3.8 HAZARDS AND HAZARDOUS MATERIALS

3.8.1 Definitions

Hazardous Materials

Hazardous materials are chemical and non-chemical substances that can pose a threat to the environment or human health if misused or released. Hazardous materials occur in various forms and can cause death; serious injury; long-lasting health effects; and damage to buildings, homes, and other property. Hazardous materials are used in industry, agriculture, medicine, research, and consumer goods. Explosives, flammable and combustible substances, poisons, radioactive materials, pesticides, petroleum products, and other materials under the Resource Conservation and Recovery Act in 40 CFR § 261 are considered hazardous materials. These substances are most often released during motor vehicle or equipment accidents or chemical accidents during industrial use. Hazardous substances have the potential to leach into soils, surface water, and groundwater if they are not properly contained.

Physical Hazards

Physical hazards include working or living in proximity to airports, wildland fire hazards, and objects that could induce current and voltage and result in electrical shocks.

3.8.2 Environmental Setting

Existing Hazardous Sites

An Environmental Data Resources (EDR) Corridor Study was conducted to identify hazardous material sites within 1 mile of the proposed projectlisted on government databases, including SWRCB GeoTracker and the Department of Toxic Substances Control's (DTSC) EnviroStor (EDR 2015). The Fast & Easy Mart, described below, is the only open hazardous materials cleanup site within 1 mile of the proposed project. All of the other hazardous material sites within 1 mile of the proposed project are closed cases or administrative in nature, such as historical records of high risk uses (i.e., gas stations, dry cleaners), or sites listed with Sonoma County as handling hazardous materials and generating waste. The residual contamination (if any) at the closed sites does not pose an unacceptable health risk to the current site users; however, residual contamination could pose an unacceptable health or environmental risk should the site change use (SWRCB 2016). No small- or large-quantity hazardous waste generators or Superfund sites are located within 1 mile of the proposed project.

The Fast & Easy Mart is a Leaking Underground Storage Tank cleanup site. This site has a potential for gasoline contamination of the soil and groundwater. According to the listing information, two 10,000-gallon underground storage tanks were removed from the site in 1995. A groundwater monitoring program was initiated in 1998, and an investigation was conducted from 1998 to 2006. The site was reviewed mid-2015 for closure and found to have several

impediments to site closure, including lacking data regarding the vertical and lateral extent of plume contamination (SWRCB 2016, DTSC 2016).

Existing power line wood poles that would be removed for the proposed project are treated with chemicals that protect wood from insects, microbial agents, and rot. These chemicals likely include pentachlorophenol, creosote, and chromated copper arsenate, which, for certain uses and quantities, can be considered hazardous materials, and require specific handling procedures prescribed by state and federal regulations. The base of some of the treated wood poles may be wrapped with copper naphthenate paper, also known as CuNap wrap. This paper has been accepted as a wood preservative for several decades, and has been employed in non-pressure treatments of wood and other products. Copper naphthenate is a common preservative and its use has increased recently in response to environmental concerns associated with other wood treatment products.

Emergency/Evacuation Plans

There are no designated emergency evacuation routes in the project study area; the area is not included in any emergency evacuation plans.

Wildland Fire Hazards

The factors that influence wildfire behavior are fuel, weather, and topography. The climate in Sonoma County is Mediterranean with mild, wet winters and hot, dry summers. The potential for damaging wildfires in Sonoma County ranges from moderate closer to the coast where there is summer fog, to very high inland where the slopes are steeper and densely wooded. Late summer and fall (e.g., August, September, and October) are the times with the highest risk of wildfire due to the dry vegetation, low humidity, and off-shore winds (Sonoma County 2011).

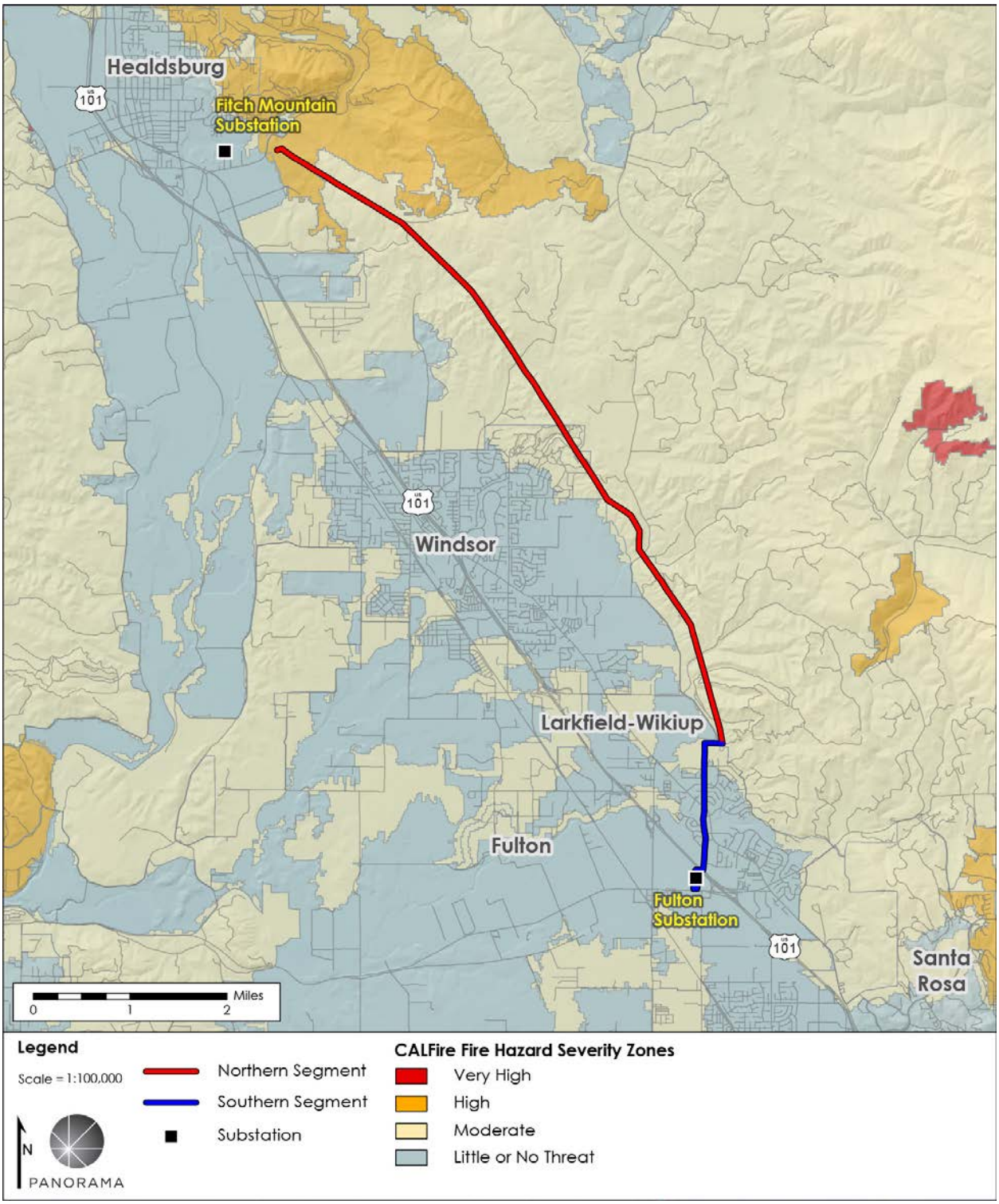
Figure 3.8-1 presents the fire hazard severity zones in the project study area. The majority of the proposed project is located within a moderate fire hazard severity zone. The northernmost 0.25 mile of the project alignment is located in a high fire hazard severity zone.

3.8.3 Impact Analysis

Summary of Impacts

Table 3.8-1 presents a summary of the CEQA significance criteria and impacts from hazards and hazardous materials that would occur during construction, operation, and maintenance of the proposed project.

Figure 3.8-1 Wildfire Hazard in the Project Area



Sources: (ESRI 2016, Cal Fire 2008, Cal Fire 2012)

Table 3.8-1 Summary of Proposed Project Impacts from Hazards and Hazardous Materials

Would the proposed project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) Be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☒	☐	☐

Impact Discussion

a) Would the proposed project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Significance Determination
	Less than significant with mitigation

Construction

Motorized heavy equipment, such as all-terrain vehicles, backhoes, graders, pickup trucks, line trucks, bucket trucks, and helicopters, would be used during construction of the proposed project. Construction equipment would use or contain hazardous materials, including gasoline, diesel, antifreeze, hydraulic oils, and lubricants; consequently, small amounts of hazardous materials would be present at work areas and staging areas where construction equipment is present during construction. A release of materials has the potential to occur during an accidental spill or other unauthorized release during helicopter use; work site grading; pole installation; or during conductor pulling, splicing, and tensioning. A hazardous materials release could also occur during refueling of helicopters, and servicing of equipment and vehicles. Improperly disposed of, spilled, or leaking hazardous materials could create a significant hazard to the public or the environment and would be a potentially significant impact.

PG&E has proposed APM HM-1 and APM HM-2, which include a worker training program to protect workers and the environment from hazards, general procedures for handling hazardous material and responding to spills, and standard procedures for fueling helicopters. APM HM-1 does not address specific procedures or topics that would be addressed in the training program to prevent hazards and spills. APM HM-2 does not address fueling procedures for other vehicles and equipment, or specific emergency response and cleanup procedures for a leak or spill of hazardous materials. A significant impact could occur if proper procedures are not followed to contain and clean up leaks or spills of hazardous materials. MM Hazards-1 supersedes APM HM-1 and APM HM-2. MM Hazards-1 specifies key hazards that would be addressed in the required worker training; procedures for storing, handling, and transporting hazardous materials; and spill prevention and response including procedures for refueling of equipment and helicopters. Such procedures would be included in the SWPPP developed for the proposed project that would be subject to CPUC review and approval, as specified in MM Hydrology-1 (refer to Section 3.9: Hydrology and Water Quality). The impact on the public and environment from the routine transport, disposal, and use of hazardous materials would be less than significant with mitigation.

Existing wood poles proposed for removal may have been chemically treated with creosote, pentachlorophenol, or other wood preservatives that require proper handling and disposal. AB 1353 requires that treated wood waste be disposed of in a hazardous waste landfill or in a composite-lined portion of a RWQCB-approved solid waste landfill. As discussed in Section 2: Project Description, existing wood poles would be disposed of at Recology Hay Road or Forward Resource Recovery Facility landfills, both of which are a RWQCB-approved treated wood waste landfill (DTSC 2013). Compliance with state regulation would ensure proper

disposal of wood poles. The impact on the public or environment from chemically treated wood pole disposal would be less than significant.

Operation and Maintenance

The proposed project would replace existing conductors and poles within PG&E easements. Operation and maintenance activities for the reconductored lines would be similar to the operation and maintenance activities for the existing power lines. No new impacts from transport, use, or disposal of hazardous materials would occur. No impact would occur.

Required APMs and MMs: MM Hazards-1

b) Would the proposed project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	**Significance Determination**
	Less than significant with mitigation

Construction

The impact from accidental spills or releases of hazardous materials during construction is discussed under Impact a), above. The impact from accidental spill of hazardous materials would be less than significant with implementation of MM Hazards-1. No known gas transmission pipelines would be bisected by or are adjacent to the project alignment; however, other subsurface utilities could be found in areas proposed for excavation and grading. Gas pipeline damage or rupture could be caused by ground-disturbing activities (i.e., grading, trenching, augering foundation holes) that would occur during construction, which could result in the uncontrolled release of natural gas from a pipeline and/or cause a fire or explosion. PG&E's construction procedures would reduce the likelihood of damaging subsurface utilities and pipelines during construction by notifying other utilities along the proposed alignment via the Underground Service Alert prior to trenching. The impact on the public and environment from damage to or rupture of buried utilities would be less than significant.

Operation and Maintenance

Operation and maintenance activities for the reconductored power lines would be similar in scope to current operation and maintenance activities for the existing power lines. The current protocols for use, transport, and disposal of hazardous materials during project operation and maintenance would continue to be implemented. Herbicides may be applied around new poles to control vegetation, and in restoration areas for treatment of non-native and invasive weeds. Herbicides are currently used along the entire project alignment to maintain areas around existing poles. Herbicide use would be similar to existing usage, and PG&E would follow established BMPs for application. Only federal and California EPA-registered herbicides would be used, as is current practice. All herbicide applicators would carry the appropriate license from the California Department of Pesticide Regulation. No new impacts associated with the transport, use, and disposal of herbicides or other hazardous materials during operation and maintenance would occur.

Required APMs and MMs: MM Hazards-1

c) Would the proposed project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Significance Determination
	Less than significant with mitigation

Construction

Hazardous Emissions

Project construction equipment would emit TACs, particularly diesel exhaust, within 0.25 mile of three schools (see Table 3.3-2 in Section 3.3: Air Quality for details). Diesel exhaust at high concentrations would be considered hazardous. As described in greater detail in Impact d) in Section 3.3: Air Quality, CCR § 2480 limits idling at or within 100 feet of a school to 30 seconds or less. Increased truck traffic due to construction in the vicinity of the three schools would be limited to 3 months or less. Diesel exhaust would not reach hazardous levels. The impact would be less than significant.

Hazardous Materials and Waste Handling

Project construction would require the use of motorized heavy equipment, including vehicles that use gasoline, diesel, antifreeze, and lubricants, throughout the proposed project construction areas. These materials would be temporarily stored during construction at the project staging yards. Helicopter refueling could occur at landing zones located within 0.25 mile of Mark West Elementary School and San Miguel Elementary School. Helicopter fuel would be transported daily to the landing zones in a refueling truck.

With the exception of helicopter fuel, the quantities of hazardous materials that could be spilled would be minimal, which would limit their ability to be transported to a school site because small quantities would be quickly absorbed into the soil. Hazardous materials spills from a storage tank fuel transfer incident either at the landing zones, or during transit to and from the landing zones could occur. The spilled material has the potential to be transported via wind or water to a school, which could cause a potentially significant impact.

As described in Impact a) above, PG&E has proposed APM HM-1 and APM HM-2 to address hazardous materials spills, but these measures do not specifically address the hazards from spills from fueling, and the impact would remain significant. MM Hazards-1 supersedes these APMs, and minimizes accidental spill impacts and hazardous materials exposure by requiring inclusion of proper hazardous material storage, handling, cleanup and disposal procedures in the SWPPP (MM Hydrology-1) to ensure that any hazardous materials would not be transported to a school site. MM Hazards-1 would reduce the impact on schools to less than significant.

Operation and Maintenance

Operation and maintenance of the reconductored power lines would involve the same equipment and vehicles as the existing power lines. The risk of hazardous material exposure to schools would not increase as a result of proposed project operation or maintenance. Herbicide

use would not increase, would be very localized, and would not occur close enough to any of the schools that children could come into contact with it. No impact would occur.

Required APMs and MMs: MM Hazards-1

d) Would the proposed project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	**Significance Determination**
	Less than significant

Construction

The proposed project would not be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The nearest open hazardous materials site is the Fast & East Mart open Leaking Underground Storage Tank case located approximately 0.29 mile from the Southern Segment. No other open sites are located within 0.5 mile of the project area. Shallow groundwater flow at the open case site is towards the northwest, away from the project alignment. Furthermore, no excavation activities would be conducted near the hazardous materials site that could result in the potential to create a significant hazard to the public or the environment by exposing or spreading the hazardous materials from that site. The impact due to proximity of the project alignment to an open hazardous materials site would be less than significant.

Operation and Maintenance

Operation and maintenance activities would not involve excavation activities near or on an open hazardous materials site. No impact would occur.

Required APMs and MMs: None

e) Would the proposed project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area?	**Significance Determination**
	Less than significant

Construction

The proposed project would not be located within 2 miles of a public airport or public use airport or within the vicinity of a private airstrip. The closest airport is the Charles M. Schultz – Sonoma County Airport, located approximately 2.3 miles southwest from the closest project component. The proposed project would not be located within the existing or proposed Comprehensive Airport Land Use Plan Safety Zones. The proposed project would use public airports, including the Charles M. Schultz – Sonoma County Airport (Sonoma County, California) and Nut Tree Airport (Vacaville, California), and landing zones for helicopter staging. Helicopters would be used during construction of the Northern Segment and a few days during construction of the Southern Segment. The proposed project may require the simultaneous use of up to three helicopters.

PG&E would comply with all FAA requirements and coordinate with local airports regarding helicopter operations and flight plans during project construction. Helicopter flight paths during project construction would generally be limited to the existing utility line ROW and landing zones. Helicopter use would comply with all applicable federal, state, and local aviation rules and regulations and would not create any new safety hazards. Helicopter use would not cause a safety hazard for people residing or working in the proposed project vicinity because PG&E would adhere to all aviation rules and regulations and coordinate helicopter operations with the Charles M. Schultz – Sonoma County Airport.

Operation and Maintenance

As described above, the proposed project would not be located within 2 miles of a public or private airport. Operation and maintenance activities would not require additional aerial inspections beyond those conducted under existing conditions. The proposed replacement poles in the Northern Segment would generally be approximately 20 feet taller than the existing poles. Based on a review of the FAA's Notice Criteria Tool, most replacement poles exceed the Notice Criteria specified in FAA Regulations and Title 14 CFR § 77.9. Based on the previous determination for project poles, it is assumed that FAA would reach the same conclusion in subsequent determinations and new poles would not result in air navigation hazards. PG&E identified one facility in the Northern Segment that would be greater than 200 feet above ground, which includes the conductor that would be installed between Poles 28 and 29. PG&E filed a Notice of Proposed Construction or Alteration with FAA for the conductor span. FAA conducted an aeronautical study and determined there would be no hazard to air navigation if PG&E marked the structure with spherical markers ("aviation marker balls") (FAA 2017a); however, FAA subsequently reversed its determination and concluded that no marking or lighting would be necessary for aviation safety (FAA 2017b).The impact from operation of the proposed project on people residing or working near the proposed project would be less than significant.

Required APMs and MMs: None

f) Would the proposed project be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?	**Significance Determination**
	Less than significant

Construction

The closest private helipad is located 0.6 mile southeast of the southern tip of the alignment at the Sutter Santa Rosa Regional Hospital. No private air strips are located in the vicinity of the proposed project; the proposed project would not use any private airports or helipads for refueling or maintenance work. PG&E would coordinate with the FAA and local airports regarding helicopter operations and flight plans during project construction. FAA recommendations would be incorporated into the proposed project. Helicopter flight paths during project construction would generally be limited to the existing utility line easement and landing zones. Helicopter use would comply with all applicable federal, state, and local aviation rules and regulations, and would not create any new safety hazards with private airstrips.

Helicopter use for the proposed project would not impact people residing or working in the area because PG&E would adhere to all aviation rules and regulations, and coordinate helicopter operations with the Sutter Santa Rosa Regional Hospital.

Operation and Maintenance

As analyzed under Impact e) above, the FAA determined that the proposed replacement poles and spans would not exceed obstruction standards, and would not be a hazard to air navigation. The impact from operation of the proposed project on people residing or working in the area would be less than significant.

Required APMs and MMs: None

g) Would the proposed project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	**Significance Determination**
	Less than significant with mitigation

Construction

No emergency response or evacuation plans have been adopted for the roads in the proposed project area. The proposed project would not affect implementation of an adopted emergency response plan or emergency evacuation plan.

Temporary traffic lane closures and lane width reduction may be necessary during proposed project construction to ensure safety of the public and workers. The temporary lane and road closures could disrupt emergency vehicle traffic and access. PG&E proposes to install guard structures and string conductors across Highway 101 and Old Redwood Highway, which would require temporary closures. Closure or partial closures of these facilities for conductor stringing, or installation of guard structures would cause a temporary interruption of traffic flow on the highway, which could affect evacuation or emergency response in the area.
MM Traffic-4 requires PG&E to coordinate with emergency service providers prior to any road closures or lane diversions to avoid or minimize potential impacts on response times.
MM Traffic-4 would reduce potential project impacts on emergency evacuation and response. The impact would be less than significant with mitigation.

Operation and Maintenance

Routine operation and maintenance of the proposed project would not involve road or lane closures. After construction, emergency access would be restored to baseline conditions. No impact on emergency access would occur.

Required APMs and MMs: MM Traffic-4

h) Would the proposed project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	Significance Determination
	Less than significant with mitigation

Construction

The majority of the project alignment is located within a California Department of Forestry and Fire Protection (Cal Fire) moderate fire hazard severity zone, as shown in Figure 3.8-1. Heat or sparks from vehicles or equipment have the potential to ignite dry vegetation and cause wildfires. Construction activities would primarily be confined to areas that have been cleared of vegetation, including access roads and work areas. Vehicles and equipment would access pole work areas via existing paved, dirt, and/or gravel access roads and overland travel routes, which would be cleared of brush to reduce fire potential; however, construction of the proposed project has the potential to spark or ignite a wildfire from vehicles and equipment, construction personnel smoking and improperly disposing of cigarettes, falling conductor or breaking of a transmission line during installation, and parking vehicles on dry vegetation. The impact on people and structures due to the increased risk of wildfire ignition is potentially significant. PG&E has proposed APM HM-3 and APM HM-4 to reduce wildfire risk. These APMs require implementation of fire prevention practices, such as only smoking in designated areas and keeping appropriate fire-fighting equipment on site to quickly extinguish a fire if one were ignited. The impact would remain significant due to the potential for ignition from construction activities that cause sparks, falling conductor or breaking of a transmission line during installation, and parking vehicles on dry vegetation in rural locations, primarily in the Northern Segment. MM Hazards-2 requires PG&E to implement fire prevention procedures including training, and maintaining fire prevention equipment on site. The impact from fire hazards to people and structures from proposed project construction would be less than significant with implementation of APMs and MM Hazards-2.

Operation and Maintenance

The project facilities would be unattended and operated remotely during operation and maintenance. Maintenance and inspection of the reconductored line would be conducted in the same manner as maintenance of the existing line. The proposed project would not create additional conflicts to firefighting efforts. Current protocols for fire prevention during project operation and maintenance would continue to be implemented. The area surrounding poles (approximately 30 feet by 15 feet) would be cleared of shrubs and other obstructions for inspection and maintenance purposes, consistent with current maintenance practices. Vehicles used to access project components for maintenance activities would use existing access roads, which would reduce the potential for ignition of dry vegetation during vehicle trips. Impacts associated with wildfires would be less than significant.

The replacement of the existing conductor and wood poles would further reduce fire risks associated with the age and wear, and potential breakage of that line. The new steel poles would not be flammable, and would provide greater durability and strength compared to the existing wood poles being replacing along the Northern Segment. The new line and poles

would be constructed in accordance with current safety technology, state law, and CPUC GO 95. CPUC GO 95 specifies the design and maintenance of the project for the strength requirements and safety factors (i.e., the ratio of material strength to loads such as weight, temperature, and wind). Poles and lines are also designed to withstand accidental scenarios such as vehicle collisions, high winds, and lightning strikes per CPUC GO 95. Therefore, due to the design requirements, pole falls or other hazards caused by accidental conditions are minimized. Impacts associated with wildfire from operation and maintenance of the components of the proposed project would be less than significant.

Required APMs and MMs: APM HM-3, APM HM-4, and MM Hazards-2

3.8.4 Required Applicant Proposed Measures and Mitigation Measures

APM HM-3: Smoking and Fire Rules
Smoking will not be permitted on site, except in barren areas that measures a minimum of 20 feet in diameter and are cleared to mineral soil. Under no circumstances will smoking be permitted during the fire season (approximately July through October) while employees are operating equipment, or while walking or working in grass and woodlands.
Applicable Locations: All project areas
Performance Standards and Timing: • **Before Construction:** N/A • **During Construction:** Smoking is restricted to appropriate areas and seasons • **After Construction:** N/A

APM HM-4: Carry Emergency Fire Suppression Equipment
PG&E construction crew trucks and large equipment shall have, at a minimum, a standard round-point shovel and a fire extinguisher. If construction activities likely to cause sparks (e.g., welding, grinding, or grading in rocky terrain) are conducted, emergency fire tool boxes shall be readily available to crews. The emergency fire tool boxes shall contain fire-fighting items such as shovels, axes, and water.
Applicable Locations: All project areas
Performance Standards and Timing: • **Before Construction:** N/A • **During Construction:** (1) A shovel and fire extinguisher are available in all worker vehicles and construction equipment, and (2) Emergency fire tool boxes are available at each active work area during higher risk activities (e.g., activities that could cause sparks) • **After Construction:** N/A

MM Hazards-1: Hazardous Materials Procedures and Worker Training (Supersedes APM HM-1, HM-2, and APM BIO-1i)

PG&E shall develop and implement specific hazardous material procedures as an element of the SWPPP (MM Hydrology-1) to ensure hazardous materials are properly handled, stored, and transported, and that any inadvertent leaks or spills are adequately cleaned and reported. At a minimum, the SWPPP shall address the following procedures related to the use of hazardous materials during construction and emergency response:

- Proper disposal of contaminated soils and materials (i.e., cleanup materials).
- Daily inspection of vehicles and equipment for leaks, particularly in parking areas near sensitive resource areas during construction and spill containment procedures.
- Emergency response and reporting procedures to address hazardous material releases.
- Fueling of any vehicles, equipment, and helicopters in staging yards or on streets paved with secondary containment and away from sensitive resource areas (e.g., preserves, designated open space areas, conserved habitat).
- Fuels and lubricating oils for vehicles and heavy equipment will not be stored or transferred within 100 feet of any waterbodies, unless otherwise isolated from waterbodies by secondary containment.
- Emergency spill supplies and equipment shall be available to respond in a timely manner if an incident should occur.
- Response materials such as oil-absorbent material, tarps, and storage drums shall be available at the project site at all times during construction and shall be used as needed to contain and control any minor releases.
- The absorbent material shall be removed promptly and disposed of properly.
- Placement of as needed, minor amounts of fuel, lubricants, and hydraulic fluid for equipment operation in appropriate storage tanks on the bed of fueling vehicles.
- Location of bulk lubricating oil, hydraulic fluids, and other materials used for vehicle and equipment maintenance shall be stored at the main construction yard.
- Use of secondary containment and spill rags when fueling.
- Discourage "topping-off" fuel tanks.
- Spill kits for all fuel trucks and fueling areas.

All workers shall be trained on the specific procedures for hazardous materials and emergency response as an element of the required worker environmental training prior to working on the project site.

Applicable Locations: All project areas

Performance Standards and Timing:

- **Before Construction:** SWPPP containing specific hazardous material procedures is submitted to the CPUC no less than 30 days before construction
- **During Construction:** (1) Appropriate measures are implemented that limit the potential for spills, and (2) Any inadvertent spills are cleaned appropriately
- **After Construction:** N/A

MM Hazards-2: Construction Fire Prevention Plan

PG&E shall prepare a Construction Fire Prevention Plan that addresses procedures for fire prevention at active construction sites. The Construction Fire Prevention Plan shall include requirements for carrying emergency fire suppression equipment, conducting "tailgate meetings" that cover fire safety discussions, restricting smoking, idling vehicles, and restricting construction during red flag warnings. The Construction Fire Prevention Plan shall address the following fire risk reduction measures:

- Training and briefing all personnel working on the project in fire prevention and suppression methods.
- Conducting a fire prevention discussion at each morning's safety meeting.

• Storage of prescribed fire tools and backpack pumps with water within 50 feet of work activities. • Water sources including water storage tanks or water trucks that would be used in case of a fire. • Assigning personnel to conduct a "fire watch" or "fire patrol" to ensure that risk mitigation and fire preparedness measures are implemented, immediate detection of a fire, and to coordinate with emergency response personnel in the event of a fire. The Construction Fire Prevention Plan shall be submitted to the CPUC for review and approval at least 30 days prior to construction within the Northern Segment.
Applicable Locations: Northern Segment
Performance Standards and Timing: • **Before Construction:** Construction Fire Prevention Plan is submitted to the CPUC for review and approval at least 30 days prior to construction • **During Construction:** (1) Workers receive fire prevention training, and (2) Fire prevention tools and water are maintained on site • **After Construction:** N/A

3.8.5 References

Cal Fire (California Department of Forestry and Fire Protection). 2008. "CAL FIRE Final Recommended VHFHSZs in LRA (c49fhszl06_3) GIS dataset."

—. 2012. "Fire Protection Responsibility Areas."

DTSC (Department of Toxic Substances Control). 2013. "List of RWQCB Approved Treated Wood Waste Landfills." July. http://www.dtsc.ca.gov/HazardousWaste/upload/lanfillapr11PDATED1.pdf.

—. 2016. *EnviroStor.* Accessed May 11, 2016. http://www.envirostor.dtsc.ca.gov/public/.

EDR (Environmental Data Resources, Inc.). 2015. "EDR DataMap Corridor Study - PG&E Fulton-Fitch."

ESRI. 2016. "Raster, Vector, and On-line GIS Data Resources."

FAA (Federal Aviation Administration). 2017a. "Determination of No Hazard to Air Navigation." *Aeronautical Study No. 2017-AWP-2446-OE.* April 4.

—. 2017b. "Marking & Lighting Recommendation." *Aeronautical Study No. 2017-AWP-4537-OE.* April 16.

Sonoma County. 2011. "Hazard Mitigation Plan." October 25.

SWRCB (State Water Resources Control Board). 2016. *Geotracker.* Accessed May 11, 2016. http://geotracker.waterboards.ca.gov/.