3.2 AGRICULTURE AND FORESTRY RESOURCES

3.2.1 Environmental Setting

Agricultural Resources

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency Department of Conservation (CDC) designates land based on its suitability for agricultural use. FMMP land designations are defined in Table 3.2-1. Approximately 578,007 acres of Sonoma County (approximately 57 percent) is FMMP-designated Farmland (i.e., Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land) (CDC 2014).

Table 3.2-1 FMMP Land Designations

Designation	Definition
Farmland Categories	
Prime Farmland	Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. Land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.
Farmland of Statewide Importance	Farmland like Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.
Unique Farmland	Farmland of lesser quality soils used to produce the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. Land must have been cropped at some time during the 4 years prior to the mapping date.
Farmland of Local Importance	Includes the hayland-producing areas of the Santa Rosa Plains, Petaluma Valley, and Tubbs Island Naval Reservation. Additional areas include those lands which are classified as having the capability for producing locally important crops such as grapes, corn, etc., but may not be planted at the present time. Examples of these areas include the coastal lands from Fort Ross to Stewarts Point, areas surrounding Bloomfield, Two Rock, Chileno Valley, and areas of Sonoma Valley in the vicinity of Big Bend, Vineburg, and Schellville.
Grazing Land	Land on which the existing vegetation is suited to the grazing of livestock.
Non-Farmland Categories	
Urban and Built-up Land	Land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

Designation	Definition
Other Land	Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Includes vacant and nonagricultural land surrounded by urban development and greater than 40 acres.
Land Committed to Nonagricultural Use	Existing farmland, grazing land, and vacant areas that have a permanent commitment for development.

Sources: (CDC 2016, CDC 2008-2010)

Williamson Act Contract Lands

Agricultural areas near the proposed project include lands subject to the California Land Conservation Act of 1965, commonly referred to as the Williamson Act. The Williamson Act enables local governments to enter into contracts with private landowners to restrict specific parcels of land to agricultural or related open-space use for periods of 10 to 20 years. Sonoma County hosts approximately 288,752 acres of agricultural areas subject to the Williamson Act (Sonoma County 2015). The proposed project would cross through FMMP-designated Farmland as well as lands under Williamson Act contracts. Agricultural areas located along the project alignment, including those subject to Williamson Act contracts, are shown on Figure 3.2-1 and Figure 3.2-2.

Sonoma County Agriculture

Overview

A variety of agricultural resources are found in Sonoma County where agricultural commodities are grown, or where land that is suitable for agriculture has been identified for conservation to prevent premature development. Commercial agricultural commodities produced in Sonoma County include livestock, dairy, poultry, wine grapes, oats, hay and straw, flowers, vegetables, and fruits (Sonoma County 2016b). In 2012, 3,579 farms were in production in Sonoma County (US Department of Agriculture 2012).

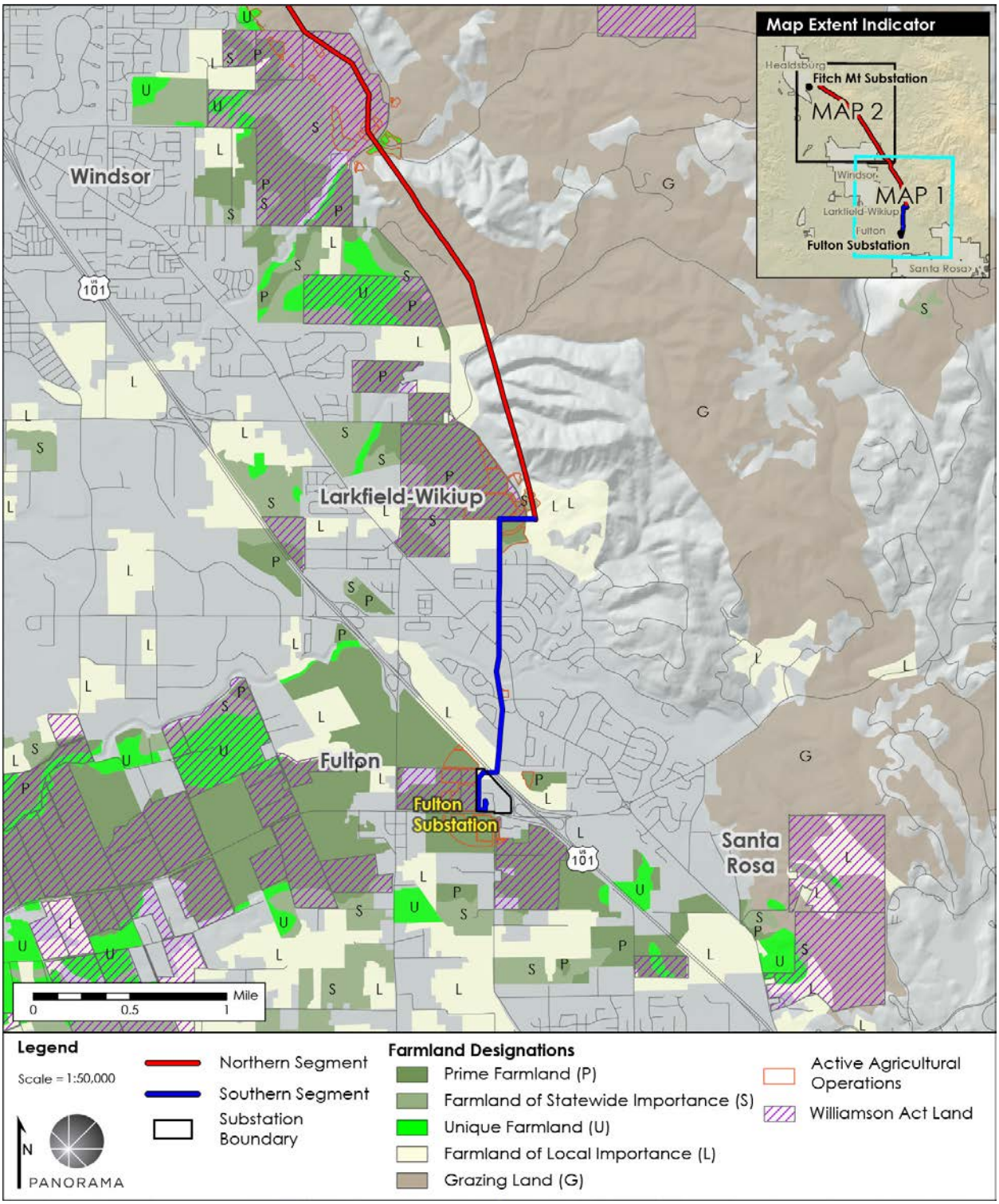
Agricultural Zoning

Sonoma County designates parcels of land with specific zoning designations that restrict or authorize certain activities, including agricultural activities. Zoning designations in the project study area are addressed in the Sonoma County Code of Ordinances. Four zoning designations in the project study area allow for agricultural use: Land Intensive Agriculture, Diverse Agriculture, Resources and Rural Development, and Agriculture and Residential. Zoning designations in the project study area are shown in Section 3.10: Land Use and Planning on Figure 3.10-3 and Figure 3.10-4.

Active Agricultural Operations

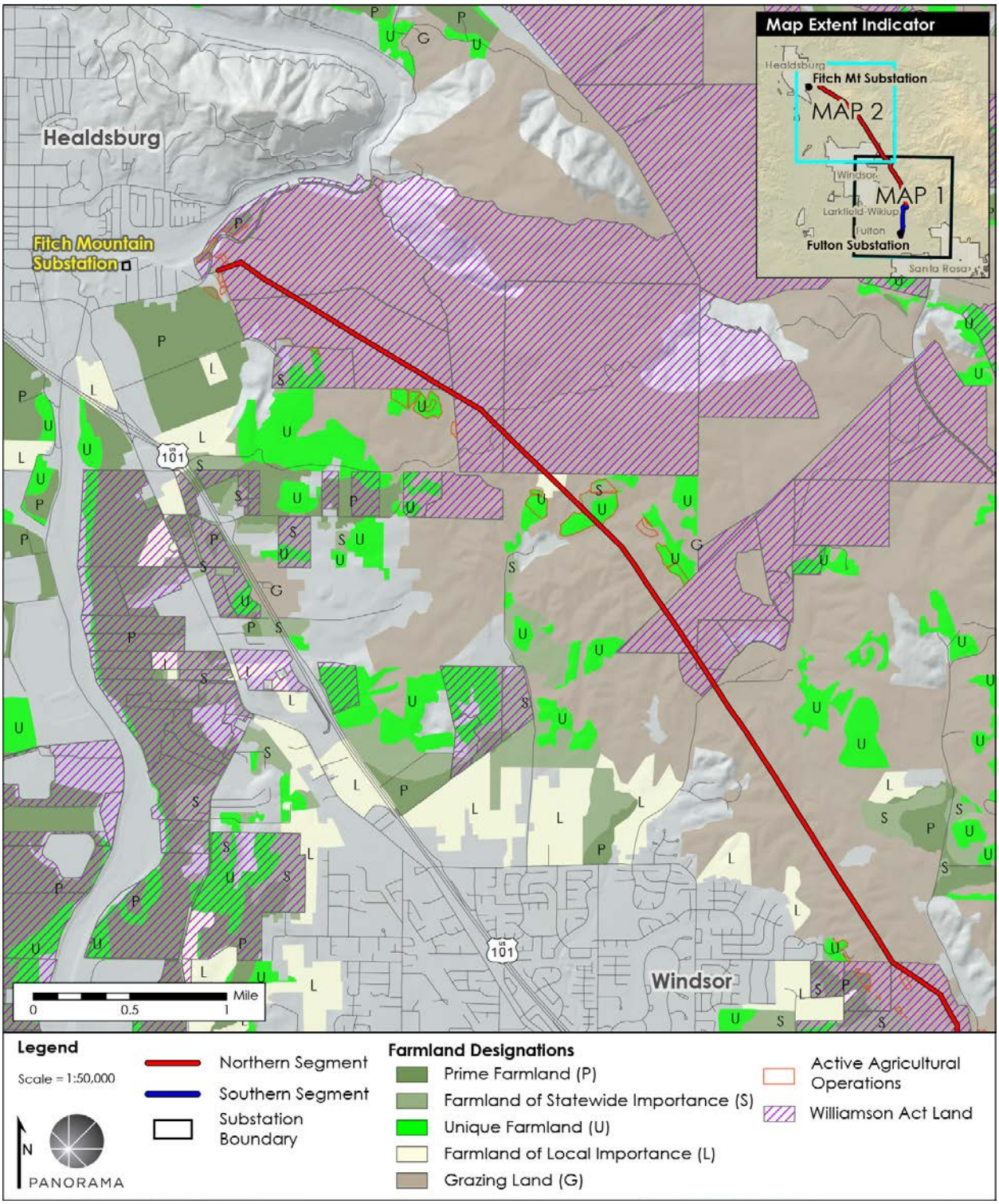
Agricultural operations in Sonoma County may be present on lands that do not have a land use designation. Active or recently active agricultural operations (i.e., cultivated land or where known agricultural activities are present) were identified using aerial imagery as well as current land use data. Active agricultural operations are shown on Figure 3.2-1 and Figure 3.2-2.

Figure 3.2-1 Agricultural Resources in the Project Area (Map 1 of 2)



Sources: (ESRI 2016, PG&E 2016, CDC 2014, Sonoma County 2015)

Figure 3.2-2 Agricultural Resources in the Project Area (Map 2 of 2)



Sources: (ESRI 2016, PG&E 2016, CDC 2014, Sonoma County 2015)

Forestry Resources

Forestry resources as defined in the PRC and California Government Code as shown in Table 3.2-2. No designated timberland, timber production zones, or land zoned for commercial timber harvesting are located near the project. The project study area contains native riparian woodland and mixed oak woodland (GANDA 2012, TRC 2015, TRC 2016a, TRC 2016b) that may meet the definition of forest land under PRC § 12220(g). While these areas are not commercially harvested for timber, they may provide suitable timber resources. The locations of native riparian woodland and mixed oak woodland are shown on Figure D-2, located in Appendix D.

Table 3.2-2 Forestry Resources Definitions

Designation	Definition
Forest Land (PRC §12220[g])	Land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.
Timberland (PRC §4526)	Land, other than land owned by the federal government and land designated by the State Board of Forestry and Fire Protection (board) as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis.
Timberland Production Zone (California Government Code §51104[g])	With respect to the general plans of cities and counties, "timberland preserve zone" means "timberland production zone." Timber production zones are areas which have been zoned for, and are devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined below. "Compatible use" is any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber, and shall include, but not be limited to, any of the following, unless in a specific instance such a use would be contrary to the preceding definition of compatible use: 1. Management for watershed. 2. Management for fish and wildlife habitat, or hunting and fishing. 3. A use integrally related to the growing, harvesting and processing of forest products, including but not limited to roads, log landings, and log storage areas. 4. The erection, construction, alteration, or maintenance of gas, electric, water, or communication transmission facilities. 5. Grazing. 6. A residence or other structure necessary for the management of land zoned as timberland production.

3.2.2 Impact Analysis

Summary of Impacts

Table 3.2-3 presents a summary of the CEQA significance criteria and impacts on agriculture and forestry resources that would occur during construction, operation, and maintenance of the proposed project.

Table 3.2-3 Summary of Proposed Project Impacts on Agriculture and Forestry Resources

Would the proposed project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☒	☐	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☒	☐	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☒	☐	☐

Impact Discussion

a) Would the proposed project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	**Significance Determination**
	Less than significant with mitigation

Construction

Construction of the proposed project would result in impacts on FMMP-designated Farmland. Temporary impacts on FMMP-designated Farmland are summarized in Table 3.2-4. Temporary impacts would occur at project work areas and access routes located in Farmland where vegetation removal, mowing, and minor surface grading would occur. Pole locations, construction work areas, and access routes would also be located in active agricultural areas. Operating heavy equipment in active agricultural areas could potentially damage irrigation

Table 3.2-4 Temporary Impacts within FMMP-Designated Farmland

Agricultural Land Category	Temporary Impacts (acres) [a, b]	Permanent Impacts (acres) [c]
Prime Farmland	1.2 – 1.4	--
Farmland of Statewide Importance	0.9 – 1.2	--
Unique Farmland	0.4	--
Farmland of Local Importance	9.4 – 42.3	< 0.001
Grazing Land	38.4 – 43.3	0.002
TOTAL	**50.3 – 88.6**	**0.002**

Notes:

[a] Temporary impacts would occur at project work areas and overland access routes. Land impacts at existing paved and unpaved access routes are not included.

[b] Where impacts are expressed in range, the low value represents impacts at anticipated work areas and the high value represents the total land present that may be impacted if work areas were repositioned. Actual impacts are expected to be at or below the lower value in the range of impacts.

[c] Permanent impacts would occur where a greater number of new poles would be located within a land designation or where larger TSPs would be installed.

Sources: (PG&E 2016, CDC 2014, Sonoma County 2015)

lines. Although unlikely, it may be necessary to remove row crops or vineyard vines for construction equipment and vehicles to access existing and proposed pole locations. Impacts on Farmland from damaging irrigation lines and removing crops could be significant if they were not replaced. MM Agriculture-1 requires PG&E to protect agricultural infrastructure (i.e., irrigation lines, wells, pumps, ditches, and drains) during construction activities, avoid crop removal where feasible, and compensate landowners for replacing crops that cannot be avoided. The impact would be less than significant with mitigation.

Operation and Maintenance

New poles that would replace existing poles would be positioned within approximately 12 to 35 feet of the existing locations. New LDSPs would occupy a similar area as existing poles (approximately 1.4 square feet). New TSP foundations would occupy a larger area than existing poles (approximately 20 to 25 square feet). Replacing poles within Farmland could convert up to approximately 0.002 acre of Farmland, as shown in Table 3.2-4. Converting 0.002 acre of Farmland would not be substantial, and the proposed project would not conflict with continued agricultural operations in the area. Therefore, the impact would be less than significant.

Required APMs and MMs: MM Agriculture-1

b) Would the proposed project conflict with existing zoning for agricultural use, or a Williamson Act contract?	Significance Determination
	Less than significant

Construction, operation, and maintenance of the proposed project would result in impacts on 19 parcels currently under Williamson Act contracts as well as areas zoned for agricultural use. Temporary and permanent impacts on land subject to an existing Williamson Act contract and land zoned for agricultural use are summarized in Table 3.2-5.

As explained in Impact a) above, temporarily impacted areas would be available for agricultural use after construction is complete in the area, and permanent impacts on areas zoned for agricultural use would be very small because the installation of new poles would be mostly offset by the removal of existing poles and the area occupied by the existing poles would be available for agricultural use after construction. The proposed project would not conflict with zoning or a Williamson Act contract because the project would involve replacing existing conductor and poles in approximately the same location. Existing zoning for agricultural use or land eligibility for a Williamson Act contract would not change. Impacts from conflicts with existing zoning for agricultural use or a Williamson Act contract would be less than significant.

Table 3.2-5 Temporary Impacts on Land Subject to a Williamson Act Contract and Land Zoned for Agricultural Use

Land Status/Zoning Designation	Temporary Impacts (acres) [a, b]	Permanent Impacts (acres) [c]
Existing Williamson Act Contract	23.1 – 24.9	0.001
Land Intensive Agriculture	4.0 – 13.8	< 0.001
Diverse Agriculture	2.2	< 0.001
Resources and Rural Development	27.4 – 30.2	0.001
Agriculture and Residential	2.7 – 23.0	< 0.001

Notes:

[a] Temporary impacts would occur at project work areas and overland access routes. Land impacts at existing paved and unpaved access routes are not included.

[b] Where impacts are expressed in a range, the low value represents impacts at anticipated work areas and the high value represents the total land present that may be impacted if work areas were repositioned. Actual impacts are expected to be at or below the lower value in the range of impacts.

[c] Permanent impacts would occur where a greater number of new poles would be located within a land designation or where larger TSPs would be installed.

Source: (PG&E 2016, Sonoma County 2016a, Sonoma County 2015)

Required APMs and MMs: None

c) Would the proposed project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104[g])?	Significance Determination
	No impact

The project alignment would not traverse timberland or timberland zoned Timberland Production, and would not conflict with existing zoning of lands designated for those uses. No impact would occur on timberland or timberland zoned Timberland Production.

The project alignment would traverse through lands that may meet the definition of forest land under PRC §12220(g), as explained under Impact d) below. Sonoma County Code of Ordinances Section 26-88-010(a) states that transmission and distribution lines are acceptable in all zoning districts; therefore, the proposed project would not conflict with existing zoning for forest lands. No impact would occur.

Required APMs and MMs: None

d) Would the proposed project result in the loss of forest land or conversion of forest land to non-forest use?	Significance Determination
	Less than significant with mitigation

The project study area contains native riparian woodland and mixed oak woodland (GANDA 2012, TRC 2015, TRC 2016a, TRC 2016b) that may meet the definition of forest land under PRC §12220(g). Construction, operation, and maintenance of the proposed project would result in temporary impacts on forest land, including the removal of approximately 100 trees of various types and sizes, approximately half of which would be native oak trees. The loss of native tress within forest land would be a significant impact. PG&E proposes to implement APM BIO-10, which includes minimizing removal of oak trees and replacement of large valley oaks greater than 20 inches diameter at breast height (dbh), or small valley oaks with a cumulative dbh greater than 60 inches consistent with Sonoma County Zoning Ordinance Article 67. As an alternative, APM BIO-10 specifies that PG&E may pay an in-lieu fee for each tree removed, as described in the ordinance. APM BIO-10 does not specify how native trees would be identified and avoided, or how any unavoidable tree removal would be documented; therefore, a significant impact on forest resources could still occur. MM Biology-7 requires PG&E to restore or replace riparian woodland and mixed oak woodland through implementation of a Revegetation, Restoration, and Monitoring Plan. MM Biology-9 requires avoidance of riparian woodland and mixed oak woodland where feasible. The impact on forest lands would be less than significant with mitigation.

Required APMs and MMs: APM BIO-10, MM Biology-7, and MM Biology-9 (refer to Section 3.4: Biological Resources)

e) Would the proposed project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	Significance Determination
	Less than significant with mitigation

The proposed project would involve replacing existing conductor and poles in approximately the same alignment. As discussed under Impact a), the proposed project could impact Farmland by damaging irrigation lines and removing crops in active agricultural areas, and by replacing poles within Farmland. The proposed project could result in the conversion of Farmland to non-agricultural use if damaged irrigation lines and crops were not replaced or poles were positioned in a location that prevented existing agricultural operations to continue. The impact from conversion of Farmland to non-agricultural use could be significant. MM Agriculture-1 requires PG&E to protect agricultural infrastructure (i.e., irrigation lines, wells, pumps, ditches, and drains) during construction activities, avoid crop removal where feasible, and compensate landowners for replacing crops that cannot be avoided. MM Agriculture-1 also requires that new poles are not positioned where they would conflict with existing agricultural operations, such as blocking access to farm equipment. The impact from conversion of agricultural land to non-agricultural use would be less than significant with mitigation.

The potential conversion of forest land to non-forest use is described in Impact d) above. The project would not otherwise convert forest land to non-forest use.

Required APMs and MMs: MM Agriculture-1

3.2.3 Required Applicant Proposed Measures and Mitigation Measures

MM Agriculture-1: Minimize Impacts on Active Agricultural Areas
PG&E shall minimize disruptions to existing agriculture operations and avoid impacts on agricultural infrastructure (i.e., irrigation lines, wells, pumps, ditches, and drains). Work areas and overland access routes shall avoid active agricultural areas (i.e., farms, orchards, vineyards) and agriculture infrastructure where feasible. If necessary, and upon agreement with farmers, agricultural infrastructure shall be protected with temporary materials (i.e., steel plates, blankets, etc.) to prevent inadvertent damage during construction. Crop removal shall be avoided to the greatest extent feasible. If crops cannot be avoided, impacts shall be limited to the minimum necessary to construct the project, and PG&E shall provide the owner with fair market compensation to replace the crops and any damaged infrastructure. If grading occurs in active agricultural areas, topsoil shall be salvaged and replaced once construction is complete.
Applicable Locations: Access roads and work areas within agricultural properties
Performance Standards and Timing: • **Before Construction:** Design access roads and work areas to avoid trees and crops where feasible • **During Construction:** Protect irrigation lines and avoid impacts to agricultural productions where feasible • **After Construction:** Replace any damaged crops

3.2.4 References

CDC (California Resources Agency Department of Conservation). 2008-2010. "California Farmland Conversion Report, Farmland of Local Importance."

—. 2014. "Farmland Designations GIS dataset." ftp://ftp.consrv.ca.gov/pub/dlrp/fmmp/2014/.

—. 2016. *Important Farmland Categories*. Accessed August 1, 2016. http://www.conservation.ca.gov/dlrp/fmmp/mccu/Pages/map_categories.aspx.

ESRI. 2016. "Raster, vector, and on-line GIS Data resources."

GANDA (Garcia and Associates). 2012. "Biological Resources Technical Report, Pacific Gas & Electric Company's Fulton-Fitch 60kV Power Line Reconductor Project, Sonoma County, California. July 2012."

PG&E. 2016. "Project Elements GIS dataset."

Sonoma County. 2015. "SoCo PRMD GIS Williamson Act Land Contracts." https://links.sonoma-county.org/xAKDYCKV6YY/.

—. 2016a. "SoCo PRMD GIS Zoning." https://links.sonoma-county.org/xAKDYCKV6YY/.

—. 2016b. "Sonoma County Crop Report 2015." July.

TRC. 2015. "Addendum #1 to the Biological Resources Technical Report." *Memorandum: Fulton-Fitch Mountain Reconductoring Project, Sonoma County, CA*. December 15.

—. 2016a. "Addendum #2 to the Biological Resources Technical Report." *Memorandum: PG&E Fulton-Fitch Mountain Reconductoring Project Biological Reconnaissance Survey for Backup Work Areas, Access Roads, and Helicopter Touch-Down Areas*. June 23.

—. 2016b. "Addendum #3 to the Biological Resources Technical Report." *PG&E Fulton-Fitch Mountain Reconductoring Project Biological Reconnaissance Survey for Work Areas and Access Roads*. December 20.

US Department of Agriculture. 2012. "2012 Census of Agriculture County Profile Sonoma County California." Accessed October 27, 2016. https://www.agcensus.usda.gov/Publications/2012/Online_Resources/County_Profiles/California/cp06097.pdf.

This page is intentionally left blank.