

APPENDIX A

Major Federal and State Laws, Regulations, and Policies Potentially
Applicable to the AT&T Japan-U.S. Cable Network Decommissioning
(JUS S8 and JUS S9 Cables) Project

Frequently Used Abbreviations

(see also List of Abbreviations and Acronyms in Table of Contents)

Abbreviation	Definition
§	Section
AB	Assembly Bill
Cal. Code Regs.	California Code of Regulations
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCA	California Coastal Act
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
ch.	Chapter
CO	Carbon Monoxide
CO ₂ , CO ₂ e	Carbon Dioxide, Carbon Dioxide Equivalent
CSLC	California State Lands Commission
CZMA	Coastal Zone Management Act
div.	Division
EO	Executive Order
FCAA	Federal Clean Air Act
FESA	Federal Endangered Species Act
Fed. Reg.	Federal Register
Fish & G. Code	Fish and Game Code
GHG	Greenhouse Gas
MMPA	Marine Mammal Protection Act

Appendix A – Major Federal and State Laws, Regulations, and Policies

Abbreviation	Definition
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NISA	National Invasive Species Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NO _x	Nitrogen Oxide
NPDES	National Pollutant Discharge Elimination System
PERP	Portable Equipment Registration Program
P.L.	Public Law
PM	Particulate Matter
Pub. Resources Code	Public Resources Code
RWQCB	Regional Water Quality Control Board
subd.	Subdivision
SB	Senate Bill
SO _x	Sulfur Dioxide
SWRCB	State Water Resources Control Board
tit.	Title
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

Appendix A identifies major federal and state laws, regulations and policies potentially applicable to the AT&T Japan-U.S. Cable Network Decommissioning (S8 and S9 Cables) Project.¹ Local and regional laws, regulations and policies are presented for each California Environmental Quality Act (CEQA) Guidelines Appendix G resource area in Appendix B of this IS/MND.

MULTIPLE ENVIRONMENTAL ISSUES

Multiple Environmental Issues (Federal)

Coastal Zone Management Act (CZMA) (16 U.S.C. § 1451 et seq.)

The CZMA recognizes a national interest in coastal zone resources and in the importance of balancing competing uses of those resources, giving full consideration to aesthetic, cultural and historic, ecological, recreational, and other values as well as the needs for compatible economic development. Pursuant to the Act, coastal states develop and implement comprehensive coastal management programs, authorities and enforceable policies, and coastal zone boundaries, among other elements. The Act also gives state coastal management agencies regulatory control ("federal consistency" review authority) over federal activities and federally licensed, permitted or assisted activities, if the activity affects coastal resources; such activities include military projects at coastal locations and outer continental shelf oil and gas leasing, exploration and development. The California Coastal Commission (CCC) coordinates California's federally approved coastal management programs and federal consistency reviews within their respective jurisdictions.

Multiple Environmental Issues (State)

California Environmental Quality Act (CEQA; Pub. Resources Code § 21000 et seq.)

CEQA requires state and local agencies to identify significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project" that must receive some discretionary approval (i.e., the agency has authority to deny the requested permit or approval) which may cause either a direct physical change, or a reasonably foreseeable indirect change, in the environment.

¹ Environmental issue areas are found in State California Environmental Quality Act Guidelines Appendix G (https://www.califaep.org/statute_and_guidelines.php).

California State Lands Commission (CSLC) and the Common Law Public Trust

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways, as well as certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust. As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the ordinary high-water mark as generally shown by the mean high tide line, except for areas of fill or artificial accretion. The CSLC's jurisdiction also includes a section of tidal and submerged land 3 nautical miles wide adjacent to the coast and offshore islands, including bays, estuaries, and lagoons; the waters and underlying beds of more than 120 rivers, lakes, streams, and sloughs; and 1.3 million acres of "school lands" granted to the State by the federal government to support public education. The CSLC also has leasing jurisdiction, subject to certain conditions, over mineral extraction from state property owned and managed by other state agencies (Pub. Resources Code, § 68910, subd. (b)), and is responsible for implementing a variety of state regulations for activities affecting these Public Trust Lands, including implementation of CEQA.

California Coastal Act (CCA; Pub. Resources Code § 30000 et seq.) and California Federal Consistency Program

Pursuant to the Coastal Act, the CCC, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. The Coastal Act includes specific policies (see Chapter 3) that address issues such as shoreline public access and recreation, lower cost visitor accommodations, terrestrial and marine habitat protection, visual resources, landform alteration, agricultural lands, commercial fisheries, industrial uses, water quality, oil and gas development, transportation, development design, power plants, ports, and public works. Development activities in the coastal zone generally require a coastal permit from either the CCC or the local government: (1) the CCC retains jurisdiction over the immediate shoreline areas below the mean high tide line

and offshore areas to the 3 nautical mile state water limit; and (2) following certification of county- and municipality-developed Local Coastal Programs, the CCC has delegated permit authority to many local governments for the portions of their jurisdictions within the coastal zone. The CCC also implements the CZMA as it applies to federal activities (e.g., development projects, permits, and licenses) in the coastal zone by reviewing specified federal actions for consistency with the enforceable policies of Chapter 3 of the Coastal Act.

CCA policies that are applicable to the Project include:

- **Section 30210:** Access, Recreational Opportunities; Posting. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.
- **Section 30211:** Development Not to Interfere with Access. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.
- **Section 30220:** Protection of Certain Water-Oriented Activities. Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.
- **Section 30221:** Oceanfront Land; Protection for Recreational Use and Development. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.
- **Section 30222:** Private lands; Priority of Development Purposes. The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.
- **Section 30223:** Upland Areas. Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

- **Section 30230:** Marine Resources; Maintenance. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.
- **Section 30231:** Biological Productivity; Water Quality. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams
- **Section 30232:** Oil and Hazardous Substance Spills. Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.
- **Section 30234.5:** Economic, Commercial, and Recreational Importance of Fishing. The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.
- **Section 30235:** Construction Altering Natural Shoreline. Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.
- **Section 30240:** Environmentally Sensitive Habitat Areas, Adjacent Developments. (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

- **Section 30244:** Archaeological or Paleontological Resources. Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.
- **Section 30251:** Scenic and Visual Qualities. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.
- **Section 30252:** Maintenance and Enhancement of Public Access. The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.
- **Section 30253:** Minimization of Adverse Impacts. New development shall do all of the following: (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any

way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. (c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development. (d) Minimize energy consumption and vehicle miles traveled. (e) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.

AESTHETICS

Aesthetics (Federal)

There are no major federal laws, regulations, and policies potentially applicable to this Project.

Aesthetics (State)

California Scenic Highway Program (Sts. & Hy. Code § 260 et seq.)

The purpose of California's Scenic Highway Program, which was created by the Legislature in 1963 and is managed by the California Department of Transportation (Caltrans), is to preserve and protect scenic highway corridors from change which would diminish the aesthetic value of lands adjacent to highways. State highways identified as scenic, or eligible for designation, are listed in Streets and Highways Code section 260 et seq. A highway's status changes from eligible to officially designated when a local governmental agency has implemented a corridor protection program for an eligible highway that meets the standards of an official scenic highway (Caltrans 2008).

Other

- **Coastal Act Chapter 3 policies** (see Multiple Environmental Issues)
 - Section 30251
 - Section 30253, subdivision (e)

AGRICULTURE AND FORESTRY RESOURCES

Agriculture and Forestry Resources (Federal)

There are no major federal laws, regulations, and policies potentially applicable to this Project.

Agriculture and Forestry Resources (State)

California Farmland Mapping and Monitoring Program

The California Department of Conservation's FMMP provides a classification system for farmland based on technical soil ratings and current land use (DOC 2022b). The minimum land use mapping unit is 10 acres unless specified; smaller units of land are incorporated into the surrounding map classifications.

For the purposes of this environmental analysis, the term "Farmland" refers to the FMMP map categories Prime Farmland, Unique Farmland and Farmland of Statewide Importance (hereafter collectively referred to as "Farmland"). Generally, any conversion of the land from one of these categories to a less quality category or a non-agriculture use would be considered to be an adverse impact. These map categories are defined as follows (DOC 2022b).

Prime Farmland: Land which has the best combination of physical and chemical features able to sustain long term agricultural production. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

Unique Farmland: Farmland of less quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the 4 years prior to the mapping date.

Farmland of Statewide Importance: Land that is similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to hold and store moisture. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (Williamson Act; Government Code Section 51200 et seq.) is the state's primary program aimed at conserving private land for agricultural and open space uses. The Williamson Act provides a mechanism through which private landowners can contract with counties and cities to voluntarily restrict their land to agricultural and compatible open-space uses. In return, Williamson Act contracts offer tax incentives by ensuring that land is assessed for its agricultural productivity rather than its highest and best (i.e.,

most remunerative) use. Contracts typically restrict land use for a period of 10 years; however, some jurisdictions exercise the option to extend the term for up to 20 years. Contracts automatically renew unless the landowner or county serves notice of non-renewal (in which case the contract ends at the close of the current renewal period). Additionally, the landowner can petition for cancellation of a contract (DOC 2022a).

California Public Resources Code

Section 12220(g) of the California Public Resources Code defines forest land as “land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.” “Timberland” is defined by Public Resources Code Section 4526 as “land, other than land owned by the federal government..., which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees.”

California Government Code

Chapter 6.7 of the Government Code (Sections 51100–51155) regulates timberlands within the state. “Timberland production zone” is defined in Section 51104(g) as an area that has been zoned pursuant to Government Code Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses. In this context, “compatible uses” include any use that “does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber” (Government Code Section 51104(h)). Watershed management, grazing, and the erection, construction, alteration, or maintenance of electric transmission facilities are examples of compatible uses. The general plans of cities and counties may use the term “timberland preserve zone,” which Government Code Section 51104(g) defines as equivalent to “timberland production zone.”

Chapter 7 of the Government Code (Section 51238 et seq.) defines compatible uses for Agricultural Preserves, i.e., land under a Williamson Act contract. Compatible uses that were defined at the time a contract was originally signed determine which uses are presently compatible under the contract.

Coastal Act Chapter 3 Policies (see Multiple Environmental Issues)

The Coastal Act requires the protection of agricultural lands within the coastal zone by requiring that (1) the maximum amount of prime agricultural land be maintained in production to protect the agricultural economy and (2) conflicts between agricultural and urban uses be minimized through the application of development standards that ensure that new development will not diminish agricultural productivity. Development standards include establishing stable urban-rural boundaries, providing agricultural buffers, ensuring that nonagricultural development is directed first to lands not suitable for agriculture, restricting land divisions and controlling public service expansions. (See: Definitions [§§ 30100.2, 30113, 30106]; Agricultural related Policies [§§ 30222, 30241, 30241.5, 30242, 30243, 30250]; and other public access and resource protection policies that apply to projects on agricultural lands.)

AIR QUALITY

Air Quality (Federal)

Federal Clean Air Act (FCAA) (42 U.S.C. § 7401 et seq.)

The Federal Clean Air Act (FCAA) requires the U.S. Environmental Protection Agency (USEPA) to identify National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. National standards are established for ozone, carbon monoxide (CO), nitrogen dioxide, sulfur dioxide, particulate matter (PM, PM₁₀ and PM_{2.5}), and lead. The FCAA mandates that states submit and implement a State Implementation Plan for local areas not meeting those standards; plans must include pollution control measures that demonstrate how the standards would be met. Pursuant to the 1990 FCAA amendments, the USEPA also regulates hazardous air pollutants, which are pollutants that result in harmful health effects, but are not specifically addressed through the establishment of NAAQS. Hazardous air pollutants require the use of the maximum or best available control technology to limit emissions. USEPA classifies air basins (or portions thereof) as in “attainment” or “nonattainment” for each criteria air pollutant by comparing monitoring data with state and federal standards to determine if the NAAQS are achieved. Areas are classified for a pollutant as follows:

- “Attainment” – the pollutant concentration is lower than the standard.
- “Nonattainment” – the pollutant concentration exceeds the standard.
- “Unclassified” – there are not enough data available for comparisons.

In 2007, the U.S. Supreme Court ruled that carbon dioxide (CO₂) is an air pollutant as defined under the FCAA, and that the USEPA has authority to regulate greenhouse gas (GHG) emissions.

The FCAA allows delegation of the enforcement of many of the federal air quality regulations to the states. In California, the California Air Resources Board (CARB) is responsible for enforcing air pollution regulations in concert with regional air pollution control districts.

Marine Diesel Engine Emission Standards

In March 2008, the USEPA adopted more stringent emission standards for locomotives and marine compression-ignition engines (73 Fed.Reg. 37096 (USEPA 2008a)). To reduce emissions from Category 1 (at least 50 horsepower [hp] but less than 7 liters per cylinder displacement) and Category 2 (7 to 30 liters per cylinder displacement) marine diesel engines, the USEPA has established emission standards for new engines, referred to as Tier 2 marine engine standards. The Tier 2 standards were phased in from 2004 to 2007 (year of manufacture), depending on the engine size (USEPA 1999). The 2008 final rule includes the first-ever national emission standards for existing marine diesel engines, applying to engines larger than 600 kilowatts (kW) when they are remanufactured. The rule also sets Tier 3 emissions standards for newly built engines that began implementation phase-in in 2009. Finally, the rule establishes Tier 4 standards for newly built commercial marine diesel engines above 600 kW, based on the application of high-efficiency catalytic after-treatment technology that began implementation in 2014 (USEPA 2008b).

The new diesel marine engine standards will reduce emissions of diesel PM by 90 percent and emissions of nitrogen oxide (NO_x) by 80 percent for engines meeting Tier 4 standards, in comparison with engines meeting the current Tier 2 standards. The USEPA's three-part program: (1) tightened standards for existing marine diesel engines when they are remanufactured, taking effect as certified remanufacture systems are available starting in 2008; (2) sets near-term emission standards, referred to as Tier 3 standards, for newly built locomotive and diesel marine engines, which reflect the application of currently available technologies to reduce engine-out PM and NO_x emissions and phase-in starting in 2009; and (3) applies the final long-term Tier 4 emissions standards to marine diesel engines.

Non-Road Diesel Engine Emission Standards

The USEPA has established a series of cleaner emission standards for new off-road diesel engines culminating in the Tier 4 Final Rule of June 2004 (USEPA 2004a). The Tier 1, Tier 2, Tier 3, and Tier 4 standards require compliance with progressively more stringent emission standards. Tier 1 standards were phased in from 1996 to 2000 (year of manufacture), depending on the engine horsepower category. Tier 2 standards were phased in from 2001 to 2006, and the Tier 3 standards were phased in from 2006 to 2008. The Tier 4 standards complement the 2007 and later on-road heavy-duty engine standards by requiring 90 percent reductions in diesel PM and NO_x when compared against current emission levels. The Tier 4 standards were phased in starting with smaller engines in 2008 until all but the very largest diesel engines were to meet NO_x and PM standards in 2015.

On-Road Trucks Emission Standards

To reduce emissions from on-road, heavy-duty diesel trucks, the USEPA established a series of cleaner emission standards for new engines, starting in 1988. These emission standards regulations have been revised over time. The latest effective regulation, the 2007 Heavy-Duty Highway Rule, provides for reductions in PM, NO_x, and non-methane hydrocarbon emissions that were phased in during the model years 2007 through 2010 (USEPA 2000).

Non-Road Diesel Fuel Rule

In May 2004, the USEPA set sulfur limits for non-road diesel fuel, including locomotives but not marine fuel. Under this rule, diesel fuel used by line-haul locomotives began being limited to 500 parts per million (ppm) starting June 1, 2007, and 15 ppm starting January 1, 2012 (USEPA 2004b), at which time it would be equivalent to sulfur content restrictions of the California Diesel Fuel Regulations.

National Corporate Average Fuel Economy Standards

The Corporate Average Fuel Economy Standards (CAFE) were first enacted in 1975 to improve the average fuel economy of cars and light duty trucks. On August 2, 2018, the National Highway Traffic Safety Administrative (NHTSA) and USEPA proposed to amend the fuel efficiency standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026 by maintaining the current model year 2020 standards through 2026 (Safer Affordable Fuel-Efficient [SAFE] Vehicles Rule). On September 19, 2019, USEPA

and NHTSA issued a final action on the One National Program Rule, which is considered Part One of the SAFE Vehicles Rule and a precursor to the proposed fuel efficiency standards. The One National Program Rule enables USEPA/NHTSA to provide nationwide uniform fuel economy and GHG vehicle standards, specifically by (1) clarifying that federal law preempts state and local tailpipe GHG standards, (2) affirming NHTSA's statutory authority to set nationally applicable fuel economy standards, and (3) withdrawing the California Clean Air Act (CCAA) preemption waiver to set state-specific standards.

USEPA and NHTSA published their decisions to withdraw California's waiver and finalize regulatory text related to the preemption on September 27, 2019 (84 Federal Register [Fed. Reg.] 51310). California, 22 other states, the District of Columbia, and two cities filed suit against Part One of the SAFE Vehicles Rule on September 20, 2019 (California et al. v. United States Department of Transportation et al., 1:19-cv-02826, U.S. District Court for the District of Columbia). On October 28, 2019, the Union of Concerned Scientists, Environmental Defense Fund, and other groups filed a protective petition for review after the federal government sought to transfer the suit to the D.C. Circuit (Union of Concerned Scientists v. National Highway Traffic Safety Administration). Opening briefs for the petition are currently scheduled to be completed on November 23, 2020. The lawsuit filed by California and others is stayed pending resolution of the petition.

USEPA and NHTSA published final rules to amend and establish national CO₂ and fuel economy standards on April 30, 2020 (Part Two of the SAFE Vehicles Rule) (85 Fed. Reg. 24174). The revised rule changes the national fuel economy standards for light duty vehicles from 50.4 mpg to 40.5 mpg in future years. California, 22 other states, the District of Columbia filed a petition for review of the final rule on May 27, 2020. The fate of the SAFE Vehicles Rule remains uncertain in the face of pending legal deliberations.

Air Quality (State)

California Clean Air Act of 1988 (CCAA)

The California Clean Air Act (CCAA) requires all air districts in the state to endeavor to achieve and maintain state ambient air quality standards for ozone, CO, sulfur dioxide, nitrogen dioxide, and PM. CARB sets air quality standards for the state at levels to protect public health and welfare with an adequate margin of safety. The California Ambient Air Quality Standards (CAAQS) are generally stricter than national standards for the same pollutants;

California also has standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The CAAQS describe adverse conditions (i.e., pollution levels must be below these standards before a basin can attain the standard). Air quality is considered in “attainment” if pollutant levels are continuously below or equal to the standards and violate the standards no more than once each year. The 1992 CCAA Amendments divide ozone nonattainment areas into four categories of pollutant levels (moderate, serious, severe, and extreme) to which progressively more stringent requirements apply. CARB also regulates toxic air contaminants (pollutants that result in harmful health effects, but are not specifically addressed by air quality standards) using air toxic control measures.

California Air Resources Board Programs, Regulations, and Standards

California Diesel Fuel Regulations (Cal. Code Regs., tit. 13, §§ 2281-2285; Cal. Code Regs., tit. 17, § 93114)

In 2004, the CARB set limits on the sulfur content of diesel fuel sold in California for use in on-road and off-road motor vehicles. Harbor craft and intrastate locomotives were later included by a 2004 rule amendment (CARB 2005a). Under this rule, diesel fuel used in motor vehicles except harbor craft and intrastate locomotives has been limited to 500 ppm sulfur since 1993. The sulfur limit was reduced to 15 ppm beginning on September 1, 2006. Diesel fuel used in harbor craft in the South Coast Air Basin also was limited to 500 ppm sulfur starting January 1, 2006, and was lowered to 15 ppm sulfur on September 1, 2006. Diesel fuel used in intrastate locomotives (switch locomotives) was limited to 15 ppm sulfur starting on January 1, 2007.

California Diesel Risk Reduction Plan. CARB has adopted several regulations that are meant to reduce the health risk associated with on- and off-road and stationary diesel engine operation. This plan recommends many control measures with the goal of an 85 percent reduction in diesel PM emissions by 2020. The regulations noted below, which may also serve to significantly reduce other pollutant emissions, are all part of this risk reduction plan.

Carl Moyer Memorial Air Quality Standards Attainment Program

The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) is a voluntary grant program that reduces emissions by funding diesel, alternative-fueled, and zero-emission replacement engines, vehicles, and equipment. The Carl Moyer Program encourages owners of mobile and

stationary sources to go beyond regulatory requirements by retrofitting, repowering, or replacing their engines with newer and cleaner ones by providing competitive grants for the incremental cost of cleaner-than-required engines, vehicles, and equipment. The Carl Moyer Program plays a complementary role to California's regulatory program by providing incentives to obtain early or extra NO_x, PM and ROG emission reductions.

Commercial Harbor Craft Regulation. This regulation requires upgrades to Tier 2 or Tier 3 standards to reduce diesel PM and NO_x emissions from diesel engines used on commercial harbor craft (e.g., tugboats, crew and supply vessels, work boats, barges, dredges) operated in California Regulated Waters (internal waters, estuarine waters, ports and coastal waters within 24 nautical miles of the coast).

Emission Standards for On-Road and Off-Road Diesel Engines. Similar to the USEPA standards for on-road and off-road emissions described above, the CARB has established emission standards for new on-road and off-road diesel engines. These regulations have model year-based emissions standards for NO_x, hydrocarbons, CO, and PM.

Heavy Duty Diesel Truck Idling Rule – Heavy Duty Diesel Truck Idling Regulation. This CARB rule became effective February 1, 2005, and prohibits heavy-duty diesel trucks from idling for longer than 5 minutes at a time, unless they are queuing and provided the queue is located beyond 100 feet from any homes or schools (CARB 2006).

In-Use Off-Road Vehicle Regulation. The state has also enacted a regulation to reduce diesel PM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles. This regulation provides target emission rates for PM and NO_x emissions from owners of fleets of diesel-fueled off-road vehicles, and applies to off-road equipment fleets of three specific sizes, as follows:

- Small Fleet – Fleet or municipality with equipment totaling less than or equal to 2,500 hp, or municipal fleet in lower population area, captive attainment fleet, or non-profit training center regardless of horsepower.
- Medium Fleet – Fleet with equipment totaling 2,501 to 5,000 hp.
- Large Fleet – Fleet with equipment totaling more than 5,000 hp, or all state and federal government fleets regardless of total hp.

The target emission rates for these fleets are reduced over time. Specific regulation requirements include:

- Limit on idling, requiring a written idling policy, and disclosure when selling vehicles;
- Require all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System [DOORS]) and labeled;
- Restrict the adding of older vehicles into fleets starting on January 1, 2014; and
- Require fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). (CARB 2014)

Ocean-Going Vessels Fuel Standards. After January 1, 2014, ocean-going vessels within California Regulated Waters must use fuel with a maximum fuel sulfur content of 0.1 percent (using cleaner marine distillate fuels in larger ocean-going vessels reduces diesel particulate matter, NO_x, and SO_x emissions)

Off-Road Mobile Sources Emission Reduction Program. The CCAA mandates that CARB achieve the maximum degree of emission reductions from all off-road mobile sources (e.g., construction equipment, marine vessels, and harbor craft) to attain CAAQS. Tier 2, Tier 3, and Tier 4 exhaust emissions standards apply to off-road equipment. In addition, CARB fleet requirements specify how equipment that is already in use can be retrofitted to achieve lower emissions using the CARB-verified retrofit technologies. USEPA standards for marine compression-ignition engines address NO_x and diesel PM emissions, depending on engine size and year of manufacture. Tier 2 standards for marine engines were phased in for model years 2004 to 2007, and Tier 3 standards were phased in for currently available technologies to reduce NO_x and PM, starting in 2009.

Protecting Blue Whales and Blue Skies Program

The Protecting Blue Whales and Blue Skies Program is a voluntary vessel speed reduction program off the San Francisco Bay, central coast, and south coast of California to encourage transit speeds of 10 knots or less to reduce air pollution, the risk of harmful whale strikes, and the level of ocean noise. The program applies to vessels that are 300 gross tons or greater. The program is administered and promoted by the Santa Barbara County Air Pollution Control District, the Ventura County Air Pollution Control District, the Bay Area Air Quality

Management District, the Monterey Bay Air Resources District, and the San Luis Obispo County Air Pollution Control District, with the federal Office of National Marine Sanctuaries, marine sanctuary foundations, and environmental groups. Pursuant to Assembly Bill 14 passed in 2025, the program is being expanded to cover the entire California Coast.

Statewide Portable Equipment Registration Program (PERP). The PERP establishes a uniform program to regulate portable engines and portable engine-driven equipment units (CARB 2005b). Once registered in the PERP, engines and equipment units may operate throughout California without the need to obtain individual permits from local air districts, if the equipment is located at a single location for no more than 12 months.

Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020 to accelerate a large-scale transition of zero-emission medium-and-heavy-duty vehicles. The regulation requires the sale of zero-emission medium-and-heavy-duty vehicles as an increasing percentage of total annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales. By 2045, every new medium-and-heavy-duty truck sold in California will be zero-emission. Large employers including retailers, manufacturers, brokers, and others are required to report information about shipments and shuttle services to better ensure that fleets purchase available zero-emission trucks.

Health and Safety Code

- **Sections 25531-25543:** (1) provide guidelines to identify a more realistic health risk; (2) require high-risk facilities to submit an air toxic emission reduction plan; (3) hold air pollution control districts accountable for ensuring that plans achieve objectives; and (4) require high-risk facilities to achieve their planned emission reductions.
- **The Air Toxics Hot Spots Information and Assessment Act (§ 44300 et seq.)** provides for the regulation of over 200 toxic air contaminants. Under the act, local air districts may request that a facility account for its toxic air contaminant emissions. Local air districts then prioritize facilities based on emissions; high priority designated facilities must submit a health risk assessment.

Other

- **Coastal Act Chapter 3 policies** (see Multiple Environmental Issues)
 - Section 30253, subdivision (c)

BIOLOGICAL RESOURCES

Biological Resources (Federal)

Federal Endangered Species Act (FESA) (16 U.S.C. § 1531 et seq.)

The Federal Endangered Species Act (FESA), which is administered in California by the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS), provides protection to species listed as threatened or endangered, or proposed for listing as threatened or endangered. When applicants propose projects with a federal nexus that “may affect” a federally listed or proposed species, the federal agency must (1) consult with the USFWS or NMFS, as appropriate, under Section 7, and (2) ensure that any actions authorized, funded, or carried out by the agency are not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of areas determined to be critical habitat. Section 9 prohibits the “take” of any member of a listed species.

- **Take** – To harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct
- **Harass** – An intentional or negligent act or omission that creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns that include, but are not limited to, breeding, feeding, or sheltering
- **Harm** – Significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering

Fish and Wildlife Coordination Act of 1958 (16 U.S.C. § 661-666(e))

This Act requires that whenever a body of water is proposed to be controlled or modified, the lead agency must consult with the state and federal agencies responsible for fish and wildlife management (e.g., USFWS, the California Department of Fish and Wildlife [CDFW], and National Oceanic and Atmospheric Administration [NOAA]). The Act allows for recommendations addressing adverse impacts associated with a proposed project, and for mitigating or compensating for impacts on fish and wildlife.

National Marine Sanctuaries Act of 1958 (16 U.S.C. § 1431-1445(c))

Under the National Marine Sanctuaries Act, project proponents must obtain either general permits or special use permits for most activities that have potential to impact a national marine sanctuary, including the Greater Farallones National Marine Sanctuary that overlaps a portion of JUS S9 Manchester and JUS S8. Vessel discharges within the Greater Farallones National Marine Sanctuary are highly restricted, and sewage and graywater must generally be held on the vessel until outside the sanctuary boundaries.

Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 U.S.C. § 1801 et seq.)

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) governs marine fisheries management in federal waters. The MSA was first enacted in 1976 and amended by the Sustainable Fisheries Act of 1996 and the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act in 2007. Amendments require the identification of Essential Fish Habitat (EFH) for federally managed species and the implementation of measures to conserve and enhance this habitat. Any project requiring federal authorization, such as a U.S. Army Corps of Engineers (USACE) permit, is required to complete and submit an EFH Assessment with the application and either show that no significant impacts to the essential habitat of managed species are expected or identify mitigations to reduce those impacts. Under the MSA, Congress defined EFH as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity” (16 U.S.C. § 1802(10)). According to the NMFS, EFH can include sediment, hard bottom, underwater structures, and associated biological communities (PFMC 2021). Section 303, subdivision (a)(7) of the MSA requires fishery management councils to identify EFH. An EFH that is deemed particularly important to the long-term productivity of populations of one or more managed species, or to be particularly vulnerable to degradation, should be identified as habitat areas of particular concern (HAPC). The EFH provisions of the MSA offer resource managers a means to heighten consideration of fish habitat in resource management. Federal agencies shall consult with the NMFS regarding any action they authorize, fund, or undertake that might adversely affect EFH (§ 305(b)(2)).

Marine Mammal Protection Act (MMPA) (16 U.S.C. § 1361 et seq.)

The Marine Mammal Protection Act (MMPA) is designed to protect and conserve marine mammals and their habitats. It prohibits takes of all marine

mammals in the U.S. (including territorial seas) with few exceptions. The Act defines “take” as hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal. “Harassment” is defined as any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild; or has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering.

The NMFS may issue a take permit under Section 104 if the activities are consistent with the purposes of the MMPA and applicable regulations at 50 Code of Federal Regulations (CFR), Part 216. The NMFS must also find that the manner of taking is “humane” as defined in the MMPA. If lethal taking of a marine mammal is requested, the applicant must demonstrate that using a non-lethal method is not feasible. In 1994 a simplified process for obtaining “small take” exemptions was added for unintentional taking by incidental harassment only. Under this process, incidental take of small numbers of marine mammals by harassment can be authorized for periods of up to one year.

Migratory Bird Treaty Act (MBTA) (16 USC 703-711)

The Migratory Bird Treaty Act (MBTA) of 1918 is the domestic law that affirms and implements a commitment by the U.S. to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. Unless and except as permitted by regulations, the MBTA makes it unlawful at any time, by any means, or in any manner to intentionally pursue, hunt, take, capture, or kill migratory birds anywhere in the United States. The law also applies to disturbance and removal of nests occupied by migratory birds or their eggs during the breeding season, whether intentional or incidental.

Bald and Golden Eagle Protection Act of 1940 (16 USC 668)

The federal Bald and Golden Eagle Protection Act of 1940 protects bald and golden eagles by prohibiting the taking, possession, and commerce of such birds and establishes civil penalties for violation of this act. Take of bald and golden eagles includes to “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb” (16 USC 668c). “Disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available: (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially

interfering with normal breeding, feeding, or sheltering behavior (72 FR 31132; 50 CFR 22.3).

National Invasive Species Act (NISA) (16 U.S.C. 4701 et seq, 33 CFR, Part 151, Subpart D)

The National Invasive Species Act (NISA) was originally passed in 1990 as the Nonindigenous Aquatic Nuisance Prevention and Control Act [16 U.S.C. § 4701-4751] and reauthorized, renamed and expanded in 1996. Under its provisions, the U.S. Coast Guard requires ballast water management for vessels entering U.S. waters from outside the 200-nautical-mile U.S. Exclusive Economic Zone. The original Act was established to: (1) prevent unintentional introduction and dispersal of nonindigenous species into Waters of the U.S. through ballast water management and other requirements; (2) coordinate and disseminate information on federally conducted, funded, or authorized research, on the prevention and control of the zebra mussel and other aquatic nuisance species; (3) develop and carry out control methods to prevent, monitor, and control unintentional introductions of nonindigenous species from pathways other than ballast water exchange; (4) understand and minimize economic and ecological impacts of established nonindigenous aquatic nuisance species; and (5) establish a program of research and technology development and assistance to states in the management and removal of zebra mussels.

Vessel General Permit for Discharges Incidental to the Normal Operation of Vessels (VGP)

In compliance with the provisions of the Clean Water Act (CWA), as amended (33 USC 1251 et seq.), under the National Pollutant Discharge Elimination System, any owner or operator of a vessel subject to the permit (i.e., greater than 79 feet in length) being operated in a capacity as a means of transportation is authorized to discharge in accordance with the requirements in the VGP. The VGP requires strict compliance with effluent limits for over 26 waste streams, including ballast water, to protect water quality and prevent the introduction of non-native species. It mandates vessel inspection, monitoring, and reporting. Failure to comply can lead to significant civil and criminal penalties.

Executive Orders (EO)

- **EO 11990** requires federal agencies to provide leadership and take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands.

Each agency, to the extent permitted by law, must (1) avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds there is no practical alternative to such construction or the proposed action includes all practical measures to minimize harm to wetlands that may result from such use; (2) take into account economic, environmental and other pertinent factors in making this finding; and (3) provide opportunity for early public review of any plans or proposals for new construction in wetlands.

- **EO 13112** requires federal agencies to use authorities to prevent introduction of invasive species, respond to and control invasions, and provide for restoration of native species and habitat conditions in invaded ecosystems; also established the Invasive Species Council, which prepares a National Invasive Species Management Plan that details and recommends performance-oriented goals and objectives and measures of success for federal agencies.
- **EO 13158** requires federal agencies to (1) identify actions that affect natural or cultural resources that are within a Marine Protected Area (MPA); and (2) in taking such actions, to avoid harm to the natural and cultural resources that are protected by an MPA.
- **EO 13186** sets forth responsibilities of federal agencies to protect migratory birds.

Other Federal Acts

- **Clean Water Act (33 U.S.C. § 1251 et seq.) and Rivers and Harbors Act (33 U.S.C. § 401 et seq.)** (see Hydrology and Water Quality)
- **Coastal Zone Management Act (16 U.S.C. § 1451 et seq.)** (see Multiple Environmental Issues)
- **Estuary Protection Act (16 U.S.C. § 1221-1226)** authorizes federal agencies to assess the impacts of commercial and industrial developments on estuaries.
- **Bald and Golden Eagle Protection Act** makes it illegal to import, export, take, sell, purchase or barter any bald eagle or golden eagle or parts thereof.

Biological Resources (State)

California Endangered Species Act (CESA) (Fish & G. Code § 2050 et seq.)

The California Endangered Species Act (CESA) provides for the protection of rare, threatened, and endangered plants and animals, as recognized by the CDFW, and prohibits the taking of such species without its authorization. Furthermore, the CESA provides protection for those species that are designated as candidates for threatened or endangered listings. Under the CESA, the CDFW has the responsibility for maintaining a list of threatened species and endangered species (Fish & G. Code, § 2070). The CDFW also maintains a list of candidate species, which are species that the CDFW has formally noticed as under review for addition to the threatened or endangered species lists. The CDFW also maintains lists of Species of Special Concern that serve as watch lists. Pursuant to CESA requirements, an agency reviewing a proposed project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project site and determine whether the proposed project will have a significant impact on such species. The CDFW encourages informal consultation on any proposed project that may affect a candidate species. The CESA also requires a permit to take a state-listed species through incidental or otherwise lawful activities (§ 2081, subd. (b)).

Lake and Streambed Alteration Program (Fish & G. Code §§ 1600-1616)

These regulations require that the CDFW: be notified of activities that would interfere with the natural flow of, or substantially alter, the channel, bed, or bank of a lake, river, or stream; determines if the activity may substantially adversely affect an existing fish and wildlife resource; and issues a Streambed Alteration Agreement if applicable.

Marine Life Protection Act (MLPA) (Fish & G. Code §§ 2850–2863)

Pursuant to this Act, the CDFW established and manages a network of MPAs to, among other goals, protect marine life and habitats and preserve ecosystem integrity. For the purposes of MPA planning, California was divided into five distinct regions (four coastal and San Francisco Bay) each of which had its own MPA planning process. The coastal portion of California's MPA network is now in effect statewide; options for a planning process in San Francisco Bay have been developed for consideration at a future date. The MLPA establishes clear policy guidance and a scientifically sound planning process for the siting and design of MPAs such as:

- State Marine Reserves (SMRs), which typically preclude all extractive activities (such as fishing or kelp harvesting)
- State Marine Parks (SMPs), which do not allow any commercial extraction
- State Marine Conservation Areas (SMCAs), which preclude some combination of commercial and/or recreational extraction

Other relevant California Fish and Game Code sections and Programs and Plans

- **Section 1900 et seq.** (California Native Plant Protection Act) is intended to preserve, protect, and enhance endangered or rare native plants in California. Under section 1901, a species is endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. A species is rare when, although not threatened with immediate extinction, it is in such small numbers throughout its range that it may become endangered. The Act includes provisions that prohibit taking of listed rare or endangered plants from the wild and a salvage requirement for landowners.
- **Sections 3503 & 3503.5** protect native birds' nests and eggs from all forms of needless take and possession and provide that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nests or eggs of any such bird except as otherwise provided by this Code or any regulation adopted pursuant thereto.
- **Sections 3511** (birds), **4700** (mammals), **5050** (reptiles and amphibians), & **5515** (fish) designate certain species as “fully protected”; such species, or parts thereof, may not be taken or possessed at any time without permission by the CDFW.

- **Section 3513** provides it is unlawful to take or possess any non-game, migratory birds as designated in the federal Migratory Bird Treaty Act.
- **California Aquatic Invasive Species Management Plan** provides a framework for agency coordination and identifies actions to minimize harmful effects of aquatic invasive species.

Marine Invasive Species Act (MISA) (Pub. Resources Code, § 71200 et seq.)

Originally passed in 2003 and amended several times, the purpose of MISA is to move towards eliminating the discharge of nonindigenous species into waters of the state or waters that may impact waters of the state, based on the best available technology economically achievable. MISA requires management of all ballast water and associated sediments for all vessels 300 gross registered tons or more, U.S. and foreign, carrying ballast water into the waters of the state after operating outside state waters. MISA also requires completion and submission of a Ballast Water Management Report 24 hours in advance of each port of call in California, annual submittal of the Marine Invasive Species Program Annual Vessel Reporting Form, maintenance of a ballast management and biofouling management plans and logs on board the vessel, and the application of "Good Housekeeping" Practices designed to minimize the transfer and introduction of invasive species. Compliance with MISA is the responsibility of vessel owners/operators. CSLC has regulatory authority to manage and enforce MISA, as codified in Title 2, California Code of Regulations, sections 2270 et seq.

- Article 4.5. Marine Invasive Species Control Fund Fee
- Article 4.6. Ballast Water Regulations for Vessels Arriving at California Ports or Places After Departing from Ports or Places Within the Pacific Coast Region
- Article 4.7. Performance Standards and Compliance Assessment for the Discharge of Ballast Water for Vessels Operating in California Waters
- Article 4.8. Biofouling Management to Minimize the Transfer of Nonindigenous Species from Vessels Arriving at California Ports
- Article 4.9. Marine Invasive Species Act Enforcement and Hearing Process

Other

- **Coastal Act Chapter 3 policies** (see Multiple Environmental Issues)
 - **Section 30230**
 - **Section 30231**
 - **Section 30232**

- **Section 30233**
- **Section 30240**
- **Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (OSPRA) Gov. Code § 8670.1 et seq., Pub. Resources Code § 8750 et seq., and Rev. & Tax. Code § 46001 et seq.)** (see Hazards and Hazardous Materials)
- **Wetlands Conservation Policy** – no net loss of wetland acreage; long-term gain in the quantity, quality, and permanence of California’s wetlands.
- **California Department of Food and Agriculture’s California Noxious and Invasive Weed Action Plan** seeks to prevent and control noxious and invasive weeds.

CULTURAL RESOURCES

Cultural Resources (Federal)

Abandoned Shipwreck Act of 1987 (43 U.S.C. § 2101–2106) and National Park Service (NPS) Abandoned Shipwreck Act Guidelines

The Abandoned Shipwreck Act asserts U.S. Government title to three categories of abandoned shipwrecks: those embedded in a state's submerged lands; those embedded in coralline formations protected by a state on its submerged lands, and those located on a state's lands that are included or determined eligible for inclusion in the National Register of Historic Places (NRHP). The law then transfers title for a majority of those shipwrecks to the respective states, and provides that states develop policies for management of the wrecks so as to protect natural resources, permit reasonable public access, and allow for recovery of shipwrecks consistent with the protection of historical values and environmental integrity of wrecks and sites.

The National Park Service (NPS) has issued guidelines that are intended to: maximize the enhancement of shipwreck resources; foster a partnership among sport divers, fishermen, archeologists, sailors, and other interests to manage shipwreck resources of the states and the United States; facilitate access and utilization by recreational interests; and recognize the interests of individuals and groups engaged in shipwreck discovery and salvage.

Archaeological and Historic Preservation Act (AHPA) (54 U.S.C. §§ 3120501-312508; PL 113-287)

The Archaeological and Historic Preservation Act (AHPA) provides for the preservation of historical and archaeological data that might be irreparably lost or destroyed as a result of (1) flooding, the building of access roads, the erection

of workmen's communities, the relocation of railroads and highways, and other alterations of terrain caused by the construction of a dam by an agency of the U.S. or by any private person or corporation holding a license issued by any such agency; or (2) any alteration of the terrain caused as a result of a federal construction project or federally licensed project, activity, or program. This Act requires federal agencies to notify the Secretary of the Interior when they find that any federally permitted activity or program may cause irreparable loss or destruction of significant scientific, prehistoric, historical, or archaeological data. The AHPA built upon national policy, set out in the Historic Sites Act of 1935, "...to provide for the preservation of historic American sites, buildings, objects, and antiquities of national significance...."

Archaeological Resources Protection Act of 1979 (ARPA) (16 U.S.C. §§ 470aa – 470mm; P.L. 96-95; 93 Stat. 712)

The Archaeological Resources Protection Act (ARPA) states that archaeological resources on public or Indian lands are an accessible and irreplaceable part of the nation's heritage and:

- Establishes protection for archaeological resources to prevent loss and destruction due to uncontrolled excavations and pillaging;
- Encourages increased cooperation and exchange of information between government authorities, the professional archaeological community, and private individuals having collections of archaeological resources prior to the enactment of this Act;
- Establishes permit procedures to permit excavation or removal of archaeological resources (and associated activities) located on public or Indian land; and
- Defines excavation, removal, damage, or other alteration or defacing of archaeological resources as a "prohibited act" and provides for criminal and monetary rewards to be paid to individuals furnishing information leading to the finding of a civil violation or conviction of a criminal violator.

An anti-trafficking provision prohibits interstate or international sale, purchase, or transport of any archaeological resource excavated or removed in violation of a state or local law, ordinance, or regulation. ARPA's enforcement provision provides for criminal and civil penalties against violators of the Act. The ARPA's permitting component allows for recovery of certain artifacts consistent with NPS Federal Archeology Program standards and requirements.

National Historic Preservation Act of 1966 (NHPA) (16 U.S.C. § 470 et seq.) and implementing regulations (Protection of Historic Properties; 36 CFR 800) (applies only to federal undertakings)

Archaeological resources are protected through the National Historic Preservation Act (NHPA) and its implementing regulation (Protection of Historic Properties; 36 Code of Federal Regulations 800), the AHPA, and the ARPA. This Act presents a general policy of supporting and encouraging the preservation of prehistoric and historic resources for present and future generations by directing federal agencies to assume responsibility for considering the historic resources in their activities. The state implements the NHPA through its statewide comprehensive cultural resource surveys and preservation programs coordinated by the California Office of Historic Preservation (OHP) in the State Department of Parks and Recreation, which also advises federal agencies regarding potential effects on historic properties.

The OHP also maintains the California Historic Resources Inventory. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the state's jurisdictions, including commenting on federal undertakings. Under the NHPA, historic properties include "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places" (16 U.S.C. § 470w [5]).

Executive Order (EO) 13158

EO 13158 requires federal agencies to (1) identify actions that affect natural or cultural resources that are within an MPA; and (2) in taking such actions, to avoid harm to the natural and cultural resources that are protected by an MPA.

Cultural Resources (State)

California Register of Historical Resources (CRHR)

The California Register of Historical Resources (CRHR) is an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change (Pub. Resources Code, § 5024.1, subd. (a)). CRHR eligibility criteria are modeled after National Register of Historic Places (NRHP) criteria but focus on resources of statewide significance. Certain resources are determined by the statute to be automatically included in the CRHR, including

California properties formally determined to be eligible for, or listed in, the NRHP. To be eligible for the CRHR, a prehistoric or historical period property must be significant at the local, state, or federal level under one or more of the following criteria (State CEQA Guidelines, § 15064.5, subd. (a)(3)):

- Criterion 1: Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage
- Criterion 2: Is associated with the lives of persons important in California's past
- Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
- Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history

A resource eligible for the CRHR must meet one of the criteria of significance above and retain enough of its historic character or appearance (integrity) to be recognizable as an historical resource and to convey the reason for its significance. An historic resource that may not retain sufficient integrity to meet the criteria for listing in the NRHP, may still be eligible for listing in the CRHR. Properties listed, or formally designated as eligible for listing, on the National Register are automatically listed on the CRHR, as are certain State Landmarks and Points of Interest. A lead agency is not precluded from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1, subdivision (j), or 5024.1 (State CEQA Guidelines, § 15064.5, subd. (a)(4)).

CEQA (Pub. Resources Code § 21000 et seq.)

CEQA section 21084.1 provides that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. A "historical resource" includes: (1) a resource listed in, or eligible for listing in, the California Register of Historic Resources; (2) a resource included in a local register of historical or identified as significant in an historical resource surveys; and (3) any resource that a lead agency determines to be historically significant for the purposes of CEQA, when supported by substantial evidence in light of the whole record. Historical resources may include archaeological resources. Mitigation measures

for significant impacts to historical resources must be identified and implemented if feasible.

Other

- **Coastal Act Chapter 3 policies** (see Multiple Environmental Issues)
 - Section 30244
- **Public Resources Code section 5097.5** prohibits excavation or removal of any “vertebrate paleontological site or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.”

CULTURAL RESOURCES – TRIBAL

Tribal Cultural Resources (Federal)

Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. §§ 3001-3013; P.L. 101-601; 104 Stat. 3049)

Assigns ownership or control of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony that are excavated or discovered on federal lands or tribal lands after passage of the act to lineal descendants or affiliated Indian tribes or Native Hawaiian organizations; establishes criminal penalties for trafficking in human remains or cultural objects; and requires federal agencies and museums that receive federal funding to inventory Native American human remains and associated funerary objects in their possession or control and identify their cultural and geographical affiliations within 5 years, and prepare summaries of information about Native American unassociated funerary objects, sacred objects, or objects of cultural patrimony. This is to provide for repatriation of such items when lineal descendants, Indian tribes, or Native Hawaiian organizations request it.

Executive Order (EO) 13007, Indian Sacred Sites

EO 13007 requires federal agencies with administrative or legal responsibility to manage federal lands to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical integrity of such sites (to the extent practicable permitted by law and not clearly inconsistent with essential agency functions).

Tribal Cultural Resources (State)

Senate Bill 18

California Senate Bill 18 (SB 18), which was enacted in 2005, requires cities and counties to notify and consult with California Native American tribes about proposed local land use planning decisions that may affect traditional tribal cultural places, also referred to as sacred sites. This consultation must occur prior to the adoption or amendment of a general plan or the designation of land as open space. After being notified, tribes have 90 days to request consultation.

CEQA (Pub. Resources Code §§ 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 [AB 52 (Gatto, Stats. 2014, Ch. 532)])

The Assembly Bill (AB) 52 (effective July 1, 2015) amendments to CEQA relate to consultation with California Native American tribes, consideration of tribal cultural resources, and confidentiality. The definition of tribal cultural resources considers tribal cultural values in addition to scientific and archaeological values when determining impacts and mitigation. AB 52 provides procedural and substantive requirements for lead agency consultation with California Native American tribes and consideration of effects on tribal cultural resources, as well as examples of mitigation measures to avoid or minimize impacts to tribal cultural resources. AB 52 establishes that if a project may cause a substantial adverse change in the significance of a tribal cultural resource, that project may have a significant effect on the environment. Lead agencies must avoid damaging effects to tribal cultural resources, when feasible, and shall keep information submitted by tribes confidential.

Health and Safety Code section 7050.5

This section provides for treatment of human remains exposed during construction; no further disturbance may occur until the County Coroner makes findings as to origin and disposition pursuant to Public Resources Code section 5097.98. The Coroner has 24 hours to notify the Native American Heritage Commission (NAHC) if the remains are determined to be of Native American descent. The NAHC contacts most likely descendants about how to proceed.

Public Resources Code section 5097.98

This section provides (1) a protocol for notifying the most likely descendent from the deceased if human remains are determined to be Native American in origin and (2) mandated measures for appropriate treatment and disposition of exhumed remains.

Executive Order B-10-11

EO B-10-11 establishes as state policy that all agencies and departments shall encourage communication and consultation with California Indian Tribes and allow tribal governments to provide meaningful input into proposed decisions and policies that may affect tribal communities.

ENERGY

Energy (Federal)

Federal Energy Policy and Conservation Act and Corporate Average Fuel Economy Standards

The Federal Energy Policy and Conservation Act (EPCA), enacted in 1975, was a foundational law aimed at reducing U.S. dependence on foreign oil, promoting energy conservation, and improving energy efficiency. One of its key provisions was the establishment of Corporate Average Fuel Economy standards, which require automakers to achieve specific average fuel efficiency targets across their fleets. These standards have evolved over time to address environmental concerns and technological advancements.

Under President Trump's second term beginning in 2025, a series of executive orders has altered the trajectory of U.S. energy and environmental policy. These actions included revoking previous climate-focused executive orders, declaring a national energy emergency, and rolling back regulations that supported clean energy and fuel efficiency. Specifically, the administration is seeking to pause or reverse Corporate Average Fuel Economy standard enhancements. The orders have also halted new wind and solar projects on federal lands.

Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 was passed to reduce the country's dependence on foreign petroleum and improve air quality. The act includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. The act requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in the act. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. The Energy Policy Act also requires states to consider a variety of incentive programs to help promote AFVs. The Energy Policy Act provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill

gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

In January 2005, the new Energy Policy Act was signed into law. It addresses energy production in the United States, including energy efficiency, renewable energy, oil and gas, coal, Tribal energy, nuclear matters and security, vehicles and motor fuels, including ethanol, hydrogen, electricity, energy tax incentives, hydropower and geothermal energy, and climate change technology. The Energy Policy Act provides loan guarantees for entities that develop or use innovative technologies that avoid the by-production of GHGs. Another provision of the Energy Policy Act is the Renewable Fuel Standard (RFS), which increases the amount of biofuel that must be mixed with gasoline sold in the United States.

President Trump's 2025 Executive Orders have resulted in a shift away from the goals of the 1992 and 2005 act, emphasizing fossil fuel expansion over clean energy and environmental protection.

Energy (State)

Warren-Alquist Act

The California legislature passed the Warren-Alquist Act in 1974. The Warren-Alquist Act created the California Energy Commission (CEC). The legislation also incorporated the following three key provisions designed to address the demand side of the energy equation:

- Directed CEC to formulate and adopt the nation's first energy conservation standards for buildings constructed and appliances sold in California.
- Removed the responsibility of electricity demand forecasting from the utilities, which had a financial interest in high-demand projections, and transferred it to a more impartial CEC.
- Directed CEC to embark on an ambitious research and development program, with a particular focus on fostering what were characterized as non-conventional energy sources.

Assembly Bill 1007

Assembly Bill (AB) 1007 (2005) required CEC to prepare a statewide plan to increase the use of alternative fuels in California (State Alternative Fuels Plan).

CEC prepared the plan in partnership with CARB and in consultation with other state agencies, plus federal and local agencies. The State Alternative Fuels Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

Integrated Energy Policy Report

CEC is responsible for preparing integrated energy policy reports that identify emerging trends related to energy supply, demand, and conservation; public health and safety; and maintenance of a healthy economy. CEC's 2023 Integrated Energy Policy Report discusses the state's policy goals of decarbonizing buildings, ensuring energy reliability, decarbonizing the state's gas system, the state's energy demand forecast, and quantifying the benefits of the clean transportation program. SB 100 calls for California's electricity system to become 100% zero-carbon by 2045. CEC, CPUC, and CARB are working together to identify pathways to deeply decarbonize the state's electricity system in response to SB 100. The aim is to leverage California's clean electricity system to decarbonize, or remove carbon from, other portions of the state's energy system. Over time these policies and trends would serve to beneficially reduce the project's GHG emissions profile and energy consumption as they are implemented.

California Building Standards

The California Building Standards Code was established in 1978 and serves to enhance and regulate California's building standards. Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure that new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. In addition to CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24), which is commonly referred to as CALGreen, establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality.

GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES

Geology, Soils, and Paleontological Resources (Federal/International)

Building Codes

The **Uniform Building Code (UBC)** designates and ranks regions of the U.S., according to their seismic hazard potential, as Seismic Zones 1 through 4, with Zone 1 having the least seismic potential and Zone 4 having the highest seismic potential. The **International Building Code (IBC)** sets design standards to accommodate a maximum considered earthquake (MCE), based on a project's regional location, site characteristics, and other factors.

Paleontological Resources Preservation Act (16 U.S.C. §§ 470aaa-470aaa-11)

Enacted to preserve paleontological resources for current and future generations on federal lands under the jurisdiction of the National Park Service, Bureau of Land Management, Bureau of Reclamation, and USFWS, this Act identifies management requirements, collection requirements, and curation requirements, and authorizes criminal and civil penalties, rewards and forfeiture.

Omnibus Public Land Management Act of 2009 - Public Law 111-11 (123 Stat. 991)

Public Law 111-11 at Title VI, subtitle D lays out statutory requirements for Paleontological Resources Preservation (PRP). PRP provides definitions but requires the definition of some terms, and uses other terms and concepts that need further definition or details to clarify intent or enforcement. PRP identifies management requirements, collection requirements, curation requirements, the need for both criminal and civil penalties, rewards and forfeiture, and the need for confidentiality of some significant resource locations.

Other Relevant Laws

- **Public Resources Code section 5097.5** prohibits excavation or removal of any vertebrate paleontological site or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.

Geology, Soils, and Paleontological Resources (State)

Alquist-Priolo Earthquake Fault Zoning Act (Pub. Resources Code §§ 2621-2630)

This Act requires that "sufficiently active" and "well-defined" earthquake fault zones be delineated by the State Geologist and prohibits locating structures for

human occupancy on active and potentially active surface faults. (Note that since only those potentially active faults that have a relatively high potential for ground rupture are identified as fault zones, not all potentially active faults are zoned under the Alquist-Priolo Earthquake Fault Zone, as designated by the State of California.)

California Building Code (Cal. Code Regs., tit. 24)

The California Building Code provides a minimum standard for building design, which is based on the UBC, but is modified for conditions unique to California. The Code, which is selectively adopted by local jurisdictions, based on local conditions, contains requirements pertaining to multiple activities, including: excavation, site demolition, foundations and retaining walls, grading activities including drainage and erosion control, and construction of pipelines alongside existing structures.

Seismic Hazards Mapping Act & Mapping Regs (Pub. Resources Code § 2690 et seq.; Cal. Code Regs., tit. 14, div. 2, ch. 8, art. 10)

This statute and these regulations were promulgated to promote public safety by protecting against the effects of strong ground shaking, liquefaction, landslides, other ground failures, or other hazards caused by earthquakes. The Act requires that: (1) site-specific geotechnical investigations be conducted identifying the hazard and; (2) mitigation measures be formulated prior to permitting most developments designed for human occupancy. California Division of Mines and Geology Special Publication 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California (2008), constitutes the guidelines for evaluating seismic hazards other than surface fault-rupture, and for recommending mitigation measures as required by Public Resources Code section 2695, subdivision (a). The Act does not apply offshore as the California Geological Survey has not zoned offshore California under the Act.

Other Relevant Policies

- **Coastal Act Chapter 3 policies** (see also Multiple Environmental Issues)
 - Section 30253
 - Section 30243
- **Public Resources Code division 6, parts 1 and 2** (see Multiple Environmental Issues)
- **California Code of Regulations, title 2, division 3, chapter 1, article 3** (see Multiple Environmental Issues)

GREENHOUSE GAS EMISSIONS

Greenhouse Gas Emissions (Federal/International)

Federal Clean Air Act (FCAA) (42 U.S.C. § 7401 et seq.)

In 2007, the U.S. Supreme Court ruled that CO₂ is an air pollutant as defined under the Federal Clean Air Act (FCAA), and that the USEPA has authority to regulate Greenhouse Gas (GHG) emissions.

Mandatory Greenhouse Gas Reporting (74 Fed. Reg. 56260)

On September 22, 2009, the USEPA issued the Mandatory Reporting of Greenhouse Gases Rule, which requires reporting of GHG data and other relevant information from large sources (industrial facilities and power plants that emit more than 25,000 metric tons of carbon dioxide equivalent (MTCO_{2e}) emissions per year) in the U.S. The purpose of the Rule is to collect accurate and timely GHG data to inform future policy decisions. The Rule is referred to as 40 Code of Federal Regulations Part 98 (Part 98). Gases covered by implementation of Part 98 (GHG Reporting Program) are: CO₂, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and other fluorinated gases including nitrogen trifluoride and hydrofluorinated ethers.

Kyoto Protocol and Paris Climate Agreement

On March 21, 1994, the Kyoto Protocol, the first international agreement to regulate GHG emissions, was signed. The Kyoto Protocol was a treaty made under the United Nations Framework Convention on Climate Change. The Kyoto Protocol commitments included a global GHG emissions reduction target of 5 percent from 1990 levels during the first commitment period of 2008 to 2012. The U.S. was a signatory to the Kyoto Protocol; however, Congress did not ratify it and the U.S. was not bound by the Protocol's commitments.

In December 2015, the Paris Climate Agreement (Agreement) was endorsed and adopted by 195 countries including the U.S. The overarching goal was to reduce pollution levels so that the rise in global temperatures is limited to no more than 2° Celsius (3.6° Fahrenheit). The Agreement includes voluntary commitments to cut or limit the growth of GHG emissions and provide regular and transparent reporting of every country's carbon reduction.

Since 2015, the U.S. has exited (Nov 4, 2020), rejoined (Feb 19, 2021), and exited again (Jan 27, 2026) the Agreement and is not currently bound to the commitments outlined in the Agreement.

Greenhouse Gas Emissions (State)

The state has taken a number of actions to address climate change. These actions are summarized below, and include EOs, legislation, and CARB plans and requirements.

Executive Order S-3-05

EO S-3-05 (June 2005) identified GHG emissions-reduction targets and laid out responsibilities among the state agencies for implementing the EO and for reporting on progress toward the targets. This EO identified the following targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

California Global Warming Solutions Act of 2006 (Health & Safety Code §§ 38500-38559; Assembly Bill 32, Stats. 2006, ch. 488)

In furtherance of the goals identified in EO S-3-05, the Legislature enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006 (California Health and Safety Code Sections 38500–38599). AB 32 provided initial direction on creating a comprehensive multiyear program to limit California's GHG emissions at 1990 levels by 2020, and initiate the transformations required to achieve the state's long-range climate objectives.

Executive Order B-30-15

EO B-30-15 (April 2015) identified an interim GHG-reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050, as set forth in EO S-3-05. To facilitate achieving this goal, EO B-30-15 called for CARB to update the Climate Change Scoping Plan (Scoping Plan) to express the 2030 target in terms of millions of metric tons of carbon dioxide equivalents (MMT CO₂e). The EO also called for state agencies to continue to develop and implement GHG emissions-reduction programs in support of the reduction targets.

Senate Bill 32 and Assembly Bill 197

Senate Bill (SB) 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions-reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the state's climate policies.

Executive Order B-55-18

EO B-55-18 (September 2018) identified a policy for the state to achieve carbon neutrality as soon as possible (no later than 2045) and achieve and maintain net-negative emissions thereafter. The goal is in addition to the existing statewide targets for reducing the state's GHG emissions. CARB will work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Assembly Bill 1279 (Health & Safety Code, § 38562.2)

The Legislature enacted AB 1279, the California Climate Crisis Act, in September 2022. The bill declares the policy of the state to achieve net-zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net-negative GHG emissions thereafter. Additionally, the bill requires that by 2045, statewide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels.

California Air Resources Board's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a scoping plan to help achieve the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (California Health and Safety Code Section 38561 [a]), and to update the scoping plan at least once every 5 years. In 2008, CARB approved the first scoping plan: The Climate Change Proposed Scoping Plan: A Framework for Change (Scoping Plan). In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (2014 Scoping Plan) defined the state's GHG emissions-reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The 2014 Scoping Plan concluded that California was on track to meet the 2020 target but recommended that a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions. The 2014

Scoping Plan recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies.

In December 2017, CARB adopted the 2017 Climate Change Scoping Plan. The 2017 Scoping Plan built on the successful framework established in the initial Scoping Plan and 2014 Scoping Plan while identifying new technologically feasible and cost-effective strategies to serve as the framework to achieve the 2030 GHG target and define the state's climate change priorities to 2030 and beyond. Commitments include implementing renewable energy and energy efficiency (including the mandates of SB 350, which is discussed under the Renewable Energy and Energy Procurement subheading below), increased stringency of the Low Carbon Fuel Standard, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant (SLCP) Plan, and increased stringency of the targets established under SB 375 (discussed under the Mobile Sources subheading below). To fill the gap in additional reductions needed to achieve the 2030 target, the 2017 Scoping Plan recommended continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20%.

CARB adopted the 2022 Scoping Plan in December 2022. The 2022 CARB Scoping Plan outlines the state's plan to reach carbon neutrality by 2045 or earlier, while also assessing the progress the state is making toward achieving the 2030 GHG reduction goals. As it relates to the 2030 goal, perhaps the most significant change in the 2022 plan (compared to previous Scoping Plans) is that it identifies a new GHG target of 48% below the 1990 level, compared to the current statutory goal of 40% below. Current law requires the state to reduce GHG emissions by at least 40% below the 1990 level by 2030, but it does not specify an alternative goal. According to CARB, a focus on the lower target is needed to put the state on a path to meeting the newly established 2045 goal, consistent with the overall path to 2045 carbon neutrality. The carbon neutrality goal requires CARB to expand proposed actions from only the reduction of anthropogenic sources of GHG emissions to also include those that capture and store carbon (e.g., through natural and working lands, or mechanical technologies). The carbon reduction programs build on and accelerate those currently in place, including moving to zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemicals and refrigerants with high GWP; providing communities with sustainable options for

walking, biking, and public transit; displacement of fossil-fuel-fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options, such as green hydrogen.

The 2022 CARB Scoping Plan also emphasizes that there is no realistic path to carbon neutrality without carbon removal and sequestration, and to achieve the state's carbon neutrality goal, carbon reduction programs must be supplemented by strategies to remove and sequester carbon. Strategies for carbon removal and sequestration include carbon capture and storage from anthropogenic point sources, where CO₂ is captured as it leaves a facility's smokestack and is injected into geologic formations or used in industrial materials (e.g., concrete), and CO₂ removal from ambient air through mechanical (e.g., direct air capture with sequestration) or nature-based (e.g., management of natural and working lands) applications.

Senate Bill 605 and Senate Bill 1383

SB 605 (2014) required CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants (SLCPs) in the state (California Health and Safety Code Section 39730) and SB 1383 (2016) required CARB to approve and implement that strategy by January 1, 2018 (California Public Resources Code [PRC] Sections 42652–43654).

Assembly Bill 1757

AB 1757 (September 2022) requires the CNRA to determine a range of targets for natural carbon sequestration and for nature-based climate solutions that reduce GHG emissions for future years 2030, 2038, and 2045. These targets are established to support the state's goals to achieve carbon neutrality and foster climate adaptation and resilience.

Renewable Energy and Energy Procurement

The latest statewide regulations related to renewable energy are summarized below:

- SB 350 (2015) expanded the Renewables Portfolio Standard program by establishing a goal of 50% of the total electricity sold to retail customers in California per year by December 31, 2030.
- SB 100 (2018) increased the standards set forth in SB 350, establishing that 44% of the total electricity sold to retail customers in California per year by December 31, 2024; 52% by December 31, 2027; and 60% by December 31, 2030, be secured from qualifying renewable energy sources.

- SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035; 95% by December 31, 2040; and 100% by December 31, 2045.

Mobile Sources

State Vehicle Standards (Assembly Bill 1493 and Executive Order B-16-12)

AB 1493 (July 2002) was enacted in response to the transportation sector accounting for a large share of California's CO₂ emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the state. EO B 16 12 (March 2012) required that state entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emission vehicles (ZEVs). It ordered CARB, the CEC, the California Public Utilities Commission, and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve target goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 identified a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050.

Executive Order S-1-07

EO S-1-07 (January 2007, implementing regulation adopted in April 2009) set a declining Low Carbon Fuel Standard for GHG emissions measured in CO₂e grams per unit of fuel energy sold in California. The target of the Low Carbon Fuel Standard was to reduce the carbon intensity of California passenger vehicle fuels by at least 10% by 2020 (17 CCR 95480 et seq.). Carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel—including extraction/feedstock production, processing, transportation, and final consumption—per unit of energy delivered.

Senate Bill 375

SB 375 (California Government Code Section 65080) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG-reduction targets for the automobile and light-truck sector for 2020 and 2035, and to

update those targets every 8 years. SB 375 requires the state's 18 regional Metropolitan Planning Organizations (MPOs) to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP) that will achieve the GHG-reduction targets set by CARB. If an MPO is unable to devise an SCS to achieve the GHG-reduction target, the MPO must prepare an alternative planning strategy demonstrating how the GHG-reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

An SCS does not (1) regulate the use of land; (2) supersede the land use authority of cities and counties; or (3) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it (California Government Code Section 65080[b][2][K]). Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the state-mandated housing element process.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars I program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package of regulations: the Low-Emission Vehicle regulation for criteria air pollutant and GHG emissions and a technology forcing regulation for ZEVs that contributes to both types of emission reductions. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. The ZEV program acted as the focused technology of the Advanced Clean Cars I program by requiring manufacturers to produce increasing numbers of ZEVs and plug-in hybrid electric vehicles in the 2018 to 2025 model years.

The Advanced Clean Cars II program, which was adopted in August 2022, established the next set of low-emission vehicle and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality O₃ standards and California's carbon neutrality standards. The main objectives of Advanced Clean Cars II are to:

- Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.

- Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.
- The Advanced Clean Cars II rulemaking package also considers technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts.

Executive Order N-79-20

EO N-79-20 (September 2020) requires CARB to develop regulations as follows: (1) passenger vehicle and truck regulations requiring increasing volumes of new ZEVs sold in the state toward the target of 100% of in-state sales by 2035; (2) medium- and heavy-duty vehicle regulations requiring increasing volumes of new zero-emission trucks and buses sold and operated in the state toward the target of 100% of the fleet transitioning to ZEVs by 2045 everywhere feasible, and for all drayage trucks to be zero emission by 2035; and (3) strategies, in coordination with other state agencies, the EPA, and local air districts, to achieve 100% zero emissions from off-road vehicles and equipment operations in the state by 2035.

Senate Bill 97 (Stats. 2007, ch. 185)

SB 97 (2007) directed the Governor's Office of Planning and Research and CNRA to develop guidelines under CEQA for the mitigation of GHG emissions. CNRA adopted the CEQA Guidelines amendments in December 2009, which became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures (14 CCR 15126.4[c]). The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply its own thresholds of significance or those developed by other agencies or experts. CNRA also acknowledged that a lead agency could consider compliance with

regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions.

With respect to GHG emissions, CEQA Guidelines Section 15064.4(a), as subsequently amended in 2018, states that lead agencies “shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate” GHG emissions. The CEQA Guidelines now note that an agency “shall have discretion to determine, in the context of a particular project, whether to: (1) Quantify greenhouse gas emissions resulting from a project; and/or (2) Rely on a qualitative analysis or performance-based standards” (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

HAZARDS AND HAZARDOUS MATERIALS

Hazards and Hazardous Materials (Federal)

Safe Drinking Water Act

The US Environmental Protection Agency (USEPA)'s authority under the Safe Drinking Water Act sets federal limits for drinking water contaminants. Water suppliers must provide water that meets these standards, called maximum contaminant levels.

Hazardous Materials Transportation Act (HMTA) (49 U.S.C. §§ 5101-5127)

The Hazardous Materials Transportation Act (HMTA) delegates authority to the U.S. Department of Transportation to develop and implement regulations pertaining to the transport of hazardous materials and hazardous wastes by all modes of transportation. The USEPA's Hazardous Waste Manifest System is a set of forms, reports, and procedures for tracking hazardous waste from a generator's site to the disposal site. Applicable regulations are contained primarily in CFR Titles 40 and 49.

California Toxics Rule (40 CFR 131)

In 2000, the USEPA promulgated numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in California to protect human health and the environment. Under the Clean Water Act (CWA) § 303(c)(2)(B), the USEPA requires states to adopt numeric water quality criteria for priority toxic pollutants for which the USEPA has issued criteria guidance, and the presence or discharge of which could reasonably be expected to interfere with maintaining designated uses. These federal criteria are legally applicable in California for inland surface waters, enclosed bays, and estuaries.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C., Ch. 103, § 9601 et seq.)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, provides broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986 (SARA).

Emergency Planning and Community Right-to-Know Act (EPCRA) (42 U.S.C., §§ 11001-11050).

Under the Emergency Planning and Community Right-to-Know Act (EPCRA), or Title III of SARA, the EPA requires local agencies to regulate the storage and handling of hazardous materials and requires development of a plan to mitigate the release of hazardous materials. Businesses that handle any of the specified hazardous materials must submit to government agencies (i.e., Environmental Health Services Department), an inventory of the hazardous materials, an emergency response plan, and an employee training program. These business plans must provide a description of the types of hazardous materials/waste onsite and the location of these materials. The information in the business plan can then be used in the event of an emergency to determine the appropriate response action, the need for public notification, and the need for evacuation.

National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR 300)

Authorized under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA: 42 U.S.C. § 9605), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA: Pub. L. 99-499); and by Clean Water Act section 311 (d), as amended by the Oil Pollution Act (Pub. L. 101-380), the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) outlines requirements for responding to oil spills and hazardous substance releases. It specifies compliance, but does not require preparation of a written plan, and provides a comprehensive system for reporting, spill containment, and cleanup. Per 40 CFR 300.175 and 40 CFR 300.120, the U.S. Coast Guard has responsibility for oversight of regional response for oil spills in “coastal zones.”

Occupational Safety and Health Act of 1970 (29 U.S.C. § 1 et seq.)

Congress created the California Division of Occupational Safety and Health (Cal/OSHA) to assure safe and healthful working conditions for working persons by setting and enforcing standards and by providing training, outreach, education and assistance. Cal/OSHA has entered into an agreement with California under which California regulations cover all private sector places of employment within the state with certain exceptions.

Oil Pollution Act (OPA) of 1990 (33 U.S.C. § 2701 et seq.)

The Oil Pollution Act (OPA) requires owners and operators of facilities that could cause substantial harm to the environment to prepare and submit, and maintain up to date plans for responding to worst-case discharges of oil and hazardous substances and for facilities and vessels to demonstrate that they have sufficient response equipment under contract to respond to and clean up a worst-case spill. The passage of the OPA motivated California to pass a more stringent spill response and recovery regulation and the creation of the Office of Spill Prevention and Response to review and regulate oil spill plans and contracts. The OPA includes provisions to expand prevention and preparedness activities, improve response capabilities, provide funding for natural resource damage assessments, ensure that shippers and oil companies pay the costs of spills that do occur, and establish an expanded research and development program. Pursuant to a Memorandum of Understanding established to divide areas of responsibility, the U.S. Coast Guard is responsible for tank vessels and marine terminals, the USEPA for tank farms, and the Research and Special Programs

Administration for pipelines; each of these agencies has developed regulations for its area of responsibility. In addition, the Secretary of Interior is responsible for spill prevention, oil-spill contingency plans, oil-spill containment and clean-up equipment, financial responsibility certification, and civil penalties for offshore facilities and associated pipelines in all federal and state waters.

Resource Conservation and Recovery Act (RCRA) (42 U.S.C. § 6901 et seq.)

The Resource Conservation and Recovery Act (RCRA) authorizes the USEPA to control hazardous waste from “cradle-to-grave” (generation, transportation, treatment, storage, and disposal). RCRA Hazardous and Solid Waste Amendments of 1984 include waste minimization, phasing out land disposal of hazardous waste, and corrective action for releases. The Department of Toxic Substances Control is the lead state agency for corrective action associated with RCRA facility investigations and remediation.

Toxic Substances Control Act (TSCA) (15 U.S.C. §§ 2601–2629)

The Toxic Substances Control Act (TSCA) authorizes the USEPA to require reporting, record-keeping, testing requirements, and restrictions related to chemical substances and/or mixtures. It also addresses production, importation, use, and disposal of specific chemicals, such as polychlorinated biphenyls (PCBs), asbestos-containing materials, lead-based paint, and petroleum.

Other Relevant Laws, Regulations, and Recognized National Codes and Standards

- **33 CFR, Navigation and Navigable Waters** regulates aids to navigation, vessel operations, anchorages, bridges, security of vessels, waterfront facilities, marine pollution financial responsibility and compensation, prevention and control of releases of materials (including oil spills) from vessels, ports and waterways safety, boating safety, and deep-water ports.
- **40 CFR Parts 109, 110, 112, 113, and 114** – The Spill Prevention Countermeasures and Control (SPCC) plans covered in these regulatory programs apply to oil storage and transportation facilities and terminals, tank farms, bulk plants, oil refineries, and production facilities, and bulk oil consumers (e.g., apartment houses, office buildings, schools, hospitals, government facilities). These regulations include minimum criteria for developing oil removal contingency plans, prohibit discharge of oil such that applicable water quality standards would be violated, and address oil spill prevention and preparation of SPCC plans. They also establish

financial liability limits and provide civil penalties for violations of the oil spill regulations.

- **46 CFR parts 1 through 599 and Inspection and Regulation of Vessels (46 U.S.C. Subtitle II Part B)** provide that all commercial (e.g., passengers for hire, transport of cargoes, hazardous materials, and bulk solids) vessels operating offshore on specified routes (inland, near coastal, and oceans), including those under foreign registration, are subject to requirements applicable to vessel construction, condition, and operation. These regulations also allow for inspections to verify that vessels comply with applicable international conventions and U.S. laws and regulations.
- **Act of 1980 to Prevent Pollution from Ships (33 U.S.C. §§ 1901-1915)** requires ships in U.S. waters, and all U.S. ships to comply with International Convention for the Prevention of Pollution from Ships (MARPOL)
- **Clean Water Act (33 U.S.C. § 1251 et seq.)** (see Hydrology and Water Quality)
- **Convention on the International Regulations for Preventing Collisions at Sea** establishes “rules of the road” such as rights-of-way, safe speed, actions to avoid collision, and procedures to observe in narrow channels and restricted visibility
- **Hazardous Materials Transportation Act** (see Transportation)
- **Safety and Corrosion Prevention Requirements** — American Society of Mechanical Engineers (ASME), National Association of Corrosion Engineers (NACE), American National Standards Institute (ANSI)

Hazards and Hazardous Materials (State)

California Occupational Safety and Health Act (Cal/OSHA) of 1973 and California Code of Regulations, title 8

California employers have many different responsibilities under the CalOSHA Regulations. The following represents several requirements:

- Establish, implement and maintain an Injury and Illness Prevention Program and update it periodically to keep employees safe
- Inspect workplace(s) to identify and correct unsafe and hazardous conditions
- Make sure employees have and use safe tools and equipment and properly maintain this equipment
- Provide and pay for personal protective equipment

- Use color codes, posters, labels or signs to warn employees of potential hazards

Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (OSPRA) (Gov. Code § 8670.1 et seq., Pub. Resources Code § 8750 et seq., and Rev. & Tax. Code § 46001 et seq.)

The Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (OSPRA) and its implementing regulations seek to protect state waters from oil pollution and to plan for the effective and immediate response, removal, abatement, and cleanup in the event of an oil spill. The Act requires applicable operators to prepare and implement marine oil spill contingency plans and to demonstrate financial responsibility, and requires immediate cleanup of spills, following the approved contingency plans, and fully mitigating impacts on wildlife. The Act assigns primary authority to the Office of Spill Prevention and Response (OSPR) within CDFW to direct prevention, removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill in the marine waters of the state; CSLC is also provided with authority for oil spill prevention from and inspection of marine facilities and assists OSPR with spill investigations and response. Notification is required to the State Office of Emergency Services, which in turn notifies the response agencies, of all oil spills in the marine environment, regardless of size. The Act also created the Oil Spill Prevention and Administration Fund and the Oil Spill Response Trust Fund. Pipeline operators pay fees into the first of these funds for pipelines transporting oil into California across, under, or through marine waters.

Clean Coast Act of 2005 (SB 771; Stats. 2005, ch. 588)

This Act (effective January 1, 2006) includes requirements to reduce pollution of California waters from large vessels by: prohibiting and requiring reporting of discharges of hazardous wastes, other wastes, or oily bilge water into California waters or a marine sanctuary; and prohibiting and requiring reporting of discharges of grey water and sewage into California waters from vessels with sufficient holding-tank capacity or vessels capable of discharging grey water or sewage to available shore-side reception facilities.

Other

- **Coastal Act Chapter 3 policies** (see Multiple Environmental Issues)
 - Section 30232

Other Relevant Laws, Regulations, and Standards

- **Hazardous Waste Control Act (Health & Saf. Code, ch. 6.5, § 25100 et seq. & Cal. Code Regs., tit. 22, div. 4.5)** establishes criteria for defining hazardous waste and its safe handling, storage, treatment, and disposal (law is designed to provide cradle-to-grave management of hazardous wastes and reduce the occurrence and severity of hazardous materials releases).
- **Hazardous Material Release Response Plans and Inventory Law (Health & Saf. Code, ch. 6.95)** is designed to reduce the occurrence and severity of hazardous materials releases. This state law requires businesses to develop a Release Response Plan for hazardous materials emergencies if they handle more than 500 pounds, 55 gallons, or 200 cubic feet of hazardous materials. In addition, the business must prepare a Hazardous Materials Inventory of all hazardous materials stored or handled at the facility over the above thresholds, and all hazardous materials must be stored in a safe manner.
- **California Code of Regulations, title 8, division 1** sets forth the Permissible Exposure Limit, the exposure, inhalation or dermal permissible exposure limit for numerous chemicals. Included are chemicals, mixture of chemicals, or pathogens for which there is statistically significant evidence, based on at least one study conducted in accordance with established scientific principles, that acute or chronic health effects may occur in exposed employees. Title 8 sections 5191 and 5194 require a Hazard Communication Plan to ensure both employers and employees understand how to identify potentially hazardous substances in the workplace, understand the associated health hazards, and follow safe work practices.
- **California Code of Regulations, title 19, division 2** establishes minimum statewide standards for Hazardous Materials Business Plans.
- **California Code of Regulations, title 22, division 4.5** regulates hazardous wastes and materials by implementation of a Unified Program to ensure consistency throughout the state in administration requirements, permits, inspections, and enforcement by Certified Unified Program Agencies (CUPAs).
- **California Code of Regulations, title 24, part 9 (Fire Code regulations)** states hazardous materials should be used and stored in compliance with the state fire codes.

- **Porter-Cologne Water Quality Control Act (Wat. Code § 13000 et seq.)** (see Hydrology and Water Quality)
- **Protection of Underground Infrastructure (California Government Code § 4216)** requires that an excavator must contact a regional notification center (i.e., underground service alert) at least 2 days before excavation of any subsurface installations. The underground service alert then notifies utilities that may have buried lines within 1,000 feet of the excavation. Representatives of the utilities must mark the specific location of their facilities within the work area prior to the start of excavation. The construction contractor must probe and expose the underground facilities by hand prior to using power equipment.
- **Seismic Hazards Mapping Act/Regulations (Pub. Resources Code § 2690 et seq.; Cal Code Regs., tit. 14, div. 2, ch. 8, art. 10)** (see Geology and Soils)

HYDROLOGY AND WATER QUALITY

Hydrology and Water Quality (Federal)

Federal Clean Water Act (CWA) (33 U.S.C. § 1251 et seq.)

The Federal Clean Water Act (CWA) is comprehensive legislation (it generally includes the Federal Water Pollution Control Act of 1972, its supplementation by the CWA of 1977, and amendments in 1981, 1987, and 1993) that seeks to protect the nation's water from pollution by setting water quality standards for surface water and by limiting the discharge of effluents into waters of the U.S. These water quality standards are promulgated by the USEPA and enforced in California by the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs). Relevant CWA sections include:

- **Section 303(d) (33 U.S.C. § 1313)** requires states to list waters that are not attaining water quality standards, which is known as the 303(d) List of impaired waters. These requirements have led to the development of total maximum daily load (TMDL) guidance at the state level through the SWRCB and various RWQCBs.
- **Section 305(b) (33 U.S.C. § 1315)** requires states to assess and report on the water quality status of waters within the states.
- **Section 401 (33 U.S.C. § 1341)** specifies that any applicant for a federal permit or license to conduct any activity which may result in any discharge into the navigable waters of the U.S. must obtain a certification

or waiver thereof from the state in which the discharge originates that such a discharge will comply with established state effluent limitations and water quality standards. U.S. Army Corps of Engineers projects are required to obtain this certification.

- **Section 402 (33 U.S.C. § 1342)** establishes conditions and permitting for discharges of pollutants under the National Pollutant Discharge Elimination System (NPDES). Under the NPDES Program, states establish standards specific to water bodies and designate the types of pollutants to be regulated, including total suspended solids and oil; all point sources that discharge directly into waterways are required to obtain a permit regulating their discharge. NPDES permits fall under the jurisdiction of the SWRCB or RWQCBs when the discharge occurs within state waters (out to 3 nautical miles).
- **Section 403 (33 U.S.C. § 1343)** provides permit issuance guidelines for ocean discharge. Section 403 provides that point source discharges to the territorial seas, contiguous zone, and oceans are subject to regulatory requirements in addition to the technology- or water quality-based requirements applicable to typical discharges. These requirements are intended to ensure that no unreasonable degradation of the marine environment will occur as a result of the discharge and to ensure that sensitive ecological communities are protected.
- **Section 404 (33 U.S.C. § 1344)** authorizes the U.S. Army Corps of Engineers to issue permits for the discharge of dredged or fill material into waters of the U.S., including wetlands, streams, rivers, lakes, coastal waters or other water bodies or aquatic areas that qualify as waters of the U.S. Wetlands are a subset of “waters of the United States” that are defined in the Code of Federal Regulations (CFR) (33 CFR 328.3[a]; 40 CFR 230.3[s]) as:
 - 1 All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.
 - 2 All interstate waters including interstate wetlands. (Wetlands are defined by the federal government [33 CFR 328.3(b), 1991] as those areas that are inundated or saturated by surface or groundwater at a Regulatory Setting August 2023 A-7 PG&E Gas Line 021G/R-708 Replacement Project MND frequency and duration sufficient to support, and that under normal circumstances support, a prevalence of vegetation typically adapted for life in saturated soil conditions).

- 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. This includes any waters with the following current or potential uses: • That are or could be used by interstate or foreign travelers for recreational or other purposes, • From which fish or shellfish are or could be taken and sold in interstate or foreign commerce, or • That are used or could be used for industrial purposes by industries in interstate commerce.
- 4 All impoundments of waters otherwise defined as waters of the United States under the definition.
- 5 Tributaries of waters identified in paragraphs (1) through (4).
- 6 Territorial seas.
- 7 Wetlands next to waters identified in paragraphs (1) through (6).
- 8 Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding the Clean Water Act jurisdiction remains with the U. S. Environmental Protection Agency (328.3[a][8] added 58 CFR 45035, August 25, 1993).

Impacts to federally regulated waters subject to the jurisdiction of the USACE would require a permit from the USACE.

Rivers and Harbors Act (33 U.S.C. § 401 et seq.)

This Act governs specified activities in “navigable waters” (waters subject to the ebb and flow of the tide or that are presently used, have been used in the past, or may be susceptible for use to transport interstate or foreign commerce). Section 10 provides that construction of any structure in or over any navigable water of the U.S., or the accomplishment of any other work affecting the course, location, condition, or physical capacity of such waters, is unlawful unless the U.S. Army Corps of Engineers approves the work and issues a Rivers and Harbors Act section 10 Permit (which may occur concurrently with Clean Water Act section 404 permits).

National Flood Insurance Program

In response to the increasing cost of disaster relief, Congress passed the National Flood Insurance Program of 1968 and the Flood Disaster Protection Act of 1973. The Federal Emergency Management Agency (FEMA) administers the program to provide subsidized flood insurance to communities that comply with FEMA regulations to limit development in floodplains. A FIRM is an official FEMA-prepared map of a community. It is used to delineate both the SFHAs and the flood-risk premium zones that are applicable to the community.

Other Relevant Laws and Regulations

- **Marine Plastic Pollution Research and Control Act (33 U.S.C. § 1913 et seq.)** prohibits the discharge of plastic, garbage, and floating wood scraps within 3 nautical miles of land. Beyond 3 nautical miles, garbage must be ground to less than 1 inch, but discharge of plastic and floating wood scraps is still restricted. This Act requires manned offshore platforms, drilling rigs, and support vessels operating under a federal oil and gas lease to develop waste management plans.
- **Navigation and Navigable Waters (33 CFR)** regulations include requirements pertaining to prevention and control of releases of materials from vessels (e.g., oil spills), traffic control, and restricted areas, and general ports and waterways safety.
- **Oil Pollution Act (OPA) (33 U.S.C. § 2701 et seq.)** (see Hazards and Hazardous Materials)

Hydrology and Water Quality (State)

State Water Resources Control Board

The State Water Resources Control Board is the umbrella agency with jurisdiction over water quality issues in the State of California. In addition to standards and regulations established by the Federal NPDES program, California adopted a number of other, more stringent legislative acts in order to further strengthen State water quality standards. These acts include the Porter-Cologne Water Quality Act, California Water Code, and Title 23 of the California Code of Regulations. Within California, the State Water Resources Control Board is responsible for developing and implementing water quality control policy. The State Water Resources Control Board is the agency designated by the Environmental Protection Agency for administering applicable Federal Clean Water Act and Safe Drinking Water Act programs, which include adopting water quality standards for State waters.

The North Coast Regional Water Quality Control Board is responsible for water quality permitting in Mendocino County and the Central Coast Regional Water Quality Control Board is responsible for water quality permitting in San Luis Obispo County. The North Coast Regional Water Quality Control Board and the Central Coast Regional Water Quality Control Board adopted the North Coast Basin Plan and Central Coastal Basin Plan for the Coastal Watersheds, respectively, which designates beneficial uses and establishes water quality objectives for groundwater and surface water.

**Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.)
(Porter-Cologne)**

Porter-Cologne is the principal law governing water quality in California. The Act established the SWRCB and nine RWQCBs, which have primary responsibility for protecting water quality and beneficial uses of state waters. Porter-Cologne also implements many provisions of the federal Clean Water Act, such as the NPDES permitting program. Pursuant to Clean Water Act section 401, applicants for a federal license or permit for activities that may result in any discharge to waters of the U.S. must seek a Water Quality Certification from the state in which the discharge originates; such Certification is based on a finding that the discharge will meet water quality standards and other appropriate requirements of state law. In California, RWQCBs issue or deny certification for discharges within their jurisdiction. The SWRCB has this responsibility where projects or activities affect waters in more than one RWQCB's jurisdiction. If the SWRCB or a RWQCB imposes a condition on its Certification, those conditions must be included in the federal permit or license. Plans that contain enforceable standards for the various waters they address include the following:

- **Basin Plan.** Porter-Cologne (see § 13240) requires each RWQCB to formulate and adopt a Basin Plan for all areas within the region. Each RWQCB must establish water quality objectives to ensure the reasonable protection of beneficial uses, and an implementation program for achieving water quality objectives within the Basin Plan. In California, the beneficial uses and water quality objectives are the state's water quality standards.
- **California Ocean Plan.** (see § 13170.2) establishes water quality objectives for California's ocean waters and provides the basis for regulating wastes discharged into ocean and coastal waters. The plan applies to point and non-point sources. In addition, the Ocean Plan identifies applicable beneficial uses of marine waters and sets narrative and numerical water

quality objectives to protect beneficial uses. The SWRCB first adopted this plan in 1972, and it reviews the plan at least every 3 years to ensure that current standards are adequate and are not allowing degradation to indigenous marine species or posing a threat to human health.

RWQCBs also oversee on-site treatment of “California Designated, Non-Hazardous Waste” and enforce water quality thresholds and standards set forth in the Basin Plan. Applicants may be required to obtain a General Construction Activities Storm Water Permit under the NPDES program, and develop and implement a Storm Water Pollution Prevention Plan (SWPPP) that includes best management practices to control erosion, siltation, turbidity, and other contaminants associated with construction activities. The SWPPP would include best management practices to control or prevent the release of non-storm water discharges, such as crude oil, in storm water runoff.

California Anti-Degradation Policy

In 1968, as required under the federal anti-degradation policy, the SWRCB adopted Resolution No. 68-16 a “Statement of Policy with Respect to Maintaining High Quality of Waters in California.” Resolution 68-16 states that the disposal of wastes into state waters shall be regulated to achieve the highest water quality standard with maximum benefit to the people of the state and to promote the peace, health, safety, and welfare of the people of the state. The Policy prohibits discharges of wastes that will lower the quality of surface or groundwater so that the water is available for the maximum benefit of future residents.

Harbors and Navigation Code sections 650-674

This code specifies a State policy to “promote safety for persons and property in and connected with the use and equipment of vessels,” and includes laws concerning marine navigation that are implemented by local city and county governments. This Code also regulates discharges from vessels within territorial waters of the State of California to prevent adverse impacts on the marine environment. This code regulates oil discharges and imposes civil penalties and liability for cleanup costs when oil is intentionally or negligently discharged to the waters of the State of California.

Marine Life Management Act (Fish & G. Code, §§ 90-99.5, 105, 7050-7090, 8585-8589.7, 8842, and 9001.7; Gov. Code § 11125.6)

The Marine Life Management Act of 1999 is a plan for managing fisheries and other marine life in the State.

Marine Life Protection Act (MLPA) (Fish & G. Code, §§ 2850–2863)

Pursuant to this Act, the CDFW established and manages a network of Marine Protected Areas (MPAs) to, among other goals, protect marine life and habitats and preserve ecosystem integrity.

Marine Managed Areas Improvement Act

This Act established the California Marine Managed Areas System, extended State Parks' management jurisdiction into the marine environment, and gives priority to MPAs adjacent to protected terrestrial lands. For example, more than 25 percent of the California coastline is within the State Park System.

Construction Storm Water Regulations

Construction projects are required to comply with the statewide NPDES General Permit for Storm Water Discharges Associated with Construction Activity (General Construction Permit) (Order No. 99-08-DWQ, Permit No. CAS000002). Under this program, construction activities that would result in earth disturbance of one or more acres are required to file a Notice of Intent to obtain a General Construction Permit. The applicant is required to develop a Storm Water Pollution Prevention Plan, which provides best management practices (BMPs) to manage storm water runoff from the Project site. BMPs include erosion and sediment control devices, scheduling of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollutant of waters of the United States

Other Relevant Laws

- **Coastal Act Chapter 3 policies** (see Multiple Environmental Issues)
 - Section 30231
- **Lake and Streambed Alteration Program (Fish & G. Code, §§ 1600-1616)** (see Biological Resources)
- **Water Code section 8710** requires that a reclamation board permit be obtained prior to the start of any work, including excavation and construction activities, if projects are located within floodways or levee

sections. Structures for human habitation are not permitted within designated floodways.

- **Water Code section 13142.5** provides marine water quality policies stating that wastewater discharges shall be treated to protect present and future beneficial uses, and, where feasible, to restore past beneficial uses of the receiving waters. The highest priority is given to improving or eliminating discharges that adversely affect wetlands, estuaries, and other biologically sensitive sites; areas important for water contact sports; areas that produce shellfish for human consumption; and ocean areas subject to massive waste discharge.

LAND USE AND PLANNING

Land Use and Planning (Federal)

Other

- **Coastal Zone Management Act (16 U.S.C. § 1451 et seq.)** (see Multiple Environmental Issues)

Land Use and Planning (State)

Submerged Lands Act (43 U.S.C. § 1301 et seq.; Pub. L. 83-31)

The State of California owns tide and submerged lands waterward of the ordinary high watermark. State law gives primary responsibility for determination of the precise boundary between these public tidelands and private lands, and administrative responsibility over state tidelands, to the CSLC. Access and use of state shoreline areas can be obtained through lease agreements.

Other

- **Coastal Act Chapter 3 policies** (see Multiple Environmental Issues)
 - **Section 30210**
 - **Section 30211**
 - **Section 30220**
 - **Section 30221**
 - **Section 30222**
 - **Section 30223**
 - **Section 30224**
 - **Section 30230**
 - **Section 30231**

- **Section 30232**
- **Section 30234.5**
- **Section 30235**
- **Section 30240**
- **Section 30244**
- **Section 30251**
- **Section 30252** – The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.
- **Section 30253** – New development shall do all of the following:
 - a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
 - b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.
 - c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.
 - d) Minimize energy consumption and vehicle miles traveled.
 - e) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.

MINERAL RESOURCES

Mineral Resources (Federal)

There are no major federal laws, regulations, and policies potentially applicable to this Project.

Mineral Resources (State)

Surface Mining and Reclamation Act (SMARA) (Pub. Resources Code §§ 2710-2796).

The California Department of Conservation is the primary agency tasked with mineral resource protection. The Department, which is charged with conserving earth resources (Pub. Resources Code, §§ 600-690), has five program divisions: California Geological Survey (CGS); Geologic Energy Management Division (CalGEM); Division of Land Resource Protection (DLRP); State Mining and Geology Board (SMGB); and Division of Mine Reclamation (DMR). SMGB develops policy direction regarding the development and conservation of mineral resources and reclamation of mined lands. In accordance with the Surface Mining and Reclamation Act (SMARA), CGS classifies the regional significance of mineral resources and assists in designating lands containing significant aggregate resources. Four Mineral Resource Zones (MRZs) are designated to indicate the significance of mineral deposits.

- MRZ-1 – Areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence.
- MRZ-2 – Areas where adequate information indicates significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- MRZ-3 – Areas containing mineral deposits the significance of which cannot be evaluated from available data.
- MRZ-4 – Areas where available information is inadequate for assignment to any other MRZ.

The Warren-Alquist State Energy Resources Conservation and Development Act (Pub. Res. Code § 25000 et seq.)

This act was adopted in 1974 to encourage conservation of non-renewable energy resources. It established the California Energy Commission.

NOISE

Noise (Federal)

Noise Control Act (42 U.S.C. § 4901 et seq.) and NTIS 550\9-74-004, 1974

The Noise Control Act required the USEPA to establish noise emission criteria and noise testing methods (40 CFR Chapter 1, Subpart Q). These criteria generally apply to interstate rail carriers and to some types of construction and transportation equipment. In 1974, the USEPA provided guidance in National Technical Information Service (NTIS) 550\9-74-004 ("Information on Levels of Environmental Noise Requisite to Protect Health and Welfare with an Adequate Margin of Safety;" referenced as the "Levels Document") that established a Day Night Average Sound Level (L_{dn}) of 55 dBA as the requisite level, with an adequate margin of safety, for areas of outdoor uses including residences and recreation areas. The recommendations do not consider technical or economic feasibility (i.e., the document identifies safe levels of environmental noise exposure without consideration for achieving these levels or other potentially relevant considerations), and therefore should not be construed as standards or regulations.

NTIS 550\9-74-004, 1974

In response to a Federal mandate, the USEPA provided guidance in NTIS 550\9-74-004, 1974 ("Information on Levels of Environmental Noise Requisite to Protect Health and Welfare with an Adequate Margin of Safety"), commonly referenced as the "Levels Document" that establishes an L_{dn} of 55 dBA as the requisite level, with an adequate margin of safety, for areas of outdoor uses including residences and recreation areas. The USEPA recommendations contain a factor of safety and do not consider technical or economic feasibility (i.e., the document identifies safe levels of environmental noise exposure without consideration for achieving these levels or other potentially relevant considerations), and therefore should not be construed as standards or regulations.

Federal Transit Administration

In its Transit Noise and Vibration Impact Assessment Manual, the Federal Transit Administration (FTA) recommends a daytime construction noise level threshold of 80 dBA Leq over an 8-hour period (FTA 2018) when detailed construction noise assessments are performed to evaluate potential impacts to community residences surrounding a project. Although this FTA guidance is not a regulation, it can serve as a quantified standard in the absence of such noise limits at the state and local jurisdictional levels.

For vibration, the FTA manual recommends a peak particle velocity (PPV) threshold of 0.2 inches per second (in/sec) for residential buildings and 0.12 in/sec for fragile historic structures. These thresholds are intended to prevent annoyance and avoid structural damage from construction-related vibration.

Noise (State)

California Department of Transportation (Caltrans)

Caltrans recommends 0.5 ips peak particle velocity (PPV) as a threshold for the avoidance of structural damage to typical newer residential buildings exposed to continuous or frequent intermittent sources of ground-borne vibration (Caltrans 2020). For transient vibration events, such as blasting, the damage risk threshold would be 1.0 ips PPV at the same type of newer residential structures. For older structures, these guidance thresholds would be more stringent: 0.3 ips PPV for continuous/intermittent vibration sources, and 0.5 ips PPV for transient vibration events. With respect to human annoyance, Caltrans guidance indicates that building occupants exposed to continuous ground-borne vibration in the range of 0.1 ips PPV (“strongly perceptible”) to 0.4 ips PPV (“severe”) would find it “annoying” at 0.2 ips PPV and “unpleasant” at the 0.4 ips PPV value. These Caltrans guidance thresholds are not regulations, but can serve as quantified standards in the absence of such limits at the local jurisdictional level.

Land Use Compatibility Guidelines from the now defunct California Office of Noise Control (State of California 1976)

State regulations for limiting population exposure to physically and/or psychologically significant noise levels include established guidelines and ordinances for roadway and aviation noise under the California Department of Transportation and the now defunct California Office of Noise Control. Office of Noise Control land use compatibility guidelines provided the following:

- For residences, an exterior noise level of 60 to 65 dBA Community Noise Equivalent Level (CNEL) is considered “normally acceptable;” a noise level of greater than 75 dBA CNEL is considered “clearly unacceptable.”
- A noise level of 70 dBA CNEL is considered “conditionally acceptable” (i.e., the upper limit of “normally acceptable” for sensitive uses [schools, libraries, hospitals, nursing homes, churches, parks, offices, commercial/professional businesses]).

Other Relevant Regulation

- **California Code of Regulations, title 24** establishes CNEL 45 dBA as the maximum allowable indoor noise level resulting from exterior noise sources for multi-family residences.

POPULATION AND HOUSING

There are no major federal or state laws, regulations, and policies potentially applicable to this Project.

PUBLIC SERVICES

Public Services (Federal)

CFR Title 29

- **29 CFR 1910.38** requires an employer, when required by a California Division of Occupational Safety and Health (Cal/OSHA) standard, to have an Emergency Action Plan that must be in writing, kept in the workplace, and available to employees for review.
- **29 CFR 1910.39** requires an employer to have a Fire Prevention Plan.
- **29 CFR 1910.155, Subpart L, Fire Protection** requires employers to place and keep in proper working order fire safety equipment within facilities.

Public Services (State)

California Code of Regulations, title 19 (Public Safety)

California State Fire Marshal regulations establish minimum standards for the prevention of fire and for protection of life and property against fire, explosion, and panic.

RECREATION

Recreation (Federal)

There are no major federal laws, regulations, and policies potentially applicable to this Project.

Recreation (State)

Other

- **Coastal Act Chapter 3 policies** (see Multiple Environmental Issues)
 - **Section 30210**
 - **Section 30220**
 - **Section 30221**
 - **Section 30222.5**

Other Relevant Regulations

- **California Ocean Sport Fishing Regulations.** Each year, CDFW and the California Fish and Game Commission issue regulations on recreational fishing within state marine waters. These regulations specify season, size and bag limits, gear restrictions, as well as licensing requirements. Following the development of the MPAs, a section on fishing restrictions within the MPAs was also included.

TRANSPORTATION

Transportation (Federal)

Ports and Waterways Safety Act (33 U.S.C. § 1221 et seq.)

This Act provides the authority for the U.S. Coast Guard to increase vessel safety and protect the marine environment in ports, harbors, waterfront areas, and navigable waters, including by authorizing the Vessel Traffic Service, controlling vessel movement, and establishing requirements for vessel operation.

Americans with Disabilities Act (ADA) (U.S.C., tit. 42, 47)

The Americans with Disabilities Act (ADA) (1990) is a wide-ranging civil rights law that prohibits, under certain circumstances, discrimination based on disability. Pedestrian facility design must comply with the accessibility standards identified in the ADA, which applies to all projects involving new or altered pedestrian facilities. The scoping and technical provisions for new construction and alterations identified in the ADA Accessibility Guidelines (Sections 4.3, 4.7 and 4.8) can be used to help design pedestrian facilities that are ADA compliant. For example, Title II-6.600 of the Technical Assistance Manual states, “When streets, roads, or highways are newly built or altered, they must have ramps or sloped areas whenever there are curbs or other barriers to entry from a sidewalk or

path." Certain facilities, such as historic buildings, may be exempt from ADA requirements.

Title 23 (Highways), CFR, Section 450.220

Requires each state to carry out a continuing, comprehensive, and intermodal statewide transportation planning process. This planning process must include the development of a statewide transportation plan and transportation improvement program that facilitates the efficient, economic movement of people and goods in all areas of the state.

Other

- **Hazardous Materials Transportation Act (HMTA) (49 U.S.C. §§ 5101-5127)**
(see Hazards and Hazardous Materials)

Transportation (State)

California Vehicle Code

Chapter 2, article 3 defines the powers and duties of the California Highway Patrol, which enforces vehicle operation and highway use in the state. The California Department of Transportation is responsible for the design, construction, maintenance, and operation of the California State Highway System and the portion of the Interstate Highway System within state boundaries.

Caltrans has the discretionary authority to issue special permits for the use of California State highways for other than normal transportation purposes. Caltrans also reviews all requests from utility companies, developers, volunteers, nonprofit organizations, and others desiring to conduct various activities within the California Highway right of way. The Caltrans Highway Design Manual, prepared by the Office of Geometric Design Standards (Caltrans 2012), establishes uniform policies and procedures to carry out the highway design functions of Caltrans. Caltrans has also prepared a Guide for the Preparation of Traffic Impact Studies (Caltrans 2002). Objectives for the preparation of this guide include providing consistency and uniformity in the identification of traffic impacts generated by local land use proposals.

Other

- **Harbors and Navigation Code sections 650-674** (see Hydrology and Water Quality)

UTILITIES AND SERVICE SYSTEMS

Utilities and Service Systems (Federal)

Other

- **CFR Title 29** (see Public Services)

Utilities and Service Systems (State)

California Integrated Waste Management Act (AB 939; Stats. 1989, ch. 1095)

This Act mandates management of non-hazardous solid waste throughout California. Its purpose includes: reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible; improve regulation of existing solid waste landfills; ensure that new solid waste landfills are environmentally sound; streamline permitting procedures for solid waste management facilities; and specify local government responsibilities to develop and implement integrated waste management programs. AB 939 policies preferred waste management practices include the following. The highest priority is to reduce the amount of waste generated at its source (source reduction). Second is to reuse, by extending the life of existing products and recycling those wastes that can be reused as components or feed stock for the manufacture of new products, and by composting organic materials. Source reduction, reuse, recycling and composting are jointly referred to as waste diversion methods because they divert waste from disposal. Third is disposal by environmentally safe transformation in a landfill. All local jurisdictions, cities, and counties were required to divert 50 percent of the total waste stream from landfill disposal by the year 2000 and each year thereafter (with 1990 as the base year).

California Code of Regulations, title 19 (Public Safety)

Title 19 sets standards for the prevention of fire and protection of property and life by the Seismic Safety Commission, Office of Emergency Services, and Office of the Fire Marshall. It also contains guidelines and standards for general fire, construction, explosives, emergency management, earthquakes, and fire.

Other

- **Coastal Act Chapter 3 policies** (see Multiple Environmental Issues)
 - **Section 30254**

WILDFIRE

Wildfire (Federal)

National Fire Protection Association Codes, Standard, Practices, and Guides

National Fire Protection Association codes, standards, recommended practices, and guides are developed through a consensus standards development process approved by the American National Standards Institute. This process brings together professionals representing varied viewpoints and interests to achieve consensus on fire and other safety issues. National Fire Protection Association standards are recommended guidelines and nationally accepted good practices in fire protection but are not law or codes unless adopted as such or referenced as such by the California Fire Code (CFC) or the local fire agency.

International Fire Code

Created by the International Code Council, the International Fire Code addresses a wide array of conditions hazardous to life and property including fire, explosions, and hazardous materials handling or usage. The International Fire Code places an emphasis on prescriptive and performance-based approaches to fire prevention and fire protection systems. Updated every 3 years, the International Fire Code uses a hazards classification system to determine the appropriate measures to be incorporated in order to protect life and property (often times these measures include construction standards and specialized equipment). The International Fire Code uses a permit system (based on hazard classification) to ensure that required measures are instituted.

Wildfire (State)

California Fire Code

Part 9 of Title 24 contains the California Fire Code (CFC), which incorporates by adoption the International Fire Code with necessary California amendments. The purpose of this code is to establish the minimum requirements to safeguard the public health, safety, and general welfare from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during

emergency operations. Chapter 49 of the CFC contains minimum standards for development in the wildland–urban interface and fire hazard areas.

The CFC and Office of the State Fire Marshal provide regulations and guidance for local agencies in the development and enforcement of fire safety standards. The CFC is updated and published every 3 years by the California Building Standards Commission.

State Responsibility Area (SRA)

The California Public Resources Code (Section 4101 et seq.) includes fire safety requirements for which the California Department of Forestry and Fire Protection (CAL FIRE) has adopted regulations (for example, Chapter 7 of Division 1.5 of 14 CCR) that apply to state responsibility areas (SRAs). As the name implies, State Responsibility Areas (SRAs) are areas where CAL FIRE has primary responsibility for fire protection. During the fire hazard season, these regulations: (a) restrict the use of equipment that may produce a spark, flame, or fire; (b) require the use of spark arrestors on equipment that has an internal combustion engine; (c) specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and (d) specify fire-suppression equipment that must be provided onsite for various types of work in fire-prone areas.

Very High Fire Hazard Severity Zones (AB 337; Gov. Code § 51175 et seq.)

As a result of the Oakland Hills Fire (Tunnel Fire) of 1991, the Bates Bill (AB 337) was passed in 1992 requiring CAL FIRE to work with local governments to identify high fire hazard severity zones within local responsibility areas throughout each county in the state. Over the years, CAL FIRE has updated the maps and provided new recommendations to local governments.

CAL FIRE periodically gathers new data and updates the mapping. This is a massive project requiring policy and procedure staff, prevention and planning staff, and the technical geographic information system (GIS) skills of CAL FIRE's Fire and Resource Assessment Program.