entirely of storm water is prohibited. The NPDES Permit, therefore, includes standard requirements to the effect that discharges shall not cause or contribute to violations of the water quality objectives nor shall they cause certain conditions to occur which create a condition of nuisance or water quality impairment in receiving waters.
NEPA/404 Integration Process – The NEPA – Section 404 integration process is a Memorandum of Understanding (MOU) committed to integrating NEPA and section 404 of the Clean Water Act in the transportation planning, programming, and implementation stages. It is committed to ensuring the earliest possible consideration of environmental concerns pertaining to waters of the U.S., including wetlands, at each of these three stages. A high priority is placed on the avoidance of impacts to waters of the U.S. and associated sensitive species, including threatened and endangered species. Whenever avoidance of waters of the U.S. is not practicable, minimization of impacts will be achieved, and unavoidable impacts will be mitigated to the extent reasonable and practicable.

Nodal Analysis – Nodal approach allows a segment of one alternative to be combined with a segment of another alternative so a new or “hybrid alternative” is created.
Nonpoint Source - A dispersed source of pollution that is not identifiable as to a specific location.
Notice of Determination (NOD) -- Part of the CEQA process. It indicates that a project has been approved subject to the requirements of CEQA.
Notice of Intent (NOI) -- Part of the NEPA process. A notice placed in the Federal Register to advise the public that an environmental impact statement will be prepared for a project.
Notice of Preparation (NOP) -- Part of the CEQA process. Notice of intent to prepare an environmental impact report on a project.
Perennial Stream - A stream with continuous year-round flow.
pH – A measure of acidity or alkalinity.
PM₁₀ - Particulate matter less than 10 microns in diameter, small enough to enter human lungs during respiration.
Point Source - A source of pollution that is emitted at a singular location.
Polychlorinated biphenyls (PCBs) – Fire-resistant organic fluids used in making plastics and as insulation in heavy-duty electrical equipment.
Postmile (PM) - A method of identifying a location on the State Highway System using miles. When combined with the county and route, identifies unique locations along any State Route in terms of miles.
Potentially Significant Impact - Under CEQA, a potentially significant impact is one that, if it were to occur, would be considered a significant impact; however, the occurrence of the impact cannot be immediately determined. A potentially significant impact is treated (i.e., mitigated) as if it were a significant impact.
Practicable – Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.
Project Report - Report providing preprogramming project information. The PSR describes the project, its scope and limits, costs and delivery schedule.
PS&E - Plans, Specifications and Estimates are construction documents.
Reasonableness (of noise abatement) -- The determination of <i>reasonableness</i> of noise abatement is more subjective than the determination of its feasibility. It implies that common sense and good judgment have been applied in arriving at a decision. Noise abatement is only considered where noise impacts are predicted and where frequent human use occurs and a lowered noise level would be of benefit. Primary consideration is given to exterior areas. The overall reasonableness of noise abatement is determined by considering a multitude of factors.
Record of Decision (ROD) - Explains why an alternative has been selected, summarizes mitigation and summarizes efforts made to minimize environmental impacts.
Regulatory agency - An agency which has jurisdiction by law.
Responsible Agency - Responsible agency means a public agency, other than the Lead Agency, which has responsibility for carrying out or approving a project under CEQA.
Resource Agencies – US Environmental Protection Agency; US Army Corps of Engineers; US Fish & Wildlife Service; National Marine Fisheries Service; California Department of Fish & Game; Regional Water Quality Control Board.
Retention Basin - A basin that holds stormwater runoff without release except by means of evaporation, infiltration or emergency bypass.
Right-of-way (ROW) - A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes.

Riparian - Pertaining to the banks and other adjacent terrestrial (as opposed to aquatic) environs of freshwater bodies, watercourses, estuaries, and surface-emergent aquifers (springs, seeps, oases) whose transported freshwater provides soil moisture sufficient in excess of that otherwise available through local precipitation to potentially support the growth of mesic vegetation.
Route Concept - Most likely facility on the route given present and future financial, planning and engineering factors.
Runoff - The storm water that is not infiltrated into the ground.
Scoping - An activity of the lead agency in the environmental review process that ensures the inclusion of: (1) all significant issues; and (2) maximum participation for the development of the EIS/EIR.
Sensitive Species - Plant or animal species which are (1) Federal listed or proposed threatened or endangered species, or candidate species; (2) bird species protected under the Migratory Bird Treaty Act; (3) species protected under State endangered species laws and regulations, plant protection laws and regulations, Fish and Game codes, or species of special concern listings and policies, or (4) species recognized by national, state, or local environmental organizations (e.g., the California Native Plant Society).
Significant Impact – A significant impact is one that will result in a detrimental change in any of the physical or socioeconomic conditions affected by the project. Under CEQA, an impact is significant if it exceeds the threshold criteria for a particular resource (see Threshold). Under NEPA, the significance of an impact is determined by considering the context in which it will occur and the severity of the impact.
Soffit – The low point on the underside of a bridge span or the uppermost point on the inside of a drainage structure (culvert).
Statewide Gateway - Major points of entry into California, including interstate routes, international routes, seaports, international airports, and intermodal transportation facilities.
Suspended Solids - The filterable fraction of the total solid present in water.
TEA-21 - The Transportation Equity Act for the 21st Century was enacted June 9, 1998 as public Law 105-178. TEA-21 authorizes Federal surface transportation programs for highways, highway safety, and transit for the 6-year period 1998-2003.
Threatened - Although not presently threatened with extinction, it is likely to become an endangered species in the foreseeable future in the absence of special protection.
Threshold of Significance – Under CEQA, a threshold is a criterion used to define the level at which an impact would be considered to be significant. If an impact exceeds this threshold, it normally would be considered to be significant. Thresholds usually are based on standards found in existing laws or regulations (for example noise control ordinances); however, in some instances they are based on scientific opinion and/or factual data.
Topology – The history of a region as indicated by its topography.
Total Dissolved Solids - The non-filterable fraction of the total solid present in water.
Transhumance – Seasonal movement of people from one ecological zone to another, organized around the migration of game and the seasonality of edible plants; the seasonal movement of livestock between upland and lowland pastures.
Truncated Valley Alternatives – Truncated valley alternatives are modifications of the original versions of Alternatives J1, L and C1.
Turbidity – Turbidity is a measure of the degree to which light is scattered by suspended particulate material and soluble colored compounds in water. The greater the amount of total suspended solids (TSS) in the water, the murkier it will appear and the higher the measured

turbidity.
Underground Storage Tanks (USTs) – These tanks typically contain motor vehicle fuel and are placed approximately three feet below the ground surface.
Undocumented Tanks – These can be above or below ground tanks that are not properly permitted. Typically no records for ownership, use, or integrity tests can be found.
Urban - An area is considered urban if it has a population of 5,000 or more for Federal-Aid purposes.
Viaduct - Typically a long narrow bridge used for highway purposes.
Volatile Organic Compounds (VOCs) – These are organic compounds that are typically found in solvents used for degreasing.
<p>Waters of the United States - As defined by the ACOE in 33 CFR §328.3(a):</p> <ol style="list-style-type: none"> 1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; 2. All interstate waters including interstate wetlands; 3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce, including any such waters: <ol style="list-style-type: none"> (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) Which are used or could be used for industrial purposes by industries in interstate commerce; 4. All impoundment of waters otherwise defined as waters of the United States under this definition; 5. Tributaries of waters identified in paragraphs (1)-(4); 6. The territorial seas; 7. Wetlands adjacent to waters (waters that are not wetlands themselves) identified in paragraphs (1)-(6).
Watershed - The drainage basin contributing water, organic matter, dissolved nutrients, and sediments to a stream, estuary, or lake.
Wetlands - Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (33 CFR §328.3 (b)).