

## 15 Acronyms and Abbreviations

| Acronym  | Definition   |
|--|--|
| µg/m <sup>3</sup>                                      | micrograms per cubic meter   |
| µT   | Microtesla   |
| °F   | degrees Fahrenheit   |
| 2013 Supplemental Alternatives Analysis Report         | <i>Merced to Fresno Section: Central Valley Wye Alternatives Supplemental Alternatives Analysis Report</i> |
| 2016 Business Plan                                     | <i>Connecting and Transforming California 2016 Business Plan</i>   |
| AA   | Assessment Area  |
| AADT   | annual average daily traffic   |
| AB   | Assembly Bill  |
| AC   | alternating current  |
| ACGIH  | American Conference of Governmental Industrial Hygienists  |
| ACHP   | Advisory Council on Historic Preservation  |
| ACM  | asbestos-containing material   |
| ACS  | American Community Survey  |
| ADL  | aerially deposited lead  |
| Air Quality and Global Climate Change Technical Report | <i>Merced to Fresno Section: Central Valley Wye Air Quality and Global Climate Change Technical Report</i> |
| ALUCP  | Airport Land Use Compatibility Plan  |
| ANSI/IEEE  | American National Standards Institute/Institute of Electrical and Electronics Engineers                    |
| APE  | area of potential effect   |
| ASTM   | ASTM International   |
| Authority  | California High-Speed Rail Authority   |
| BAAH   | Breaker-And-A-Half   |
| BAAQMD   | Bay Area Air Quality Management District   |
| BAU  | business-as-usual  |
| Bay Area   | San Francisco Bay Area   |
| BCC  | Birds of Conservation Concern  |
| bcf/year   | billion cubic feet per year  |
| BETP   | built environment treatment plan   |
| BFE  | base flood elevation   |
| bgs  | below ground surface   |
| Biological Resources and Wetlands Technical Report     | <i>Merced to Fresno Section: Central Valley Wye Biological Resources and Wetlands Technical Report</i>     |

| Acronym              | Definition  |
|----------------------|---|
| BMP                  | best management practice  |
| BNSF                 | BNSF Railway  |
| BPS                  | best performance standards  |
| BRMP                 | biological resources management plan                                  |
| Btu                  | British thermal units   |
| CAA                  | Clean Air Act   |
| CAAQS                | California Ambient Air Quality Standards                              |
| Cal. Code Regs.      | California Code of Regulations  |
| Cal. Gov. Code       | California Government Code  |
| CAL FIRE             | California Department of Forestry and Fire Protection                 |
| Cal-OSHA             | California Occupational Safety and Health Administration              |
| Caltrans             | California Department of Transportation                               |
| CARB                 | California Air Resources Board  |
| CAT                  | computed axial tomography   |
| CCA                  | copper chromated arsenate   |
| CCID                 | Central California Irrigation District                                |
| CDFW                 | California Department of Fish and Wildlife                            |
| CDOF                 | California Department of Finance                                      |
| CDPH                 | California Department of Public Health                                |
| CEC                  | California Energy Commission  |
| CED                  | California Energy Demand  |
| CEDD                 | California Employment Development Department                          |
| Central Valley RWQCB | Central Valley Regional Water Quality Control Board                   |
| Central Valley Wye   | Merced to Fresno Section: Central Valley Wye                          |
| CEQ                  | Council on Environmental Quality                                      |
| CEQA                 | California Environmental Quality Act                                  |
| CERCLA               | Comprehensive Environmental Response, Compensation, and Liability Act |
| CESA                 | California Endangered Species Act                                     |
| CFC                  | chlorofluorocarbons   |
| CGG                  | California Gas Gathering  |
| C.F.R.               | Code of Federal Regulations   |
| CGS                  | California Geological Survey  |
| CH <sub>4</sub>      | methane   |
| CHCD                 | California Department of Housing and Community Development            |
| CMP                  | construction management plan  |

| Acronym                    | Definition  |
|----------------------------|---|
| CNDDDB                     | California Natural Diversity Database   |
| CNPS                       | California Native Plant Society   |
| CO                         | carbon monoxide   |
| CO <sub>2</sub>            | carbon dioxide  |
| CO <sub>2</sub> e          | Carbon dioxide equivalent   |
| Conditions of Receivership | Conditions of Receivership for Paleontologic Salvage Collections  |
| CP                         | construction package  |
| CPUC                       | California Public Utilities Commission  |
| CRAM                       | California Rapid Assessment Method  |
| CRHR                       | California Register of Historical Resources   |
| CT                         | computed tomography   |
| CTP                        | construction transportation plan  |
| CUPA                       | Certified Unified Program Agencies  |
| CVFPB                      | Central Valley Flood Protection Board   |
| CWA                        | Clean Water Act   |
| CWD                        | Chowchilla Water District   |
| CWHR System                | California Wildlife Habitat Relationships Habitat Classification Scheme   |
| CMMW                       | California Wetlands Monitoring Workgroup  |
| cy                         | cubic yard  |
| dBA                        | A-weighted decibels   |
| DC                         | direct current  |
| DOC                        | Department of Conservation  |
| DOGGR                      | Division of Oil, Gas and Geothermal Resources   |
| DPM                        | diesel particulate matter   |
| Draft Supplemental EIR/EIS | <i>California High-Speed Rail Merced to Fresno Section: Central Valley Wye Draft Supplemental Environmental Impact Report (EIR)/Supplemental Environmental Impact Statement (EIS)</i> |
| DTSC                       | California Department of Toxic Substances Control   |
| DWR                        | California Department of Water Resources  |
| EA                         | environmental assessment  |
| ECA                        | essential connectivity area   |
| EDR                        | Environmental Data Resources, Inc.  |
| EFH                        | essential fish habitat  |
| EGPR                       | environmental goals and policy report   |
| EINU                       | electrical interconnections and network upgrades  |

| Acronym                    | Definition  |
|----------------------------|---|
| EIR                        | environmental impact report   |
| EIR/EIS                    | environmental impact report/environmental impact statement  |
| EIS                        | environmental impact statement  |
| ELF                        | extremely low frequency   |
| EM                         | electromagnetic   |
| EMC                        | electromagnetic compatibility   |
| EMF                        | electromagnetic field   |
| EMFAC2014                  | Emission FACtors 2014   |
| EMI                        | electromagnetic interference  |
| EMMA                       | Environmental Mitigation Management and Assessment  |
| EMR                        | electromagnetic radiation   |
| EO                         | Executive Order   |
| EOP                        | emergency operations plan   |
| EPRI                       | Electric Power Research Institute   |
| ERA                        | environmentally restricted area   |
| ESA                        | environmentally sensitive area, or<br>environmental site assessment   |
| FAA                        | Federal Aviation Administration   |
| FBI                        | Federal Bureau of Investigation   |
| FCC                        | Federal Communications Commission   |
| FCFPD                      | Fresno County Fire Protection District  |
| Fed. Reg.                  | <i>Federal Register</i>   |
| FEMA                       | Federal Emergency Management Agency   |
| FESA                       | federal Endangered Species Act  |
| FHWA                       | Federal Highway Administration  |
| Final Supplemental EIR/EIS | <i>California High-Speed Rail Merced to Fresno Section: Central Valley Wye Final Supplemental Environmental Impact Report (EIR)/Supplemental Environmental Impact Statement (EIS)</i> |
| FIRM                       | flood insurance rate maps   |
| FMMP                       | Farmland Mapping and Monitoring Program   |
| FPPA                       | Farmland Protection Policy Act  |
| FRA                        | Federal Railroad Administration   |
| FSZ                        | Farmland Security Zone  |
| FTA                        | Federal Transit Administration  |
| FY                         | fiscal year   |
| G                          | Gauss   |

| Acronym         | Definition  |
|-----------------|---|
| GAMAQI          | Guide for Assessing and Mitigating Air Quality Impacts        |
| GC              | general conformity  |
| GHG             | greenhouse gas  |
| GHz             | billion hertz   |
| GIS             | geographic information system                                 |
| GO              | General Order   |
| HAP             | hazardous air pollutant                                       |
| HCFC            | hydrochlorofluorocarbon                                       |
| HCP             | habitat conservation plan                                     |
| HF              | high frequency  |
| HI              | hazard index  |
| HMF             | heavy maintenance facility                                    |
| HMP             | habitat mitigation plan                                       |
| HMRD            | Henry Miller Reclamation District                             |
| Hot Spots Act   | Air Toxics “Hot Spots” Information and Assessment Act of 1987 |
| HSR             | high-speed rail   |
| HUC             | Hydrologic Unit Code  |
| HVAC            | heating, ventilation, and air-conditioning                    |
| Hz              | hertz   |
| IAMF            | impact avoidance and minimization feature                     |
| ICNIRP          | International Commission on Non-Ionizing Radiation Protection |
| IPaC            | Information for Planning and Conservation                     |
| ISEP            | Implementation Stage EMC Program Plan                         |
| ITA             | Indian Trust Asset  |
| K               | kindergarten  |
| kHz             | kilohertz   |
| kV              | kilovolts   |
| kV/m            | kilovolts per meter   |
| KVP             | key viewpoint   |
| LAFCo           | Local Agency Formation Commission                             |
| LBP             | lead-based paint  |
| L <sub>dn</sub> | day-night sound level   |
| LEDPA           | least environmentally damaging practicable alternative        |
| L <sub>eq</sub> | equivalent sound level  |
| LESA            | land evaluation and site assessment                           |

| Acronym                        | Definition   |
|--------------------------------|--|
| LID                            | low-impact development   |
| LMF                            | light maintenance facility   |
| LRA                            | local resource area  |
| LOS                            | level of service   |
| LWCF                           | Land and Water Conservation Fund   |
| m                              | meter  |
| Madera County RTP              | Madera County Final 2014 Regional Transportation Plan and Sustainable Communities Strategy                   |
| Madera ID                      | Madera Irrigation District   |
| MBTA                           | Migratory Bird Treaty Act  |
| MCAG                           | Merced County Association of Governments   |
| MCTC                           | Madera County Transportation Commission  |
| Merced to Fresno Final EIR/EIS | <i>Merced to Fresno Section Final Environmental Impact Report (EIR)/Environmental Impact Statement (EIS)</i> |
| mG                             | milligauss   |
| MHz                            | megahertz  |
| MMBtu                          | million British thermal units  |
| MMT                            | million metric tons  |
| MOA                            | Memorandum of Agreement  |
| MOU                            | Memorandum of Understanding  |
| MPE                            | maximum permissible exposure   |
| mpg                            | miles per gallon   |
| mph                            | miles per hour   |
| MPO                            | metropolitan planning organization   |
| MRI                            | magnetic resonance imaging   |
| MS4                            | municipal separate storm sewer system  |
| MSAT                           | mobile source air toxics   |
| MT CO <sub>2</sub> e           | metric tons of carbon dioxide equivalent   |
| MTC                            | Metropolitan Transportation Commission   |
| MW                             | megawatts  |
| mW/cm <sup>2</sup>             | milliwatt per square centimeter  |
| N <sub>2</sub> O               | nitrous oxide  |
| NAAQS                          | National Ambient Air Quality Standards   |
| NAC                            | noise abatement criteria   |
| NAIP                           | National Agriculture Imagery Program   |

| Acronym                                    | Definition   |
|--|--|
| NEPA                                       | National Environmental Policy Act  |
| NFPA                                       | National Fire Protection Association   |
| NHPA                                       | National Historic Preservation Act   |
| NHTSA                                      | National Highway Traffic Safety Administration   |
| NIMS                                       | National Incident Management System  |
| NIOSH                                      | National Institute for Occupational Safety and Health  |
| NMFS                                       | National Marine Fisheries Service  |
| NMI  | nuclear magnetic imaging   |
| NMR  | nuclear magnetic resonance   |
| NO <sub>2</sub>                            | nitrogen dioxide   |
| NOA  | naturally occurring asbestos   |
| NOD  | Notice of Determination  |
| NO <sub>x</sub>                            | nitrogen oxide   |
| NPDES                                      | National Pollutant Discharge Elimination System  |
| NPS  | National Park Service  |
| NRCS                                       | Natural Resources Conservation Service   |
| NRHP                                       | National Register of Historic Places   |
| NSR  | New Source Review  |
| O&M  | operations and maintenance   |
| O <sub>3</sub>                             | ozone  |
| OCS  | overhead contact system  |
| ORFPD                                      | Oakdale Rural Fire Protection District   |
| OSHA                                       | Occupational Safety and Health Administration  |
| PA   | Programmatic Agreement   |
| Paleontological Resources Technical Report | <i>Merced to Fresno Section: Central Valley Wye Paleontological Resources Technical Report</i> |
| Pb   | lead   |
| PCB  | polychlorinated biphenyl   |
| PEC  | potential environmental concern  |
| PG&E                                       | Pacific Gas & Electric   |
| PHA  | preliminary hazard analysis  |
| PL   | Public Law   |
| PM   | particulate matter   |
| PM <sub>2.5</sub>                          | particulate matter smaller than or equal to 2.5 microns in diameter                            |

| Acronym  | Definition  |
|--|---|
| PM <sub>10</sub>   | particulate matter smaller than or equal to 10 microns in diameter  |
| Ppb  | parts per billion   |
| Ppm  | parts per million   |
| PRM  | permittee-responsible mitigation  |
| PRMMP  | paleontological resources monitoring and mitigation plan  |
| PRS  | paleontological resources specialist  |
| RCRA   | Resource Conservation and Recovery Act  |
| REL  | reference exposure level  |
| RF   | radio frequency   |
| Revised/Second Draft Supplemental EIR/EIS, Biological Resources Analysis | <i>California High Speed Rail, Merced to Fresno Section, Central Valley Wye, Revised Draft Supplemental EIR/Second Draft Supplemental EIS, Biological Resources Analysis</i> (published March 2020) |
| RIMS II  | Regional Input-Output Model   |
| ROD  | Record of Decision  |
| ROG  | reactive organic gases  |
| ROW  | right-of-way  |
| RSA  | resource study area   |
| RTP  | regional transportation plans   |
| RWQCB  | Regional Water Quality Control Board  |
| SACOG  | Sacramento Area Council of Governments  |
| SAFE   | Safer Affordable Fuel-Efficient Vehicles Rule   |
| SANDAG   | San Diego Association of Governments  |
| SAR  | Special Aquatic Resource  |
| SB   | Senate Bill   |
| SCAG   | Southern California Association of Governments  |
| SCAQMD   | South Coast Air Quality Management District   |
| SCFPD  | Stanislaus Consolidated Fire Protection District  |
| Scoping Plan   | Climate Change Scoping Plan   |
| SEMS   | Standardized Emergency Management System  |
| SEL  | sound exposure level  |
| Settlement   | San Joaquin River Restoration Settlement Natural Resources Defense Council, et al., v. Kirk Rodgers, et al. Settlement Agreement  |
| SF <sub>6</sub>  | sulfur hexafluoride   |
| SFBAAB   | San Francisco Bay Area Air Basin  |
| SFHA   | special flood-hazard areas  |



| Acronym                   | Definition   |
|---------------------------|--|
| SHPO                      | State Historic Preservation Officer  |
| SHTAC                     | Swainson's Hawk Technical Advisory Committee   |
| SIP                       | state implementation plan  |
| SJRRP                     | San Joaquin River Restoration Program  |
| SJVAB                     | San Joaquin Valley Air Basin   |
| SJVAPCD                   | San Joaquin Valley Air Pollution Control District  |
| SJVUAPCD                  | San Joaquin Valley Unified Air Pollution Control District  |
| SNAP                      | Supplemental Nutrition Assistance Program  |
| SO <sub>2</sub>           | sulfur dioxide   |
| SPCC                      | spill prevention control and countermeasure  |
|                           |  |
| SR                        | State Route  |
| SSP                       | system safety program  |
| Standard Guidelines       | Standard Guidelines for the Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources |
| Statewide Program EIR/EIS | <i>Final Program EIR/EIS for the Proposed California High-Speed Train System</i>                                 |
| STB                       | Surface Transportation Board   |
| SVP                       | Society of Vertebrate Paleontology   |
| SWPPP                     | stormwater pollution prevention plan   |
| SWRCB                     | State Water Resources Control Board  |
| T                         | Tesla  |
| TAC                       | toxic air contaminant  |
| Tanner Act                | Toxic Air Contaminant Identification and Control Act   |
| TCE                       | temporary construction easement  |
| THPO                      | Tribal Historic Preservation Officer   |
| TMDL                      | total maximum daily load   |
| TNAP                      | traffic noise analysis protocol  |
| TPSS                      | traction power substations   |
| UCMP                      | University of California Museum of Paleontology  |
| Unified Program           | Unified Hazardous Waste and Hazardous Materials Management Regulatory Program                                    |
| UPRR                      | Union Pacific Railroad   |
| USACE                     | U.S. Army Corps of Engineers   |
| USBR                      | U.S. Bureau of Reclamation   |
| U.S.C.                    | United States Code   |
| U.S. DOT                  | U.S. Department of Transportation  |

| Acronym                             | Definition   |
|-------------------------------------|--|
| USEO                                | U.S. Presidential Executive Order  |
| USEPA                               | U.S. Environmental Protection Agency   |
| USFWS                               | U.S. Fish and Wildlife Service   |
| USGS                                | U.S. Geological Survey   |
| V                                   | volts  |
| V/m                                 | volts per meter  |
| V2V                                 | Valley to Valley   |
| Valley to Valley Extension, or V2VE | San Jose to north of Bakersfield with potential extension to San Francisco and Bakersfield with a branch to Merced from the Bay Area |
| VdB                                 | vibration velocity level   |
| VERA                                | Voluntary Emissions Reduction Agreement  |
| VHF                                 | very high frequency  |
| VMT                                 | vehicle miles traveled   |
| VOCs                                | volatile organic compounds   |
| VPC                                 | Valley Planning Consultants, Inc.  |
| W                                   | watts  |
| W/m <sup>2</sup>                    | watts per square meter   |
| WEAP                                | worker environmental awareness program   |
| WEF                                 | wildlife exclusion fencing   |
| WiFi                                | wireless fidelity  |