3.17 MANDATORY FINDINGS OF SIGNIFICANCE

3.17.1 Impact Analysis

Summary of Impacts

Table 3.17-1 presents a summary of the significant of impacts for each element of the Environmental Checklist, Appendix G of the CEQA Guidelines for Mandatory Findings of Significance.

Table 3.17-1 Summary of Proposed Project Impacts for Mandatory Findings of Significance

Would the proposed project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Impact MFOS-1: Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
Impact MFOS-2: Have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☒	☐	☐
Impact MFOS-3: Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Impact Discussion

Impact MFOS-1: Would the proposed project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Significance Determination
	Less than significant with mitigation

Fish and Wildlife Species Habitat

The proposed project would involve reconductoring existing power and transmission lines and replacing 60-kV wood poles with steel poles located approximately 12 to 35 feet away from the existing poles, and within existing PG&E easements. The proposed project would have no effect on habitat for fish because (1) no poles would be in streams or habitat for fish, and (2) potential culvert replacements in streams would occur during the dry season, and would not affect fish or fish habitat because the culverts would replace existing structures.

The project study area contains suitable habitat for common and special-status wildlife species. Construction activities would result in temporary and permanent impacts on habitat for wildlife at pole work areas where vegetation would be removed and cleared. The small loss of isolated habitat around each replacement pole (e.g., approximately 10 feet in diameter encompassing approximately 80 square feet) would not substantially reduce the habitat of a wildlife species. The impact on wildlife habitat would be less than significant.

Fish and Wildlife Populations

The proposed pole replacements would occur in upland areas. Potential~~Proposed~~ culvert replacements would occur within ephemeral or intermittent streams, but not within perennial streams. Work within fish habitat would be performed only when the stream is dry. The proposed project would have no effect on fish populations. Grading, excavation, and equipment access during construction of the proposed project could cause mortality or injury of individual wildlife if wildlife were to occur in work areas at the time of construction. Project construction would occur over a period of ~~18~~12 months. Project construction activities would occur in pole work areas, existing and proposed access routes, LZs, and staging areas. The existing access routes, LZs, and staging areas are currently disturbed or developed and do not contain suitable habitat for wildlife. Construction activities at each pole work area would last for only a few days. The potential for wildlife to occur in a work area at the time of construction is low; therefore, the impact on one or a few individuals of any wildlife species would not cause any wildlife population to drop below self-sustaining levels. The impact on wildlife population levels would be less than significant.

Plant and Animal Communities

Impacts on plant and animal communities are discussed in Section 3.4: Biological Resources. Construction impacts would be isolated to the individual work areas, and would not eliminate an entire plant or animal community due to the small area of disturbance at each pole. The potential impacts on individual plants or animals would not eliminate or threaten to eliminate an entire plant or animal population or community. No impact would occur.

Rare or Endangered Plants and Animal Numbers and Range

Range of Rare and Endangered Species

The proposed project would involve reconductoring of existing power lines and replacement of poles within PG&E's existing easement. The small area of impact at each proposed replacement pole would not restrict the range of any rare or endangered plant or animal species. No impact on the range of any rare or endangered species would occur.

Rare and Endangered Plants

The proposed project has the potential to reduce the number of rare and endangered plant species through direct removal of rare and endangered plants during grading and construction, and through indirect impacts such as invasive weed introduction (refer to the discussion of direct and indirect impacts on special-status plants in Section 3.4: Biological Resources). Direct and indirect impacts on special-status plants could substantially reduce the number of rare and endangered plants in the project study area, which would be a significant impact. MM Biology-1 requires monitoring for sensitive biological resources during project activities, including flagging of special-status plants. MM Biology-2 requires pre-activity surveys for special-status plants and avoidance of special-status plants, where feasible, or salvage and relocation if avoidance is infeasible. MM Biology-7 requires PG&E to restore, revegetate, and monitor areas of temporary ground disturbance. MM Biology-8 requires invasive weed control and monitoring to reduce the introduction and spread of invasive weeds. MM Biology-9 requires surveys for sensitive natural plant communities in project access and work areas and, where possible, avoidance of impacts to these communities. Mitigation would reduce the potential for the proposed project to substantially reduce the number of any rare or endangered plant species. The impact would be less than significant with mitigation.

Rare or Endangered Wildlife

The proposed project has the potential to impact rare or endangered wildlife (refer to the discussion of direct and indirect impacts on special-status animals in Section 3.4: Biological Resources). Construction activities could injure or kill rare or endangered wildlife individuals, potentially resulting in a substantial reduction in the number of rare or endangered wildlife species occurring in the project study area. Construction activities would also result in noise and light impacts, which could affect wildlife breeding behavior or cause nest abandonment, and, therefore, potentially cause a substantial reduction in rare or endangered species numbers. APM BIO-7, APM BIO-8, APM BIO-9, MM Biology-3, MM Biology-4, MM Biology-5, and MM Biology-6 would reduce potentially substantial impacts on the number or range of CTS, American badger, western pond turtle, California red-legged frog, foothill yellow-legged frog, special-status and protected avian species, and special-status and protected bat species,

respectively, to less than significant levels. Potentially substantial impacts on the number or ranges of other rare and endangered wildlife species would remain significant. Worker training, litter management, prohibition of firearms and pets, covering excavations, and biological monitoring, as required by APM BIO-1a, APM BIO-1f, APM BIO-1j, APM BIO 1k, and MM Biology-1, would avoid and/or reduce impacts on all other rare and endangered species' populations. The impact would be less than significant with mitigation.

California History or Prehistory

The CRHR is used to catalog important examples of California history and prehistory. Pole removal and installation, grading of access roads, vegetation removal, and other ground-disturbing activities have the potential to substantially damage or destroy CRHR-eligible resources. Destruction or substantial damage of CRHR-eligible resources could eliminate an important example of California history or prehistory. APM CR-1 specifies monitoring requirements, equipment restrictions, and methods for marking a protective zone around CA-SON-1256, a known CRHR-eligible resource in the project study area. Impacts would remain significant because APM CR-1 does not address the need for cultural resource monitoring, or specify sufficient treatment measures should a previously unknown resource be discovered. Cultural resource training, monitoring, evaluation, avoidance of eligible cultural resources, and data recovery, as necessary, would reduce the impact of construction activities on these resources (MM Cultural-1, MM Cultural-2, MM Cultural-3, and MM Cultural-4). The proposed project would not eliminate important examples of the major periods of California history or prehistory with implementation of mitigation.

Required APMs and MMs: APM BIO-1a, APM BIO-1f, APM BIO-1j, APM BIO-1k, APM BIO-7, APM BIO-8, APM BIO-9, MM Biology-1, MM Biology-2, MM Biology-3, MM Biology-4, MM Biology-5, MM Biology-6, MM Biology-7, MM Biology-8, MM Biology-9, APM CR-1, MM Cultural-1, MM Cultural-2, MM Cultural-3, and MM Cultural-4 (refer to Section 3.4: Biological Resources and Section 3.5: Cultural and Tribal Cultural Resources)

Impact MFOS-2: Would the proposed project have impacts that are individually limited, but cumulatively considerable? "Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.	**Significance Determination**
	Less than significant with mitigation

Introduction

The CEQA Guidelines (Section 15130) require a discussion of the cumulative impacts of a project. Cumulative impact analysis accounts for the combined impacts associated with two or more projects in a given area. The following cumulative analysis evaluates the potential cumulative impacts from the proposed project in combination with other past, present, and probable future projects in the area. Based on the cumulative impacts analysis provided below, the proposed project would not result in a significant cumulative environmental impact.

Approach to Cumulative Impact Analysis

CEQA Guidelines Section 15130(b) presents two approaches for analyzing cumulative impacts, using either:

- A list of past, present, and probable future projects producing related or cumulative impacts, including those projects outside the control of the agency; or
- A summary of projections contained in an adopted local, regional, or statewide plan, or related planning document that describes or evaluates conditions contributing to the cumulative effect.

A hybrid approach is used in this IS/MND, where a list of probable future projects is considered in combination with the baseline conditions, agency projections, and adopted planning documents. The cumulative analysis considers, but does not exclusively rely on, planning documents to establish the cumulative scenario for the analysis.

Area of Analysis

The analysis of potential cumulative impacts is generally limited to projects occurring within an approximately 2-mile-wide corridor centered on the approximately 10-mile-long project alignment (i.e., 1 mile on each side of the project alignment). Additional projects outside of this radius were also considered if they were determined to be relevant to the geographic scope of an environmental resource topic (e.g., air quality, greenhouse gases). The analysis area represents the physical extent of the limits in which indirect impacts of the proposed project may occur. For these reasons, the approximately 1-mile buffer is an appropriate distance to determine the potential for other probable future projects to be cumulatively considerable.

Data Collection

Probable future projects were identified through review of websites, by contacting the surrounding local and state agencies (Caltrans, County of Sonoma, Town of Windsor, City of Healdsburg, Sonoma County Permit and Resource Management Department, Sonoma County Transportation Authority), and by contacting other utilities, including PG&E.

Cumulative Projects List

Table 3.17-2 includes a list of present (i.e., under construction) and probable future projects considered in this cumulative analysis. The table indicates the project name, project type, a description of the project, its location and status. The locations of cumulative projects in relation to the proposed project are shown on Figure 3.17-1 and Figure 3.17-2. Each project in Table 3.17-2 has an assigned number that is keyed to Figure 3.17-1 and Figure 3.17-2.

Table 3.17-2 Cumulative Projects List

No.	Project Name (Project Type)	Project Actions and Components	Proximity to Project at Nearest Point	Status
1	SMART Phase 2 – North (Transportation)	Rebuild 70 miles of passenger rail and bicycle-pedestrian pathway from Larkspur to Cloverdale to connect Marin and Sonoma counties. Phase 2 has multiple components, which include the Larkspur extension in the south and northern extensions that connect Sonoma County Airport to Cloverdale.	Approximately 0.25 mile west of Fulton Substation	Construction schedule for the Windsor and Healdsburg extensions is currently unknown and dependent on funding.
2	Badger Substation 60-kV and 12-kV Bus Reconstruction (Utilities)	Install one steel dead-end structure capable of 60-kV metering. Reconstruct the 12-kV bus to meet current industry standards.	Approximately 0.25 mile northwest of Fitch Mountain Substation	Construction is scheduled through 2018.
3	Badger Park Renovation (Community Service)	Renovate the park, including restrooms, storage, play structures, play field, and shade structures.	Approximately 0.3 mile northwest of Fitch Mountain Substation	Construction is anticipated from 2018 through 2019.
4	Railroad Park Renovation (Community Service)	Renovate Railroad Park, including replacing retaining walls, stairs, and picnic areas.	Approximately 0.5 mile west of Fitch Mountain Substation	Construction is scheduled between 2019 and 2020.
5	Recreation Park Renovations (Community Service)	Extend left outfield fence with netting and install higher fence/netting along the left field foul ball line and picnic area. Replacing existing bluegrass with Bermuda sports turf in the outfield turf area.	Approximately 0.5 mile northwest of Fitch Mountain Substation	Budget is allocated through 2017.
6	The "Big Pave" (Transportation)	Repave US 101 north of Windsor to Geyserville (phase 1 of 2), perform crack-and-seal and asphalt overlay of freeway and ramps, improve drainage, upgrade ADA curb ramps, and replace roadside signs.	Approximately 0.6 mile west of Northern Segment	Construction is scheduled to occur between January 2017 and December 2018.
7	University Sewer Main Replacement (Utilities)	Replace approximately 2,500 feet of aging and failed sewer main (clay pipe) to reduce ongoing annual maintenance and the risk of sanitary sewer overflows.	Approximately 0.75 mile northwest of Fitch Mountain Substation	Construction is scheduled through 2018.

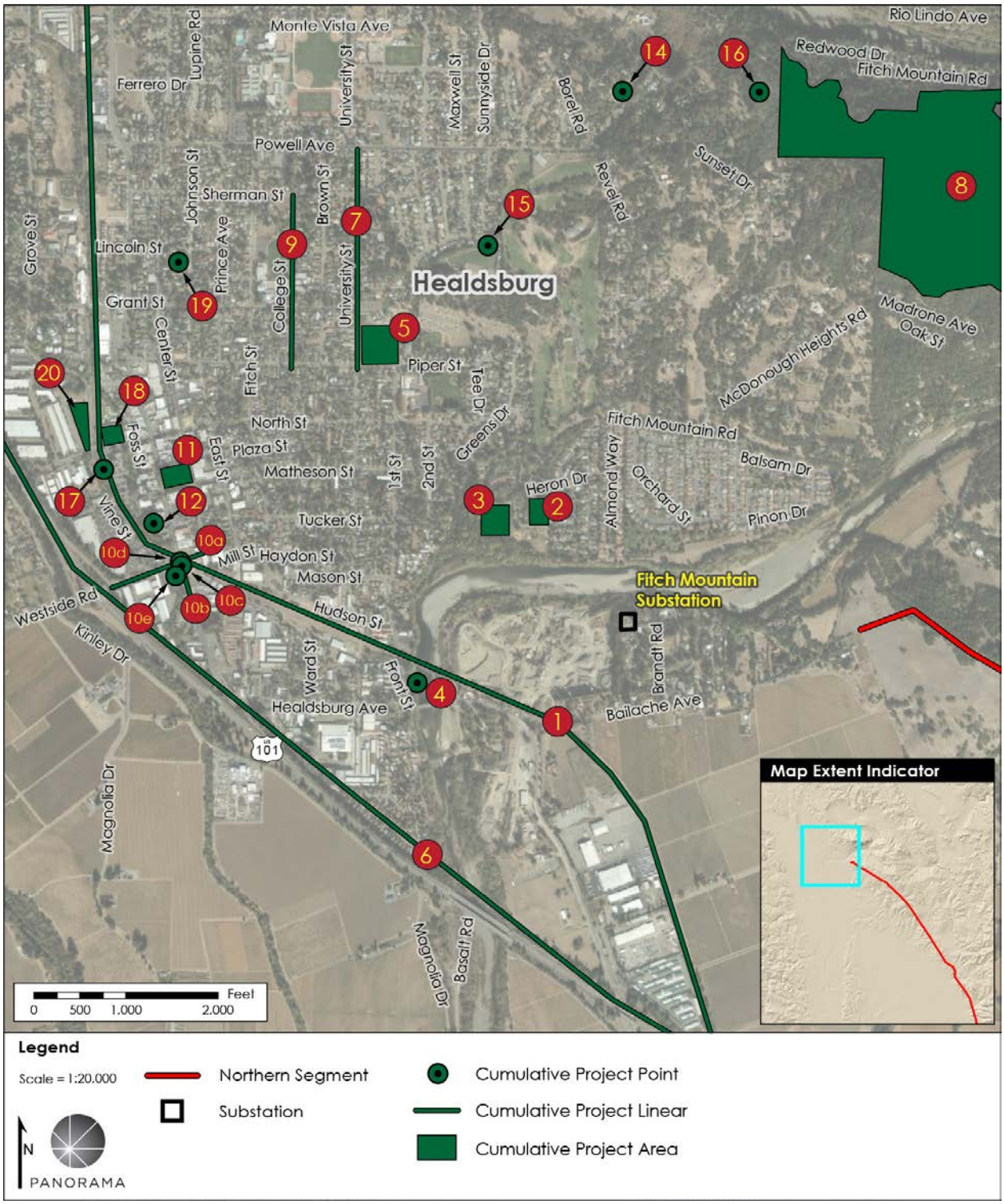
No.	Project Name (Project Type)	Project Actions and Components	Proximity to Project at Nearest Point	Status
8	Fitch Mountain Park and Open Space Preserve (Community Service)	Establish public access to Fitch Mountain, including trail access improvements and natural resource restoration.	Approximately 0.8 mile of the northernmost pole replacement	Initial access improvements to the Villa property are anticipated to be constructed in 2017 or 2018. Future improvements have yet to be determined.
9	College Street Water Main Replacement (Utilities)	Replace approximately 1,800 feet of severely deteriorated 1930-era cast iron water main with an 8-inch plastic pipe; associated aging water services and meters will also be replaced to achieve additional capacity.	Approximately 0.9 mile northwest of Fitch Mountain Substation	Construction is anticipated to occur through 2019.
10	Healdsburg Avenue Improvements (Public)	Refer to projects 10a through 10e	Approximately 0.9 mile from Fitch Mountain Substation	Currently under construction and anticipated to continue into the middle of 2018.
10a	Overhead utility undergrounding (Utilities)	Relocate all overhead utilities into underground substructures along the length of Mill Street from US 101 to Center Street and Healdsburg Avenue from the 5-way intersection to Exchange Avenue.		
10b	Central Healdsburg Streetscape Improvement Project (Public)	Widen sidewalks and plazas with decorative paving; install new water efficient landscape (replace 16 existing trees with 74 new trees), LED lighting, and site furnishings		
10c	Underground wet utilities (Utilities)	Replace aging underground sewer and water utilities, replace fire hydrants and add capacity for recycled water. Implement "low impact development" techniques along the roadway to improve stormwater quality entering Foss Creek, replace storm drain inlets and piping, and install water quality basins.		

No.	Project Name (Project Type)	Project Actions and Components	Proximity to Project at Nearest Point	Status
10d	Five-way Roundabout (Infrastructure)	Convert a 5-way signalized intersection at Mill Street and Vine Street into a roundabout. Install infrastructure for SMART through the intersection, including pedestrian safety gates, upgraded signals for commuter rail, upgraded track and tie, and modern concrete crossing panels.		
10e	Foss Creek Improvement Area (Infrastructure)	Reconstruct the Foss Creek culvert under Mill Street and daylight the southern portion to improve both flow capacity and habitat quality. Demolish vacant gas station.		
11	Plaza Park Renovation (Community Service)	Renovate Healdsburg Plaza Park, including turf replacement, fountain renovations, planters, concrete work, and streets.	Approximately 0.9 mile northwest of Fitch Mountain Substation	Construction is anticipated between 2020 and 2021.
12	h3 Hotel (Development)	Develop a 39-room boutique hotel.	Approximately 1 mile from Fitch Mountain substation	Currently under construction. Anticipated completion in 2018.
13	The Oaks (Development)	Configure two parcels on a 2.9-acre site at 6122 Old Redwood Highway to accommodate a 31-residential rental unit into flats and townhomes on one parcel, and three residential units above a 3,000-square foot commercial space on the second parcel.	Approximately 1.1 miles southwest of Northern Segment	Environmental studies are in progress; construction schedule is unknown.
14	North Fitch Mountain Road Slide Repair (Public Works)	Construct an isolation wall, reconstruct the road surface, and install storm drainage improvements.	Approximately 1.1 miles north of Fitch Mountain substation	Remedial work has been completed but construction is currently on hold and unlikely to start until 2019 or 2020.
15	Pordon Lane/Tayman Park Drainage Improvement (Public Works)	Improve drainage to mitigate flooding in the Pordon Lane area (at the western boundary of Tayman Park), including pipes, inlets, berms, and channel improvements, to capture stormwater upland of the residential properties into the City's drainage system.	Approximately 1.1 miles northwest of Fitch Mountain Substation	Construction of the first phase is anticipated to occur in the summer of 2017. Construction of the second phase may follow in 2018.

No.	Project Name (Project Type)	Project Actions and Components	Proximity to Project at Nearest Point	Status
16	Villa Chanticleer Dog Park Improvements (Community Service)	Improve gate and Americans with Disabilities Act access, shade structure, water, and erosion control.	Approximately 1.1 miles north of Fitch Mountain Substation	Anticipated construction is between 2018 through 2019.
17	West Plaza Parking Expansion (Transportation)	Enlarge the parking lot westward to add approximately 24 stalls and replace existing lighting.	Approximately 1.1 miles from the Fitch Mountain Substation	Currently under design; construction is anticipated to take 2 months in 2018.
18	Cerri Property (Facilities)	Renovate and repurpose a portion of the existing structure (including bathrooms and a kitchen) to create a multi-use site for community gatherings, events, parking, and a permanent Farmer's Market.	Approximately 1.1 miles from Fitch Mountain substation	Currently under planning. Construction will occur in phases, starting with parking lot improvement. Construction schedule and completion date are unknown.
19	Old Hospital (Development)	Demolish an old hospital building at 639 Johnson Street and subdivide the 1.07-acre parcel into six single-family residential lots.	Approximately 1.2 miles northwest of Fitch Mountain Substation	Currently under construction; anticipated completion in spring of 2017.
20	Healdsburg City Hall Addition and Alterations (Facilities)	Involves constructing a second-story addition, selective demolition, associated site improvements, exterior repairs, interior remodeling of the existing City Hall, and constructing approximately 3,500 square feet of new space for the new Community Development Center as an annex.	Approximately 1.2 miles northwest of Fitch Mountain substation	Construction is anticipated to start in January 2017 and be complete by March 2018.
21	Creekwalk (Development)	Construct up to 30 residential units.	Approximately 1.2 miles southwest of Northern Segment	Environmental studies are in progress; construction schedule is unknown.

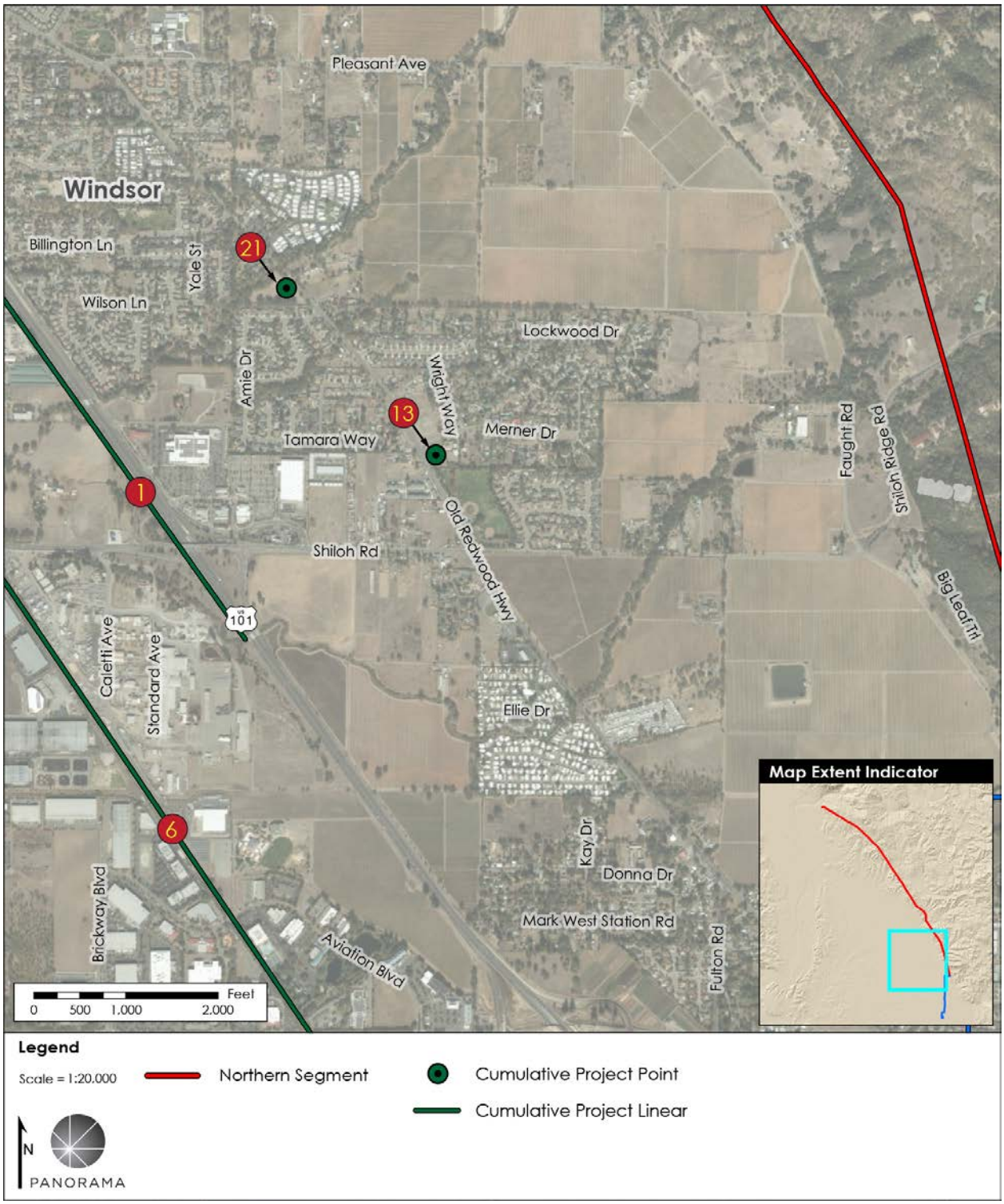
Sources: (Bird 2016, City of Healdsburg n.d., City of Healdsburg 2015a, City of Healdsburg 2015b, City of Healdsburg 2016a, City of Healdsburg 2016c, Healdsburg Avenue Improvements n.d., Idleman 2016, Kirchner 2016, Landeros 2016) (Murray 2016, Salmi 2017, Stevens 2016, Themig 2016, Town of Windsor 2016, Wolski 2016)

Figure 3.17-1 Cumulative Projects (Map 1 of 2)



Sources: (ESRI 2016, PG&E 2016, Sonoma Marin Area Rail Transit 2016) (also refer to Table 3.17-1)

Figure 3.17-2 Cumulative Projects (Map 2 of 2)



Sources: (ESRI 2016, PG&E 2016, Sonoma Marin Area Rail Transit 2016) (also refer to Table 3.17-1)

Cumulative Impacts

Introduction

The cumulative impact analysis for the proposed project is provided for each of the environmental resource topics analyzed in this IS/MND. The proposed project would have no impact on Land Use or Population and Housing. As such, the proposed project would not contribute to cumulative impacts on Land Use or Population and Housing, and these resource topics are not discussed in the following cumulative analysis.

Aesthetics

Geographic Extent

The geographic extent for the analysis of cumulative impacts to aesthetic resources includes both local and regional viewsheds. The local viewshed includes projects, activities, and landscapes visible within the same field of view as the proposed project. Regional cumulative effects occur when viewers perceive that the general visual quality or landscape character of a regional area is diminished by the proliferation of visible similar structures or construction effects, even if the changes are not within the same field of view as existing or known future structures or facilities. The result is a perceived "industrialization" or "urbanization" of the existing landscape character. Cumulative aesthetic impacts would occur within 1 mile or less of the project alignment. Beyond 1 mile, structures become less distinct or not visible if they blend in sufficiently with background forms, colors, and textures. Also, beyond 1 mile it is likely that sightlines will become impaired or blocked by intervening terrain and vegetation.

Impacts Avoided by the Proposed Project

The proposed project would have no impact on scenic vistas, and would not contribute to a cumulative impact on scenic vistas.

Potential Cumulative Impacts

The Southern Segment of the proposed project would include conductor replacement and replacement of one pole. These improvements would be located within the same viewshed as the SMART Project (#1). The SMART Project includes passenger rail and bike improvements that could have some visual impacts, primarily from the appearance of new facilities that would be constructed. Cumulative impacts would not occur, however, because visual impacts from the SMART Project would not compound with impacts from the proposed project. The visual impacts from the SMART Project would generally be most visible in the immediate foreground of the proposed project and the SMART project facilities would be predominantly at ground level. The work for the proposed project would be minimal and visual changes would be indiscernible compared with existing conditions once construction is complete. Viewers, generally, would not notice significant changes once both projects are complete. Cumulative impacts along the Southern Segment would not occur.

Badger Substation (#2), Badger Park (#3), and Railroad Park (#4) are located within 0.5 mile of the Fitch Mountain Substation and within 1 mile of the Northern Segment. Each project would have some minor visual impacts during construction, including the proposed project. These impacts would likely be minimal, and would include the appearance of construction equipment

and workers as work is underway. The projects would likely not be constructed at the same time. After completion of the projects, visual quality in the area would not change as the substations and parks are existing facilities. The proposed project's visual impacts would similarly be minimal due to the linear way that the project would be constructed, which would cause localized and short-term visual impacts in any one area. Cumulative visual impacts would be less than significant.

Agriculture and Forestry Resources

Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with agriculture includes all of Sonoma County. This geographic extent accounts for regional cumulative impacts to agriculture, which is appropriate because agricultural production is a regional resource.

Impacts Avoided by the Proposed Project

The proposed project would not conflict with zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. The proposed project would not contribute to cumulative impacts on these resources.

Potential Cumulative Impacts

None of the projects identified in Table 3.17-2 would result in a substantial loss of or impact on agricultural land. Sonoma County, in general, has not faced the degree of agricultural land loss as is being experienced in many other areas of the state. Net loss of Prime, Unique, Grazing, and Farmland of Local Importance to urban and built-up land totaled only 45 acres from 2010 to 2012 per the CDC's California Farmland Conversion Report 2015 (CDC 2015). The County had over 1,000,000 acres of the various farmland types in 2010. The conversation rate is, therefore, 0.005 percent. The project would result in minor and temporary impacts on farmland, but would not permanently convert any land. No cumulative impacts would occur.

None of the projects identified in Table 3.17-2 would result in the substantial conversion of forest or timberland to non-forest use. The County has approximately 232,000 acres of timberland, of which 69,000 acres are designated as Timber Production Zones per California's Timberland Productivity Act (Sonoma County 2008). The proposed project would not result in the conversion of forest land to non-forest use. No cumulative impacts would occur.

Air Quality

Geographic Extent

Air quality is a regional resource and is neither defined nor limited by jurisdictional boundaries, political boundaries, or project boundaries. The cumulative study area for air quality primarily encompasses activities within the same air basins as the proposed project, specifically the SFBAAB and NCAB.

Potential Cumulative Impacts

Regional Air Quality. Regional air quality is affected by all activities that occur within an air basin. The SFBAAB is in nonattainment for $PM_{2.5}$, PM_{10}, and ozone. Past and present projects in

the SFBAAB have resulted in the nonattainment status. The cumulative impact from past, present, and probable future projects on existing air quality violations in the SFBAAB and criteria pollutants for which the SFBAAB is in nonattainment, would be significant.

Cumulative impacts on regional air quality are addressed by the BAAQMD thresholds of significance for construction and operational criteria pollutant emissions in the SFBAAB because BAAQMD considered all past, present, and probable future projects when they set the thresholds of significance. Qualitative thresholds are used for emissions in the NCAB. The construction thresholds represent the levels at which a project's individual combustion emissions of criteria air pollutants and precursors would result in a cumulatively considerable contribution to the existing nonattainment designations. Neither BAAQMD nor NSCAPCD sets numerical thresholds for fugitive dust. If a project's emissions exceed the numerical thresholds in the SFBAAB or qualitative thresholds in the NCAB, or if the project generates uncontrolled fugitive dust, the project would considerably contribute to the cumulatively significant air quality impact in the applicable air basin.

Emissions generated from combustion during construction of the proposed project would not exceed the BAAQMD significance thresholds for criteria air pollutants or violate the NSCAPCD qualitative thresholds (refer to Section 3.3: Air Quality, Impact b); however, uncontrolled fugitive dust emissions could result in a significant impact. The proposed project's contribution to a significant cumulative impact to an existing air quality violation and nonattainment of particulate matter could be considerable. APM AIR-1 and APM AIR-2 require PG&E to implement measures to reduce fugitive dust and diesel emissions. With implementation of APM AIR-1 and APM AIR-2, the proposed project would not generate excessive emissions of fugitive dust and would comply with BAAQMD and NSCAPCD fugitive dust restrictions. The proposed project would not contribute considerably to a significant cumulative air quality impact.

Local Air Quality. Carbon monoxide hotspots, fugitive dust emissions, or diesel emissions have the potential to result in localized impacts. Vehicle trip increases during construction and operation of cumulative projects could elevate CO emissions at intersections. BAAQMD screening guidance indicates that a project would not exceed the CO significance threshold if project traffic projections indicate traffic levels would not increase at any affected intersection to more than 44,000 vehicles per hour. The cumulative projects would not increase traffic at any affected intersection above the BAAQMD threshold because the cumulative projects and proposed project would result in minimal traffic increases at any one affected intersection. None of the cumulative projects include large-scale development associated with substantial increases in traffic. Localized CO emissions at intersections would not increase substantially from cumulative projects. The cumulative impact from localized CO emissions would be less than significant. Construction vehicles and equipment used during construction of the cumulative projects would generate localized diesel and fugitive dust emissions near sensitive receptors. SMART Project (#1), Badger Substation (#2), and Badger Park (#3) could affect the same sensitive receptors as the proposed project (sensitive receptors within 1,000 feet of cumulative project and proposed project construction areas). Construction of the cumulative projects has

the potential to subject sensitive receptors to elevated TAC emissions for a prolonged period. Fitch Mountain Substation is the only location with proposed activities that could generate TAC emissions that would combine with the cumulative projects. Proposed construction at Fitch Mountain Substation may generate some TAC emissions; however, the consecutive duration of exposure from the nearest cumulative projects and the proposed project would be limited to less than 2 months and intensive activities (e.g., access road installation) would be limited and spread out over a few weeks. TAC emissions from these types of construction projects (e.g., park renovations, passenger rail and bike facility rebuilds) are limited. The cumulative impact on sensitive receptors from air toxics would be less than significant.

Biological Resources

Geographic Extent

The geographic extent for the biological resources cumulative analysis includes the entire extent of all vegetation and wildlife communities and special-status species habitats and ranges that could be directly and indirectly affected by construction, operation, and maintenance of the proposed project, specifically all similar habitats within 1 mile of the project alignment. This geographic extent is appropriate because it accounts for the cumulative degradation or loss of a particular vegetation community, or special-status species population from cumulative projects that have impacted or would impact vegetation communities of concern or special-status species, and which could result in cumulative habitat degradation or fragmentation.

Impacts Avoided by the Proposed Project

The proposed project would not impact special-status invertebrates or special-status fish or the movement of migratory fish or wildlife species, or conflict with any local policies or ordinances protecting biological resources or with any habitat conservation plan or natural community conservation plan. The proposed project would not contribute to cumulative impacts on these resources.

Potential Cumulative Impacts

Most of the cumulative projects listed in Table 3.17-2 are located in developed areas that do not provide suitable habitat for and would not impact special-status plants, amphibians, reptiles, or mammals. The SMART Project (#1), and the Fitch Mountain Park and Open Space Preserve (#8), are the only cumulative projects located within 1 mile of the proposed project that could impact natural habitats that may support special-status species. The cumulative impacts of the SMART Project, the Fitch Mountain Park and Open Space Preserve, and the proposed project are described below.

Special-Status Plants. The SMART Project, and Fitch Mountain Park and Open Space Preserve, could impact the same special-status plant species as the proposed project. The SMART Project is required to implement mitigation measures to reduce impacts on special-status plants including: surveying for federally-endangered plant species; installing fencing to avoid impacts to special-status plants; collecting seeds and transplanting special-status plants that cannot be avoided; monitoring impacted plants for 5 years; consulting with CDFW and USFWS; and providing compensatory mitigation, as determined through consultation with CDFW and

USFWS (SMART 2006). Implementation of mitigation would ensure the SMART Project would not result in a permanent loss of special-status plants.

The Fitch Mountain Park and Open Space Preserve project's goals include protecting the mountain's biodiversity, soil, aquatic resources, and ecological functions, as well as providing public recreational and educational opportunities compatible with the protection of natural resources (Prunuske Chatham, Inc. 2017). The project is currently undergoing CEQA review. Impacts to special-status plant species are not known at this time, but it is assumed that impacts are possible during development of the public recreational opportunities. The proposed project could also impact special-status plant species during construction activities. If a special-status plant species were to be harmed or killed through the activities of both projects, such that the overall population in the area could be affected, a significant cumulative impact could occur. The proposed project includes MM Biology-2, which requires pre-construction surveys for special-status plants, and consultation with USFWS and CDFW in the event plants cannot be avoided. Mitigation includes requiring a qualified biologist to identify special-status plant populations and individual plants of a species in order to salvage and relocate, when appropriate. The proposed project would not contribute considerably to a significant cumulative impact on special-status plants with mitigation.

California Tiger Salamander. The SMART Project, the Fitch Mountain Park and Open Space Preserve project, and the proposed project are located within the potential range for CTS (USFWS 2003). The SMART Project is required to implement mitigation to reduce impacts on CTS, including protection measures such as establishment of exclusion zones, avoidance of work during the breeding season, and compensation if loss cannot be avoided (SMART 2006). Implementation of mitigation for the SMART Project would ensure that no CTS individuals or habitat would be permanently affected by the SMART Project. The Fitch Mountain Open Space and Park Preserve project's goals, as previously stated, are to protect natural resources. Public access could have impacts on populations of CTS, if they were to occur in the park. The proposed project could also have impacts on CTS through construction in potential habitat, which could result in a potentially significant cumulative impact on CTS populations.

The proposed project is required to comply with the SRPCS, which establishes mitigation ratios for impacts on suitable habitat, and requires implementation of minimization measures, as deemed suitable by USFWS. CTS and CTS habitat are protected through compliance with the SRPCS. The project's contribution to a potentially significant cumulative impact on CTS habitat would be less than significant.

California Red-legged Frog and Foothill Yellow-legged Frog. The SMART Project, Fitch Mountain Park and Open Space Preserve, and the proposed project have the potential to affect CRLF and FYLF because construction associated with each of these projects could occur near and within suitable habitat for these species. No CRLF were detected during protocol-level surveys conducted for the SMART Project and are not anticipated to occur within the SMART Project corridor. FYLF have a low potential to occur within the SMART Project corridor (SMART 2006).

Public access associated with the Fitch Mountain Open Space and Park Preserve project could have impacts on CRLF or FYLF, if and where they were to occur in the park. The proposed project could also have impacts on these special-status frogs through construction in potential habitat, which could result in a potentially significant cumulative impact on CRLF and/or FYLF populations.

Construction of the proposed project would temporarily impact suitable habitat for CRLF, and could potentially affect individual CRLF and FYLF through injury or mortality. Construction of the proposed project would not impact suitable FYLF habitat. The proposed project's contribution to a significant cumulative impact on CRLF and FYLF could be considerable. The mitigation measures for the proposed project includes measures to reduce impacts on CRLF and FYLF (refer to Section 3.4: Biological Resources). MM Biology-3 and MM Biology-4 include surveying requirements and measures to implement if CRLF and FYLF are found during pre-construction surveys, and the measures would limit vehicle speeds on access roads to minimize potential for causing injury or mortality to CRLF and FYLF. MM Biology-7 requires PG&E to restore temporarily impacted habitat. Restoration would be required in areas of potentially suitable habitat affected by construction of the proposed project. Implementation of mitigation would ensure that injury or mortality of CRLF and FYLF would be avoided, and any disturbed habitat is restored. The proposed project would not contribute considerably to a significant cumulative impact on CRLF or FYLF with mitigation.

Western Pond Turtle. The SMART Project and the proposed project could both impact western pond turtle. Suitable habitat for western pond turtle is not present in the Fitch Mountain Park and Open Space Preserve project area (Prunuske Chatham, Inc. 2017). The SMART Project is required to implement mitigation to reduce impacts on western pond turtle, including pre-construction surveys, avoidance of habitat impacts, exclusion fencing around habitat, and potential relocation of western pond turtle (SMART 2006). Implementation of mitigation for the SMART Project would ensure that no western pond turtle individuals or habitat would be permanently affected by the SMART Project. The proposed project and the SMART Project would not have a significant cumulative impact on western pond turtle.

Special-Status Birds, Nesting Birds, and Special-Status Bats. Any cumulative project that would affect a tree, including removing limbs or removing the entire tree, could potentially affect special-status birds, nesting birds, or special-status bats. Although several of the cumulative projects are located within urban or suburban environments, there are trees located within those urban or suburban areas. It is assumed that all the cumulative projects listed in Table 3.17-2 could potentially impact trees or generate construction noise near trees, potentially impacting special-status birds, nesting birds, or special-status bats. The increase in noise and loss of trees from the cumulative projects would result in a potentially significant cumulative impact on populations of special-status birds, nesting birds, and special-status bats.

Construction of the proposed project would temporarily impact suitable habitat for special-status birds, nesting birds, and special-status bats, including trees for nesting and roosting, and could potentially affect individuals through injury or mortality. The proposed project's

contribution to a significant cumulative impact on special-status birds, nesting birds, and special-status bats could be considerable. The mitigation measures for the proposed project include measures to reduce impacts on special-status birds and bats (refer to Section 3.4: Biology~~y~~ical Resources). MM Biology-5 and MM Biology-6 require PG&E to conduct pre-construction surveys for special-status birds, nesting birds, and special-status bats, and to implement exclusion buffers if any special-status birds, nesting birds, or special-status bats are found during the pre-construction surveys. Implementation of MMs Biology-5 and Biology-6 would ensure that injury or mortality of special-status birds, nesting birds, and special-status bats would be avoided. MM Biology-7 requires PG&E to restore temporarily impacted habitat. This measure would include requirements for planting of trees to restore the affected areas. APM BIO-10 requires PG&E to replace any protected trees that were removed during construction.
MM Biology-7 and APM BIO-10 would ensure that suitable habitat for special-status birds, nesting birds, and special-status bats, including trees, would not be permanently affected by construction of the proposed project. Impacts to nesting birds and bird populations from the proposed project would not occur, or would be very minimal. The proposed project would not contribute considerably to a significant cumulative impact on special-status birds, nesting birds, or special-status bats, or potentially suitable habitat, with mitigation.

Burrowing Owl. The majority of the cumulative projects are in areas outside of habitat for burrowing owl. Burrowing owl have a low potential to occur within the SMART Project corridor (SMART 2006), and the Fitch Mountain Park and Open Space Preserve. Burrowing owl are not likely to occur in the vicinity of any of these projects; therefore, the likelihood of impacts to burrowing owl from any of the projects is low. The potential cumulative impact on burrowing owl would be less than significant due to the low likelihood of impact on burrowing owl from any cumulative project.

Sensitive Habitats and Wetlands. The proposed project, the SMART project, and the Fitch Mountain Park and Open Space Preserve would impact similar sensitive habitats. The SMART Project could permanently impact (SMART 2006):

- 30.1 acres of wetlands
- 2.9 acres of water
- 4.8 acres of riparian areas
- 15.0 acres of oak woodlands

Mitigation measures that would be implemented to mitigate temporary and permanent impacts on sensitive habitat and wetlands from the SMART Project include (SMART 2006):

- Avoiding sensitive areas during access, staging, storage, and parking
- Implementing a worker education program for all construction personnel
- Avoiding instream construction by limiting construction to the dry or low-flow season
- Monitoring for work in streams in wetland areas
- Returning affected streams and wetlands to their pre-construction conditions

- Mitigating for permanent impacts to wetlands at a 1:1 ratio, or 3:1 ratio for high quality habitat by preparing and implementing a habitat restoration plan that enhances wetlands and riparian areas in undeveloped portions of the SMART ROW
- Providing off-site compensation for riparian and wetland impacts, if habitat restoration and enhancement within the ROW is insufficient to compensate for impacts
- Mitigating for impacts to oak woodlands by preparing and implementing an oak woodland restoration plan that requires mitigation at a 1:1 ratio for creation and preservation of new oak woodland, and a 3:1 ratio for preservation of existing habitat

Mitigation for the SMART Project would ensure that no permanent loss of sensitive habitat or wetlands would occur from implementation of the SMART Project. The Fitch Mountain Park and Open Space Preserve project could impact wetlands, waters, riparian areas, and oak woodland. The amount of impact to each habitat is not known, as the project is currently undergoing CEQA review. Significant habitat impacts are not anticipated, however, because the project's goals are to preserve and protect natural habitats, and the project includes only limited creation of trails and recreational opportunities. Were the Fitch Mountain Park and Open Space Preserve to significantly impact a special habitat, as well as the proposed project, a significant cumulative impact to these habitats in the area could occur. The proposed project could impact sensitive habitats, specifically riparian woodland and Oregon oak woodland, when establishing construction access and from the installation of new poles. MM Biology-7 would be implemented to ensure temporary impacts from construction would be restored following project activities. MM Biology-9 would be implemented to avoid impacts on sensitive vegetation communities to the greatest extent feasible, and to mitigate for unavoidable impacts on sensitive vegetation communities at a 1:1 ratio. The proposed project would not contribute considerably to a significant cumulative impact on riparian woodland and Oregon oak woodland with mitigation.

Cultural Resources

Geographic Extent

The geographic extent for the cultural resources cumulative analysis includes the project region. This geographic scope is appropriate because cultural resources are usually associated with both, a particular tribe or historic settlement, and a particular time period.

The proposed project is not located in a historic or archaeological district.

Potential Cumulative Impacts

The loss of several resources from a particular tribe or representing one particular time period could result in significant impacts to the information that those resources possess. If any of the cumulative projects could each impact resources with similar information about a particular tribe or timeframe, a cumulatively significant impact could occur.

The proposed project has some potential to impact known and previously undiscovered cultural resources. MM Cultural-1, MM Cultural-2, MM Cultural-3, and MM Cultural-4 require procedures to conduct cultural resource surveys prior to construction in areas not previously surveyed, train workers, monitor qualifying ground disturbance, and avoid eligible cultural resources, as well as procedures to follow upon discovery of human remains and perform data recovery, as necessary. With this mitigation, the one known resource would not be affected, and its historical value and information would remain available. Any previously undiscovered resources would either be avoided or their information potential would be ascertained, minimizing the project's contribution to any otherwise significant cumulative impacts.

Geology and Soils

Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with geology, soils, and mineral resources includes projects within 0.5 mile of the proposed project because nearby projects could contribute to slope instability, or geologic hazards.

Impacts Avoided by the Proposed Project

The proposed project would not be located on expansive soils, require use of septic tanks or alternative waste water disposal systems, result in the loss of a known mineral resource, or result in the loss of availability of a locally-important mineral resource recovery site. The proposed project would not contribute to cumulative impacts on these resources.

Potential Cumulative Impacts

Cumulative projects located within 0.5 mile of the proposed project include the SMART Project (#1), Badger Substation (#2), and Badger Park Renovation (#3).

The cumulative projects involve rehabilitation or additions to existing facilities. These projects are not transected by faults, but active faults are located in the region. The risk of seismic hazards to the public would be localized and would not combine cumulatively. The risks are existing risks, and none of the cumulative projects substantially increase those risks over baseline conditions.

None of the construction activities for any of the cumulative projects considered would involve extensive recontouring or excavation. All of the considered cumulative projects would occur in flat, previously graded and disturbed areas. None of the projects would result in substantial soil erosion, or loss that could be cumulatively significant. Due to the flat terrain, destabilization of soils or geologic units is unlikely. The cumulative impacts would be less than significant.

Greenhouse Gas Emissions

Geographic Extent

GHGs are global pollutants and have long atmospheric lifetimes of one year to several thousand years, which permits dispersal of GHGs around the globe. In contrast to air quality, which generally is a regional or local concern, human-caused emissions of GHGs have been linked to climate change on a global scale. The geographic extent for the GHG emissions cumulative analysis is therefore considered global.

Potential Cumulative Impacts

GHG emissions and climate change are inherently cumulative impacts. Past, present, and probable future projects worldwide contribute or would contribute to the cumulative conditions for GHG emissions. The cumulative impact of GHG emissions and climate change is significant.

Cumulative impacts from GHG emissions are addressed by the BAAQMD thresholds of significance for construction emissions of GHGs. The BAAQMD threshold represents the levels at which a project's individual emissions of criteria air pollutants and precursors would result in a cumulatively considerable contribution to GHGs. BAAQMD considered the cumulative nature of greenhouse gases when setting thresholds for GHG. The BAAQMD GHG emissions threshold is 1,100 MT CO_2e per year.

Use of vehicles and equipment during construction of the proposed project would generate GHG emissions. The gas insulated circuit breakers at Fitch Mountain Substation could generate GHGs from circuit breaker leaks. The proposed project would generate approximately 198 MT CO_2e per year. GHG emissions generated by construction and operation of the proposed project would not exceed the BAAQMD GHG emissions threshold. The proposed project's contribution to GHG emissions would be less than cumulatively considerable.

Hazards and Hazardous Materials

Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with hazards and hazardous materials is the area within approximately 0.25 mile of the project alignment. This geographic extent is appropriate given the small volume of hazardous materials that would be used for construction of the proposed project and the potential for that material to be transported offsite during upset or accident conditions.

Potential Cumulative Impacts

The SMART Project (#1) and Badger Substation (#2) are the only cumulative projects listed within 0.25 mile of the proposed project.

Routine Transport, Use, and Disposal of Hazardous Materials and Accidental Hazardous Materials Releases. Construction and operation of the proposed project and cumulative projects would use equipment and vehicles that could leak hazardous materials including gasoline and diesel fuel, engine oil, coolant, lubricants, and grease. Hazardous materials, particularly fuel, may be transported to and from project sites, which would increase the risk of accident and release. The hazard to the public from fuel leaks from the cumulative projects would be highly localized due to the small amount of hazardous materials that typical construction activities would use, and would not overlap or compound. The cumulative impact from accidental releases of hazardous materials would be less than significant.

Hazardous Materials Sites. A review of hazardous material investigation and cleanup site databases provided information regarding the hazardous material sites located in the project study area (Table 3.8-1). The cumulative projects would not disturb a hazardous materials site

within 0.25 mile of the proposed project. No cumulative impact from accidental releases of hazardous materials from a known hazardous site would occur.

Air Traffic Hazard. Construction of the cumulative projects would not increase air traffic in the region. Although the proposed project would temporarily increase air traffic during helicopter operations, no conflict with cumulative projects would occur. None of the other cumulative projects involve air traffic, or the construction of tall structures. No cumulative impact would occur.

Wildland Fire. The cumulative projects are located in developed areas or are separated from the proposed project by the Russian River. Developed areas do not have a high risk of wildfire. The cumulative projects in high fire risk areas are not located in the same fireshed as the proposed project. No cumulative impact would occur.

Hydrology and Water Quality

Geographic Extent

The geographic extent for this cumulative analysis is defined as the watersheds where the proposed project is located, which includes the Guerneville and Mark West Creek Watersheds. These watersheds represent both the hydrologic and administrative units for water quality control and protection of beneficial uses for water resources in the project area.

Impacts Avoided by the Proposed Project

The proposed project would not construct houses or structures within a 100-year flood hazard area. The proposed project would not contribute to cumulative impacts from flooding on housing or structures.

Potential Cumulative Impacts

All projects listed in Table 3.17-2 contribute or would contribute to the cumulative conditions for hydrology and water quality within the cumulative analysis study area.

Water Quality Standards, Waste Discharge Requirements, and Erosion. Past and present projects have resulted in degradation of water quality in nearby waterbodies. Mark West Creek, Windsor Creek, and the Russian River are on the 303(d) list of impaired waterbodies due to siltation/sedimentation and temperature. The Russian River is also impaired by pathogen indicator bacteria. The proposed project would not contribute to cumulative impacts on water quality from temperature or pathogen indicator bacteria; however, the proposed project would involve ground-disturbing activities that could increase erosion and siltation. Ground-disturbing activities required to construct cumulative projects could result in soil erosion and sediment deposition into local streams. Construction and operation of the proposed project and cumulative projects would require the use of hazardous materials such as diesel fuel and gasoline. Spilled materials and sedimentation from earth-moving activities could potentially be transported to waterways and adversely impact water quality in the watersheds. The impact on currently impaired waterbodies from ongoing and future erosion and siltation would be cumulatively significant.

The proposed project could contribute considerably to an existing significant cumulative impact to waterbodies with existing water quality violations. MM Hydrology-1 defines performance standards for the SWPPP and requires PG&E to obtain CPUC approval for the SWPPP. MM Hydrology-2 requires monitoring and maintenance of BMPs until all ground-disturbing activities have ended and disturbed areas are sufficiently stabilized. Adequately defining, implementing, and monitoring erosion and sediment control BMPs would reduce water quality impacts to a minimal level, and would not likely impact impaired waters downstream from the proposed project. The proposed project would not contribute considerably to a significant cumulative impact on existing impaired waterbodies with mitigation.

Groundwater. Impervious surfaces would not increase substantially from the proposed project and cumulative projects, because the cumulative projects would be constructed within developed areas and the proposed project would have a negligible increase in impervious area (refer to Section 3.9 for further details). The cumulative impact on groundwater recharge would be less than significant.

Construction of the cumulative projects would require temporary use of water for dust control and/or compaction. Operation of several cumulative projects (h3 Hotel [#12], The Oaks [#13], Cerri Property [#18], Old Hospital [#19], Healdsburg City Hall Addition and Alterations [#20], and Creekwalk [#21]) would increase the long-term demand for water. Regional water supplies include groundwater resources. The potential increase in groundwater consumption could result in a significant cumulative impact on groundwater resources.

Construction of the proposed project would require water for dust control and compaction. Water required for construction activities (20,000 gallons) would be less than the average annual water use of a single household in Sonoma County. The proposed project would not require long-term water use, and would not contribute to long-term impacts on groundwater resources. Groundwater dewatering may be required during excavation for replacement poles if shallow groundwater is encountered in the excavation. Dewatering would be short-term (a few days) and impacts on groundwater resources would be highly localized (extending only a few feet from the pole). The proposed project would not contribute considerably to a significant cumulative impact on groundwater supplies.

Drainage Pattern Alterations. None of the cumulative projects would involve grading in the same drainages as the proposed project. The proposed project would not contribute to cumulative impacts on drainage patterns.

Increased or Polluted Runoff. Impervious surfaces would not increase substantially from the proposed project and cumulative projects, because the cumulative projects would be constructed within developed areas, and the proposed project would have a negligible increase in impervious area (refer to Section 3.9 for further details). The cumulative increase in runoff would be less than significant.

Use of vehicles and equipment during construction or operation of the cumulative projects could release hazardous materials due to leaks or spills; however, the quantity of pollutants

would be minimal and would not result in a substantial source of polluted runoff. The potential cumulative increase in polluted runoff would be less than significant.

Risk of Loss, Injury or Death from Flooding or Mudflow. The proposed project would include the replacement of substation equipment at Fitch Mountain Substation, which is located within a FEMA 500-year flood zone, and the replacement of poles within areas that may be subject to mudflow. Cumulative projects within the FEMA 500-year flood zone (SMART Project [#1], Badger Substation [#2], Badger Park Renovation [#3], Railroad Park Renovation [#4], and the "Big Pave" [#6]) would also involve the replacement or rehabilitation of existing facilities. The cumulative impact on the risk of loss, injury, or death would be less than significant because the components of the cumulative projects and the proposed project would be in areas with the same potential for flooding and mudflow as existing facilities. Impacts from each project would not cumulatively combine to increase impacts from flooding or mud flow, given the size of the projects and their locations. Cumulative impacts would be less than significant.

Noise

Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with noise is limited to areas within 0.5 mile of the proposed project components. This geographic extent is appropriate because noise levels attenuate rapidly with distance, and the noise generated by activities greater than 0.5 mile from the proposed project would not have the potential to combine with the noise generated by proposed project construction.

Impacts Avoided by the Proposed Project

The proposed project would not generate noise that would violate local noise ordinances or standards, or be located within an airport land use plan or within 2 miles of a private airstrip. The proposed project would not contribute to cumulative impacts from conflict with noise standards or proximity to an airport.

Potential Cumulative Impacts

The SMART Project (#1), Badger Substation (#2), and Badger Park Renovation (#3) are located within 0.5 mile of the proposed project and could potentially produce noise at the same time as the proposed project construction due to concurrent construction.

Groundborne Vibration. Construction of the cumulative projects would require the use of heavy equipment that would generate groundborne vibrations. The vibrations would be short-term. Additionally, groundborne vibrations are localized and attenuate very rapidly with distance (a few feet). The closest cumulative project is located 0.25 mile from the proposed project at the nearest point. No cumulative impact from groundborne vibration would occur.

Ambient Noise. Construction activities and equipment use associated with construction of the cumulative projects have the potential to generate substantial noise. The noise from construction of the cumulative projects could temporarily increase ambient noise levels. Noise from typical construction activities (i.e., 85 dBA at 50 feet) at Badger Substation (#2), Badger Park Renovation (#3), and the proposed project would not combine to exceed thresholds that

would result in a significant impact, because noise would attenuate over the distances between the project sites and would not impact the same noise-sensitive receptors. The SMART Project could potentially require atypical construction activities such as pile drivers and rock drills which generate more noise (up to 105 dBA at 50 feet) (SMART 2006). Even noise at these levels, however, would not combine to cause a cumulative impact because of the distances between the project sites. The projects would not result in significant impacts at the same noise-sensitive receptors. The cumulative impact on noise-sensitive receptors from temporary or periodic noise increases would be less than significant.

Paleontological Resources

Geographic Extent

The geographic extent for cumulative paleontological impacts includes the extent of geologic units with high paleontological sensitivity: Sonoma Volcanics, Glen Ellen Formation, older alluvial fan deposits, and the Great Valley Sequence. This geographic extent is appropriate because these contiguous geologic formations could contain similar paleontological resources, which would contain the same research potential as resources found within the project study area.

Impacts Avoided by the Proposed Project

The proposed project would avoid impacts on unique geologic features because none exist in the project area. The proposed project would, therefore, not contribute to a cumulative impact to unique geologic formations.

Potential Cumulative Impacts

The cumulative projects listed in Table 3.17-2 are all located in areas with low paleontological sensitivity (refer to Section 3.12: Paleontological Resources, Figure 3.12-1). There is a very low likelihood that paleontological resources would be encountered during construction of the cumulative projects due to the low sensitivity of the geologic units in the area. The cumulative impact on paleontological resources would be less than significant.

Recreation

Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with recreation includes areas within 1 mile of the project alignment. A geographic distance of 1 mile is appropriate because neighbors are expected to use recreational facilities in proximity to their community. A 1-mile area surrounding the project alignment includes the parks that are most likely to be used by the same community that uses the parks affected by the proposed project.

Impacts Avoided by the Proposed Project

The proposed project would not require the construction or expansion of recreational facilities or contribute to population growth that could cause the deterioration of recreational facilities. The proposed project would not contribute to a cumulative impact from the construction or expansion of recreational facilities or from population growth.

Potential Cumulative Impacts

Several of the cumulative projects would involve construction in parks within the vicinity of the proposed project (Badger Park Renovation [#3], Railroad Park Renovation [#4], Recreation Park Renovations [#5], Fitch Mountain Park and Open Space Preserve [#8], Plaza Park Renovation [#11], and Villa Chanticleer Dog Park Improvements [#16]). It is possible that construction within the parks would overlap with each other in timing as well as with the proposed project. Construction of cumulative projects within parks could temporarily restrict use of those facilities, potentially diverting recreationalists to other facilities in the vicinity that support similar activities. Diverting recreationalists to other parks and substantially increasing use of facilities could cause physical deterioration of other parks.

The proposed project could impact the use of one of three regional parks at a time during construction from closing trails or blocking access to parking lots, including Maddux Ranch Regional Park, Shiloh Ridge Regional Park, and Foothill Regional Park. The primary activities at Shiloh Ridge Regional Park and Foothill Regional Park involve hiking and equestrian riding. The parks that would be affected by the cumulative projects do not support these activities, and thus park closures would not likely divert large numbers of recreationalists to the same alternate parks. The primary activities at Maddux Ranch Regional Park involve use of the ball fields, which are used by the local little leagues. Ball fields at Maddux Ranch Regional Park would not be closed during construction, but overhead reconductoring could restrict access to the parking lot at the park, which may affect use of the facility. The Recreation Park Renovations project (#5) would involve work on ball fields. If the proposed project restricted use of ball fields at Maddux Ranch Regional Park at the same time that other ball fields were renovated, the use of other ball fields in the vicinity could increase substantially. The resulting cumulative impact could be significant.

MM Traffic-1 and MM Traffic-2 requires PG&E to maintain public access to parks by installing guard structures or position flaggers if guard structures cannot be installed. With implementation of these measures, the proposed project would not likely displace many recreationalists to other parks. The proposed project would have a less than significant contribution to a cumulative impact to recreation.

Transportation and Traffic

Geographic Extent

The geographic extent for the transportation and traffic cumulative analysis includes the local and regional roadways (refer to Table 3.15-7, which lists the public roadways in the project study area) and highways (US 101) that would be crossed by the proposed project or utilized for transportation of proposed project materials. The extent of the analysis specifically includes all projects within 1 mile of the project alignment because these projects are expected to use the same roads for access. In general, the proposed project's transportation and traffic impacts (such as increased traffic volume and lane closures) would diminish with increased distance from the project area.

Potential Cumulative Impacts

The proposed project and cumulative projects listed in Table 3.17-2 that involve construction vehicle trips or add permanent vehicle traffic to roadways in 2018 or 2019 would contribute to the cumulative scenario for traffic.

Conflict with Traffic Standards. Construction worker vehicles and haul trucks used during construction of the cumulative projects would use local roadways to access work sites. Most of the cumulative projects, except the SMART Project (#1) and the "Big Pave" (#6), are located within the City of Healdsburg. The SMART Project is located on the west side of US 101, while the proposed project is located nearly entirely northeast of US 101. The SMART Project and proposed project would not use the same local roadways as the proposed project for access. The "Big Pave" involves repaving US 101 and would not use local roadways. The cumulative projects located in the City of Healdsburg would rarely or never use the same local roadways as the proposed project because they are separated from the proposed project area by the Russian River. The cumulative impact on local roadways would be less than significant.

All the cumulative projects would likely use US 101 for vehicle travel during construction and operation. The vehicle trips associated with maintenance of the proposed project would not increase with the replaced conductor and poles. However, the additional vehicle trips during concurrent construction of the proposed project and cumulative projects at the same time as repaving US 101 could result in a drop of LOS to below traffic standards. The cumulative impact on traffic standards is potentially significant.

Proposed project construction workers and haul trucks could use the same segments of US 101 as the cumulative projects. Although construction of the proposed project would be temporary and would not permanently impact traffic flow, the impact on LOS could be considerable. The proposed project would generate a maximum of 442 trucks and vehicle trips per day during construction. The temporary increase in vehicle trips resulting from the proposed project would constitute less than half a percent of the capacity of the highway assuming all trips occurred on US 101; however, the majority of proposed project trips would occur along local roadways between staging areas and work areas, and would avoid US 101. The proposed project would therefore not contribute considerably to a significant cumulative traffic impact.

Air Traffic Patterns. Construction and operation of the cumulative projects would not increase air traffic in the region. No cumulative impact would occur.

Traffic Hazards. Construction of the cumulative projects would increase truck traffic to and from work sites and could require temporary lane closures; however, the cumulative projects would not affect the same local roadways as the proposed project. The proposed project would not contribute to traffic hazards on US 101. No cumulative impact from traffic hazards would occur.

Emergency Access. Lane and road closures may be required during construction of the cumulative projects. Closures have the potential to restrict or slow down emergency vehicles and responders. Construction of the cumulative projects would not result in lane and road

closures on the same local roadways as the proposed project, because the cumulative projects are not located on the same local roadways as the proposed project. The cumulative impact on emergency access on local roadways would be less than significant.

The "Big Pave" (#6) would likely involve lane closures for repaving. The proposed project would involve temporary lane closures on US 101. The cumulative impact on emergency access is potentially significant because lane closures could significantly reduce response times for emergency vehicles. The lane closures for the proposed project would occur at night when traffic volumes are low and only on two occasions. In contrast, lane closures for repaving would be extensive along the approximately 13-mile-long stretch of US 101 between the Town of Windsor and the unincorporated community of Geyserville. Temporary lane closures for the proposed project would not have a considerable contribution to a significant cumulative impact on emergency access.

Alternative Transit. Bicycle lanes, bus stops, and bus routes have the potential to be affected by lane and road closures required during construction of the cumulative projects or during stringing of overhead power lines for the proposed project. Each cumulative project may have limited impacts on some bicycle lanes, bus stops, and bus routes. Most of these impacts would be localized (i.e., development projects) and/or of limited duration due to the nature of the construction projects (e.g., linear projects). It is not likely that all closures would happen at the same time or affect the same facility. Even when all closures are considered together, disruption to the overall system would be minimal and not cumulatively significant.

Utilities and Public Services

Geographic Extent

The geographic extent for the analysis of cumulative impacts associated with utilities and public services is the service area of the cities and counties near the proposed project including the cities of City of Healdsburg and Sonoma County.

Impacts Avoided by the Proposed Project

Construction of the proposed project would not exceed wastewater treatment requirements; require or result in the construction of new or expanded water or wastewater facilities; require or result in the construction of new or expanded storm water drainage facilities; or conflict with federal, state, or local statutes and regulations related to solid waste. The proposed project would not contribute to cumulative impacts on these resources.

Potential Cumulative Impacts

Wastewater Treatment Capacity. Construction of the cumulative projects may result in generation of additional wastewater. All of the cumulative projects would be located in areas that are served by existing municipal sewer systems. The cumulative projects involve redevelopment of existing areas or are utility and transportation projects that would generate minimal amounts of wastewater. The cumulative increase in wastewater would not exceed the wastewater treatment capacity of the wastewater treatment systems. The cumulative impact would be less than significant.

Water Supplies and Facilities. Construction of the cumulative projects would require varying quantities of water for dust control and/or compaction. The majority of the cumulative projects that could be constructed simultaneously are small and would require little water. The h3 Hotel (#12), The Oaks (#13), Cerri Property (#18), Old Hospital (#19), and Creekwalk (#21) would increase demand for water supplies during operation. These projects are located within the City of Healdsburg and Town of Windsor. The proposed project would purchase water from the City of Healdsburg for dust control during construction. The City of Healdsburg has a significant surplus of supply, which can accommodate growth within the City (City of Healdsburg 2016b). Additionally, the comparatively small quantity of water required during construction of the proposed project (20,000 gallons), would not significantly impact existing water supplies. The cumulative impact on water supplies and facilities would be less than significant.

Landfill. The regional landfills that serve the cumulative projects and proposed project have approximately 9.3 million cubic yards of capacity. The cumulative projects would not result in waste generation in excess of the available landfill capacity. The cumulative impact on landfill capacity would be less than significant.

Public Services. The proposed project would not contribute to impacts on demand for police services, schools, parks, or other public facilities. The cumulative projects are not located in the same fire department service areas as the proposed project and would not result in a cumulative impact on demand for fire services.

Cumulative projects constructed simultaneously (The "Big Pave" [#6] and North Fitch Mountain Road Slide Repair [#14]) could interfere with the response time of emergency services due to lane or road closures. Potential lane closures for the North Fitch Mountain Road Slide Repair and the proposed project would not occur on the same local roadways; cumulative impacts would not occur. The "Big Pave" (#6) would likely involve lane closures along US 101. The proposed project would also involve temporary lane closures on US 101. The cumulative impact on emergency access is potentially significant because lane closures could significantly reduce response times for emergency vehicles. The lane closures for the proposed project would occur at night when traffic volumes are low and only on two occasions. In contrast, lane closures for repaving would be extensive along the approximately 13-mile-long stretch of US 101 between the Town of Windsor and the unincorporated community of Geyserville. Temporary lane closures for the proposed project would not have a considerable contribution to a significant cumulative impact on emergency access.

Required APMs and MMs: APM AIR-1, APM AIR-2, APM BIO-10, APM CR-1, MM Biology-1, MM Biology-2, MM Biology-3, MM Biology-4, MM Biology-5, MM Biology-6, MM Biology-7, MM Cultural-1, MM Cultural-2, MM Cultural-3, MM Cultural-4, MM Hydrology-1, MM Hydrology-2, MM Noise-1, MM Noise-2, MM Noise-3, MM Noise-4, MM Noise-5, MM Recreation-2, MM Traffic-1, and MM Traffic-2 (refer to Section 3.3: Air Quality, Section 3.4: Biological Resources, Section 3.5: Cultural and Tribal Cultural Resources, Section 3.9: Hydrology and Water Quality, Section 3.11: Noise, Section 3.14: Recreation, and Section 3.15: Transportation and Traffic)

3.17 MANDATORY FINDINGS OF SIGNIFICANCE

Impact MFOS-3: Would the proposed project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Significance Determination
	Less than significant with mitigation

The following sections of this IS/MND discuss various types of impacts that could have potentially substantial adverse effects on human beings:

- Dust and air pollutants emitted during proposed project construction activities (refer to Section 3.3: Air Quality)
- Potential increase in GHG emissions during proposed project construction activities (refer to Section 3.7: Greenhouse Gas Emissions)
- Potential for wildland fires during proposed project construction activities (refer to Section 3.8: Hazards and Hazardous Materials)
- Potential release of gasoline, diesel fuel, oil, and lubricants associated with construction equipment and other vehicles (refer to Section 3.8: Hazards and Hazardous Materials)
- Noise generated by proposed project construction (refer to Section 3.11: Noise)
- Potential traffic hazards (refer to Section 3.15: Transportation and Traffic)

These potential impacts are all temporary impacts that could occur during proposed project construction activities. Each type of impact with the potential to cause substantial adverse effects on human beings has been evaluated. The potential health impact from air pollutants generated during construction would be less than significant. The hazard to the public from increased risk of wildland fires and the release of hazardous materials would be less than significant with implementation of APM HM-3 and APM HM-4 and MM Hazards-1. The effects from temporary noise increases on sensitive receptors would be less than significant with implementation of APM REC-1, MM Noise-1, MM Noise-2, MM Noise-3, and MM Noise-4. Traffic hazards from lane, road, and pedestrian route closures would be less than significant with implementation of MM Traffic-1. The risk to the public from conductor falling onto roadways would be minimized and less than significant with implementation of MM Traffic-2. The hazard to motorists from damaged roadways would be less than significant with implementation of MM Traffic-3.

The proposed project would have a beneficial effect on human beings in the project area by increasing electrical service capacity and reliability. Potential direct and indirect adverse effects on human beings would not be substantial with mitigation. The potential impact on human beings would be less than significant with mitigation.

Required APMs and MMs: APM HM-3, APM HM-4, APM REC-1, MM Hazards-1, MM Noise-1, MM Noise-2, MM Noise-3, MM Traffic-1, MM Traffic-2, and MM Traffic-3 (refer to Section 3.8: Hazards and Hazardous Materials, Section 3.11: Noise, Section 3.14: Recreation, and Section 3.15: Transportation and Traffic)

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