

Appendix E Glossary of Technical Terms

abutment	An abutment is an end support of a bridge superstructure used to either transmit the reaction of the superstructure to the foundations, to retain the earth filling, or to connect the superstructure to the approach roads.
acquisition	The process of obtaining right of way.
active fault	A fault that has moved within late-Quaternary time (the last 750,000 years). Note that this definition is broader than that used by the California Department of Conservation, California Geological Survey (CGS), which defines an active fault as one that has moved within Holocene time (the last 11,000 years).
Advisory Council for Historic Preservation (ACHP)	The ACHP promotes the preservation, enhancement, and productive use of our nation's historic resources, and advises the President and Congress on national historic preservation policy.
alternative	An alternative is one possible east/west route between I-215 on the west and SR-79 on the east, and is made up of several segments.
Americans with Disabilities Act (ADA)	The Americans with Disabilities Act (ADA) of 1990 extends the protection of the 1964 Civil Rights Act to the disabled, prohibiting discrimination in public accommodations and transportation and other services.
aqueduct	<ol style="list-style-type: none">(1) A major conduit.(2) The entire transmission main for a municipal water supply that may consist of a succession of canals, pipes, tunnels, etc.(3) Any conduit for water, especially one for a large quantity of flowing water.(4) A structure for conveying a canal over a river or hollow.
Area of Potential Effect (APE)	A term used in Section 106 to describe the area in which historic resources may be affected by a federal undertaking. This term should only be used in the cultural resource reports; "survey area" or "project footprint" should be used as applicable in other reports.

Austin sand filter	An Austin sand filter is a specific type of media filter that is usually open and at grade. It has no permanent water pool and may be configured with earthen or concrete sides and inverts. Storm water is directed into the first chamber where the larger sediments and particulates settle out, and the partially treated effluent is metered into the second chamber to be filtered through a media.
base floodplain (100-year floodplain)	The area subject to flooding once every 100 years, or having a 1 percent chance of being flooded in any given year.
beneficial use	A use of a natural water resource that enhances the social, economic, and environmental well-being of the user. A total of 21 beneficial uses are defined for the waters of California, ranging from municipal and domestic supply to fisheries and wildlife habitat.
Best Management Practices (BMPs)	BMPs are procedures and/or actions applied and/or implemented during construction and/or operation of the project to minimize environmental impacts (i.e., water quality).
biochemical oxygen demand (BOD)	BOD refers to the oxygen used in meeting the metabolic needs of aerobic microorganisms in water containing organic matter. The higher the level of organic matter, the higher the BOD.
biofiltration swales/strips	Biofiltration strips are vegetated land areas over which storm water flows as sheet flow. Biofiltration swales are vegetated channels, typically configured as trapezoidal or v-shaped channels, that receive and convey storm water flows while meeting water quality criteria and other flow criteria.
bridges	Structures that span more than 6.1 meters, measured along the centerline of the road between undercroppings of abutments, and multiple span structures, including culverts, where the total measurement of the individual spans is in excess of 6.1 meters, measured from center to center of supports along the centerline of the road and the distance between individual culvert barrels is less than one-half the culvert diameter.
California Endangered Species Act (CESA)	The CESA generally parallels the main provisions of the Federal Endangered Species Act and is administered by the CDFG. The CESA establishes a petitioning process for the listing of threatened or endangered species. The California Fish and Game Commission is required to adopt regulations for this process and establish criteria for determining whether a species is endangered or threatened. The CESA also prohibits the “taking” of listed species except as otherwise provided in state law. Unlike its federal counterpart, the CESA applies the take prohibitions to species petitioned for listing (state candidates).

California Environmental Quality Act (CEQA)	CEQA is a California law (California Public Resources Code Section 21000 et seq.) passed in 1970, shortly after the federal government passed NEPA. CEQA does not directly regulate land uses, but instead requires development projects to provide documentation of their potential environmental impact.
California Register of Historical Resources (California Register)	The California Register is the authoritative guide to the state's significant historical and archeological resources.
California State Highway System	The California State Highway System comprises designated roads intended for travel by the public throughout the State of California. These roads are maintained by Caltrans.
Caltrans Highway Design Manual Standards	The Caltrans Highway Design Manual design standards are categorized in order of importance. Mandatory design standards are those considered most essential to achievement of overall design objectives. Advisory design standards are important also, but allow greater flexibility in application to accommodate design constraints. All standards other than mandatory or advisory are permissive with no requirement for application.
channelization	The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movement of both vehicles and pedestrians.
Clean Air Act as amended in 1990 (CAA)	The Clean Air Act, as amended in 1990, proposed emissions trading; added provisions for addressing acid rain, ozone depletion, and toxic air pollution; and established a national permits program.
Community and Environmental Transportation Acceptability Process (CETAP)	Established by the Riverside County Integrated Project to aid in the preparation of environmental, transportation, housing, and development guidelines for Riverside County for the first half of the 21st century, CETAP included the study of two intercounty corridors (Riverside County to Orange County and Riverside County to San Bernardino County) and two intracounty transportation corridors (a north-south and an east-west corridor in western Riverside County). The MCP project is included as one of the east-west intracounty transportation corridors.
community character	Community character refers to the qualities of the residents of a specific community (age, gender, ethnicity, etc).

community cohesion	Community cohesion is the degree to which residents have a “sense of belonging” to their neighborhood, a level of commitment of the residents to the community, or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time.
concentration flow conveyance systems	Where cut slopes are steeper than 1:4 (slope sections are defined as height: length), asphalt concrete dike, tow of fill ditches, and downdrains/overside drains would be used to control runoff and minimize gullies and scour. Direct surface runoff would be need to be intercepted.
conduit	Any pipe, arch, box, or drain tile through which water is conveyed.
Cooperating Agency	“Cooperating Agency,” under NEPA, means any agency other than the lead agency that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal for any action significantly affecting the human environment. Under CEQA, the term “responsible agency” is used.
cul-de-sac street	A local street open at one end only, with special provisions for turning around.
cultural resources	Any tangible or observable evidence of past human activity, regardless of significance, found in direct association with a geographic location, including tangible properties possessing intangible traditional cultural values.
culvert	A closed conduit that allows water to pass under a highway. The following three conditions constitute a culvert: <ol style="list-style-type: none">(1) Single Barrel: The span measured along the centerline of the road is 6.1 meters or less.(2) Multi-Barrels: The total of the individual spans measured along the centerline of the road is 6.1 meters or less.(3) Multi-Barrels: The total of the individual spans measured along the centerline of the road is 6.1 meters or greater, but the distance between individual culverts is more than one-half the culvert diameter.
cumulative impact	Impacts that result from past, present, and reasonably foreseeable future actions/projects, combined with the potential impacts of the MCP project.
Dead-end street	A local street open at one end only, without special provisions for turning around.

design variation	A modification in design for a specific alignment that may be applied to one or more of the MCP Build Alternatives.
detention basin	A detention basin is an artificial flow control structure used to contain floodwater for a limited period of time, thereby providing protection for areas downstream.
detention devices	A detention device is a permanent treatment BMP designed to reduce the sediment and particulate loading in runoff from the water quality design storm by temporarily detaining the water quality volume (WQV).
direct area of potential effects (APE)	The direct APE is the area that would potentially be directly and physically impacted by the project.
distance between ramp intersection and local road intersection	This term is used for the distance measured from curb return to curb return between ramp intersections and local road intersections.
drainage area (drainage basin) (basin)	That portion of the earth's surface upon which falling precipitation flows to a given location. With respect to a highway, this location may be either a culvert, the farthest point of a channel, or an inlet to a roadway drainage system.
embankment	A prism of earth that is constructed from excavated or borrowed natural soil and/or rock, extending from original ground to the grading plane, and designed to provide a stable support for the pavement structure.
encroachment	Any structure or object of any kind or character that is within the right of way, but not a part of the state facility.
Environmental Justice	Environmental Justice, in terms of transportation projects, can be defined as the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, from the early stages of transportation planning and investment decision making through construction, operations, and maintenance. As defined by Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by President Clinton on February 11, 1994, federal agencies are directed to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines.

United States Environmental Protection Agency (EPA)	An agency of the executive branch of the federal government charged with establishing and enforcing environmental regulations.
Environmentally Sensitive Area (ESA)	ESAs are locations of identified resources within a project APE that are to be protected by avoidance or restrictions on construction activities.
Executive Order (EO)	In the United States, an EO is a directive used by the President. The MCP project falls under EO 13274 (Environmental Stewardship and Environmental Streamlining), signed on September 18, 2002, by President George W. Bush.
Federal Endangered Species Act (FESA)	The purposes of the FESA are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection.
Federal Transportation Improvement Program (FTIP)	Based on the State Transportation Improvement Program (STIP), regional agencies, such as the Southern California Association of Governments (SCAG), prepare FTIPs to determine programming and funding for local and regional transportation projects.
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.
footprint	Area and/or boundary planned to be used for the project.
fossil	Any remains, trace, or imprint of a plant or animal that has been preserved in the Earth's crust since some past geologic time (Bates and Jackson 1980:243).
freeboard	Distance between the water surface and the bottom of the bridge deck.
freeway	Facility that includes basic freeway segments, ramp merge areas, ramp diverge areas, and weaving sections.
frontage street or road	A local street or road auxiliary to and located on the side of an arterial highway for service to abutting property and adjacent areas and for control of access.

General Plan	<p>A General Plan provides a focus and a guide for local land use decisions. Local land use plans consist of goals and policies that aim to direct the physical development of communities, and depend on regulatory mechanisms to implement those policies and guide growth and development. A General Plan includes:</p> <ul style="list-style-type: none">• Goals and objectives for long-range land use planning.• Specific policies to support goals and objectives.• Seven required “elements”: land use, circulation, housing, conservation, open space, noise, and safety. The local government has the option to adopt additional separate elements (e.g., historical, agricultural) if it so wishes. Also be aware that area, community, and neighborhood plans are policy instruments adopted as part of the General Plan itself.
groundwater	<p>That water which is present under the earth’s surface. Groundwater is that situated below the surface of the land, irrespective of its source and transient status. Subterranean streams are flows of groundwaters parallel to and adjoining stream waters, and usually determined to be integral parts of the visible streams.</p>
growth-related effect	<p>An effect resulting from changes in accessibility to a previously undeveloped area or a redistribution of growth.</p>
Habitat Conservation Plans	<p>Plans developed to lessen habitat loss and fragmentation and to maintain wildlife corridors.</p>
High-Occupancy Vehicle (HOV) lane	<p>A lane reserved for vehicles with a driver and one or more passengers.</p>
Historic Properties Survey Report (HPSR)	<p>The HPSR is the summary document Caltrans uses as its consultation and decision-making document. Under Section 106 Programmatic Agreement (PA) [1], Caltrans uses it to request the State Historic Preservation Officer’s concurrence on determinations of eligibility or ineligibility for properties within the project APE that were evaluated as part of the project.</p>
Historic property	<p>In federal law, a district, site, building, structure, or object significant in American history, architecture, engineering, archaeology, or culture at the national, state, or local level, that has integrity, and that meets the National Register of Historic Places criteria (is eligible for or listed in the National Register of Historic Places).</p>

Historic resource	In state law, any object, building, structure, site, area, place, record, or manuscript found to be historically or archaeologically significant, or significant in other specific aspects of California life, and that meets the California Register criteria.
Historic resource under CEQA	In state law, any cultural resource designated as historic under a local ordinance or resolution, identified as significant in a local survey that meets the Office of Historic Preservation standards, is listed in or has been determined eligible for listing in the California Register or National Register of Historic Places.
Indirect area of potential effects (APE)	The Indirect APE is usually larger than the Direct APE and may extend beyond it to encompass additional properties that could be affected indirectly by the project. Indirect effects may extend beyond the project's footprint to encompass visual, audible, or atmospheric intrusions; shadow effects; vibrations from construction activities; or change in access or use.
infiltration devices	An infiltration device is designed to remove pollutants from surface discharges by capturing the WQV and infiltrating it directly to the soil rather than discharging it to surface waters.
interchange	A system of interconnecting roadways in conjunction with one or more grade separations providing for the interchange of traffic between two or more roadways on different levels.
interchange spacing	This term is used when discussing the distance between interchanges. It could refer to the distance between two local street interchanges (intersecting street with ramps) or to the distance between a freeway-to-freeway interchange and a local street interchange.
invasive species	Any species, including its seeds, eggs, spores, or other biological material capable of breeding that species, that is not native to that ecosystem and whose introduction does or is likely to cause economic or environmental harm or harm to human health.
key view	Specific views selected to represent the various landscape units throughout the study area, the visual resources, and a number of sensitive viewer perspectives.
L_{dn}	L _{dn} (day-night level) is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10 decibels (dB) penalty applied to A-weighted sound levels occurring during nighttime hours between 10 p.m. and 7 a.m.

L_{eq}	L _{eq} (equivalent sound level) represents an average of the sound energy occurring over a specified period. In effect, L _{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound that actually occurs during the same period. The continuous 1-hour A-weighted equivalent sound level (L _{eq} [h]) is the energy average of A-weighted sound levels occurring during a 1-hour period and is the basis for the Noise Abatement Criteria (NAC) used by Caltrans and FHWA.
L_{max}	L _{max} (maximum sound level) is the highest instantaneous sound level measured during a specified period.
L_{xx}	L _{xx} (percentile-exceeded sound level) represents the sound level exceeded for a given percentage of a specified period (e.g., L ₁₀ is the sound level exceeded 10 percent of the time, and L ₉₀ is the sound level exceeded 90 percent of the time).
Lead Agency	“Lead Agency” means the public agency that has primary responsibility for carrying out or approving a project that may have a significant effect on the environment and preparing the environmental document.
levee	A levee is a natural or artificial slope or wall, usually earthen, and often parallels the course of a river.
level of service (LOS)	A rating using qualitative measures that characterize operational conditions within a traffic stream and their perception by motorists and passengers.
liquefaction	The loss in the shearing resistance of a cohesionless soil, caused by an earthquake wave. The soil is turned into a fluid mass.
longitudinal encroachment	A longitudinal encroachment would result from a bridge, levee, or road constructed parallel to the existing floodplain.
Measure A	In 1988, Riverside County voters approved Measure A, which established a half-cent sales tax in order to fund transportation improvement projects to address growing transportation congestion in Riverside County. Measure A was reauthorized by voters in 2002.
media filters	A Media Filter Treatment BMP device primarily removes total suspended solids pollutants (sediments and metals) from runoff by sedimentation and filtering.
Most Likely Descendant (MLD)	Native American tribes, organizations, and individuals who have requested to be placed on the register to be contacted to make recommendations for the treatment and disposition of Native American human remains.

multi-chambered treatment trains (MCTT)	The MCTT is a storm water treatment device that uses sedimentation and filtering in each of three sequential chambers to primarily remove total suspended solids pollutants (sediments and metals) from runoff. The MCTT was developed for treatment of storm water at critical source areas, such as vehicle service facilities, parking areas, paved storage areas, and fueling stations.
Multiple Species Habitat Conservation Plan (MSHCP)	An MSHCP is a comprehensive habitat conservation planning program that addresses multiple species' needs, including habitat, and the preservation of native vegetation. The MCP project is a covered activity under the western Riverside County MSHCP.
National Environmental Policy Act (NEPA)	An Act to establish a national policy for the environment, to provide for the establishment of a Council on Environmental Quality, and for other purposes.
National Historic Preservation Act (NHPA)	The NHPA (Public Law 89-665; 16 United States Code [USC] 470 <i>et seq.</i>) became law in 1966 and consists of legislation creating the National Register of Historic Places, the list of National Historic Landmarks, and the posts of State Historic Preservation Officers, with the intent of preserving historical and archaeological sites.
National Pollutant Discharge Elimination System (NPDES) Permit	A permit required for facilities and activities that discharge waste into surface waters from a confined pipe or channel.
National Register of Historic Places (National Register)	The National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect historic and archeological resources. Properties listed in the National Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.
Native American Heritage Commission (NAHC)	The NAHC provides protection to Native American burials from vandalism and inadvertent destruction; provides a procedure for the notification of MLDs regarding the discovery of Native American human remains and associated grave goods; brings legal action to prevent severe and irreparable damage to sacred shrines, ceremonial sites, sanctified cemeteries, and place of worship on public property; and maintains an inventory of sacred places.
nonattainment area	Any geographic region of the United States that the EPA has designated as a nonattainment area for a transportation-related pollutant for which a National Ambient Air Quality Standard (NAAQS) exists.

nonpoint source	A dispersed source of pollution that is not identifiable as to specific location, but that may be identified as contributing to water quality degradation from a tributary drainage area (e.g., pesticide residues distributed over an agricultural area).
Notice of Intent (NOI)	A notice that an EIS will be prepared and considered. The NOI is published in the Federal Register by the lead federal agency. The CEQA equivalent of this notice is called the Notice of Preparation. The NOI for the MCP project was published in November 2004.
Notice of Preparation (NOP)	The CEQA notice that an EIR will be prepared for a project. The NOP for the MCP project was circulated in November 2004, and a Supplemental NOP was circulated in July 2007.
Office of Historic Preservation (OHP)	The OHP, in partnership with the people of California and governmental agencies, helps to preserve and enhance California's irreplaceable historic heritage as a matter of public interest so that its legacy will be maintained and enriched for present and future generations.
Paleontology	The study of life in past geologic times based on fossil plants and animals and including phylogeny, their relationships to existing plants, animals, and environments, and the chronology of the Earth's history (Bates and Jackson 1980:451).
paleontologic species	A morphologic species based on fossil specimens. It may include specimens that would be considered specifically distinct if living individuals could be observed (Bates and Jackson 1980:451).
paleontological resource	A locality containing vertebrate, invertebrate, or plant fossils (i.e., fossil location, fossil-bearing formation, or a formation with the potential to bear fossils).
partial acquisition	The acquisition of a portion of a parcel of property.
pathogens	Disease-causing organisms that grow and multiply within the host. Pathogens include viruses, bacteria, protozoa, and possibly helminth worms and are a concern in storm water runoff.
project	CEQA (§21065) defines a "project" as an activity that may cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment, and that is any of the following: (a) An activity directly undertaken by any public agency.

- (b) An activity undertaken by a person which is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.
- (c) An activity that involves the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

project footprint

The project footprint is the future right of way for all alternatives, based on a minimum 224-foot roadway cross-section for the parkway alternatives and a 128- to 196-foot or greater cross-section for the General Plan alternatives. The project footprint defines the cultural resources APE for evaluation purposes of archaeological sites. The project footprint defines the area of direct impacts for all alternatives. The project footprint also includes areas of cut and fill, staging areas for construction vehicles, equipment and materials, haul routes, and borrow areas.

Record of Decision (ROD)

A formal written statement required under NEPA, wherein a federal lead agency must present the basis for its decision to approve a selected project alternative, summarize mitigation measures incorporated into the project, and document any required Section 4(f) approval.

Regional Transportation Plan (RTP)

“. . . the official intermodal metropolitan transportation plan that is developed through the metropolitan planning process for the metropolitan planning area, developed pursuant to 23 CFR part 450.”

responsible agency

A “public agency, other than the lead agency which has responsibility for carrying out or approving a project” (Public Resources Code [PRC] 21069). The CEQA Guidelines further explain the statutory definition by stating that a “responsible agency” includes “all public agencies other than the Lead Agency which have discretionary approval power over the project” (14 California Code of Regulations [CCR] 15381). State and local public agencies that have discretionary authority to issue permits, for example, fall into this category.

retaining wall

A retaining wall is a structure that holds back soil or rock from a building, structure, or area. Retaining walls prevent downslope movement or erosion and provide support for vertical or near-vertical grade changes.

Riverside County Integrated Project (RCIP)

The RCIP is a comprehensive, three-part, integrated program to determine future conservation, transportation and housing, and economic needs in Riverside County.

Riverside County Transportation Commission (RCTC)	The RCTC coordinates transit plans with regional and state agencies and allocates transportation development act funds for Riverside County.
runoff	The portion of precipitation that appears as flow in streams. Drainage or flood discharge that leaves an area as surface flow or a pipeline flow, having reached a channel or pipeline by either surface or subsurface routes.
scoping	A process for determining the scope of issues to be addressed in an environmental document and for identifying significant issues to be analyzed in depth in an EIS and/or EIR.
scour	The process by which water erodes the streambed and banks of a waterway.
Section 4(f)	Section 4(f) of the 1966 Department of Transportation Act prohibits the use of land from any historic property on or eligible for the National Register unless there is no feasible and prudent alternative to the use of land from the affected historic property and the project includes all possible planning to minimize harm.
Section 106 of the National Historic Preservation Act (Section 106)	<p>The NHPA set forth national policy for recognizing and protecting historic properties. It established the National Register, State Historic Preservation Officers and programs, and the ACHP.</p> <p>Under Section 106 of the NHPA, federal agencies are required to take into account the effects of their undertakings on historic properties and provide the ACHP an opportunity to comment on those undertakings. Historic properties are defined in federal law as those properties that are listed in, or meet the criteria for listing in, the National Register.</p>
segment	Shorter than an alternative, most segments run in an east-west direction, although a few run north-south. Data was collected and tabulated for the project technical reports by segment to assist in organizing data collection and analysis for the MCP Alternatives.
seiche	A wave oscillation of the surface of water in an enclosed basin initiated by an earthquake.
Service Interchange	An interchange of traffic to or from a local roadway to or from a freeway; also known as local interchange.

setbacks	The minimum horizontal distance slopes shall be set back from site boundaries according to Chapter 70 of the Uniform Building Code. Also applies to the minimum horizontal distance required from faults to structures (see California Geological Survey Special Publication 42, pp. 27 and 29).
side slope	This term is used when discussing the embankment and cut sections of the roadside. The side slope is the grading slope, width and depth ratio for the roadside to ensure roadway stability and erosion control, and to provide a reasonable opportunity for recovery for an out-of-control vehicle.
significance – CEQA	<p>CEQA defines a “significant effect on the environment” as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant” (15382).</p> <p>CEQA requires that the lead agency identify each “significant effect on the environment” resulting from the project and avoid or mitigate it.</p> <p>The CEQA Guidelines include mandatory findings of significance for certain effects, thus requiring the preparation of an EIR.</p>
significance – NEPA	NEPA requires that an EIS be prepared when the proposed federal action as a whole has the potential to “significantly affect the quality of the human environment.” To determine that potential, one must consider both the context in which the action takes place and the intensity of its effect.
slope ratio	Defined as height to length.
sound wall	A sound wall is a noise barrier exterior structure designed to protect sensitive land uses from noise pollution.
State Historic Preservation Officer (SHPO)	The SHPO is responsible for the operation and management of the OHP, as well as long-range preservation planning.
State Implementation Plan (SIP)	The portion (or portions) of an applicable implementation plan approved or promulgated, or the most recent revision thereof, under Sections 110, 301(d) and 175A of the Clean Air Act.

State Transportation Improvement Program (STIP)	A staged, multiyear, statewide, intermodal program of transportation projects that is consistent with the statewide transportation plan and planning processes and metropolitan plans, Transportation Improvement Programs (TIPs), and processes.
State Water Resources Control Board	The principal authority of California for regulation of the quantity and quality of waters of the state, established by act of the legislature in 1967. It assumed responsibility for administration of the Porter-Cologne Water Quality Control Act of 1969.
stopping sight distance	The stopping sight distance is the distance required by the driver of a vehicle, traveling at a given speed, to bring the vehicle to a stop after an object on the road becomes visible.
study area	The MCP study area is the broad area defined in the Statement of Purpose and Need that ranges from approximately 1 to 4 miles in width. The study area for each environmental topic may vary (e.g., the water quality study may consider watersheds that extend outside of the MCP study area).
subsidence	A localized mass movement that involves the gradual downward settling or sinking of the Earth's surface.
superelevation	Superelevation is the banking of the roadway along a horizontal curve so motorists can safely and comfortably maneuver the curve at reasonable speeds. As speeds increase and horizontal curves become tighter a steeper superelevation rate is required.
surface runoff	The movement of water on Earth's surface, whether flow is over surface of ground or in channels.
Surface Transportation Assistance Act of 1982 (STAA) National Network	The STAA National Network is made up of the National Network (NN), Terminal Access (TA), and Service Access routes and determines route classification for STAA trucks.
survey area	The survey area is the area that ranges from 200 to 700-plus feet in width along the centerline of each MCP alternative. It is the survey area for biological resources and for the site identification phase for cultural resources. Surveys of the buffer area resulted in a database of identified resources that was used by the engineering team to avoid and minimize impacts to resources as much as possible when establishing the right of way for each alternative. The survey area was previously referred to as a "buffer area" in early project correspondence.

swale	A shallow, gentle depression in the earth's surface. This tends to collect the waters to some extent and is considered in a sense a drainage course, although waters in a swale are not considered stream waters.
System Interchange	Interchange of traffic to or from controlled access facilities, with one or more grade separations.
threatened and endangered species	Threatened or endangered species are species of plants and animals that are formally listed as endangered under the Federal Endangered Species Act or California Endangered Species Act.
total dissolved solids (TDS)	TDS refers to the sum of all cations or anions (sometimes measured in parts per million as calcium carbonate). TDS comprise inorganic salts (principally calcium, magnesium, potassium, sodium, bicarbonates, chlorides, and sulfates) and small amounts of organic matter that are dissolved in water.
total suspended solids (TSS)	TSS is the dry-weight of particles that are suspended in water.
Traditional Cultural Property (TCP)	A TCP can be defined generally as one that is eligible for inclusion in the National Register 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.
Transportation Control Measure (TCM)	“ . . . is any measure that is specifically identified and committed to in the applicable implementation plan that is either one of the types listed in § 108 of the CAA, or any other measure for the purpose of reducing emissions or concentrations of air pollutants from transportation sources by reducing vehicle use or changing traffic flow or congestion conditions. Notwithstanding the above, vehicle technology-based, fuel-based, and maintenance-based measures which control the emissions from vehicles under fixed traffic conditions are not TCMs for the purposes of Project-level conformity.”
transverse encroachment	A transverse encroachment would result from construction, or placement of fill, in the base floodplain perpendicular to the direction of flow.
truck climbing lane	A lane required by Caltrans Highway Design Manual Section 204.5 when the grade of the transportation facility exceeds 2 percent and the total change in elevation is greater than 75 meters (246 feet).

trustee agency	<p>A state agency having jurisdiction by law over natural resources affected by the MCP project are held in trust for the people of the State of California. Trustee agencies include:</p> <ul style="list-style-type: none">(a) The CDFG with regard to the fish and wildlife of the state, to designated rare or endangered native plants, and to game refuges, ecological preserves, and other areas administered by the department;(b) The State Lands Commission with regard to state-owned “sovereign” lands, such as the beds of navigable waters and state school lands;(c) The State Department of Parks and Recreation with regard to units of the State Park System; and(d) The University of California with regard to sites within the Natural Land and Water Reserves System” (14 CCR 15386).
Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 (Uniform Act)	<p>The Uniform Act, as amended in 1987, provides for uniform and equitable treatment of persons displaced from their homes, businesses, nonprofit associations, or farms by federal and federally assisted programs, and establishes uniform and equitable land acquisition policies.</p>
Value Analysis	<p>A Value Analysis is required by Caltrans during large transportation projects and is a method for enhancing product value by improving the relationship of performance to cost through the study of function.</p>
viaducts	<p>A viaduct is a bridge composed of several small spans. Many viaducts over land connect points of similar height in a landscape, usually by bridging a river valley or other eroded opening in an otherwise flat area. Viaducts over water are often combined with other types of bridges or tunnels to cross navigable waters.</p>
vista point	<p>A paved area beyond the shoulder that permits travelers to safely exit the highway to stop and view a scenic area. In addition to parking areas, amenities such as trash receptacles and interpretive displays, and in some cases, restrooms, drinking water, and telephones, may be provided.</p>
watershed	<p>The area drained by a stream or stream system.</p>
weaving section	<p>A weaving section is a length of one-way roadway where vehicles are crossing paths, changing lanes, or merging with through traffic as they enter or exit a freeway or a collector-distributor road.</p>

wet basins

Wet basins are detention systems consisting of a permanent pool of water, a temporary storage volume above the permanent pool, and a shoreline zone planted with aquatic vegetation. Wet basins are designed to remove pollutants from surface discharges by temporarily capturing and detaining the WQV in order to allow settling and biological uptake to occur.

wetland

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. (United States Army Corps of Engineers [USACE] and EPA definition)