

3.3 AGRICULTURE AND FORESTRY RESOURCES

This section describes Humboldt County’s agricultural and forestry land uses; the significance, quality, and extent of agricultural land on-site and within the county; the types of on-site forestland; describes on-site timber production; and the factors that potentially could contribute to the alteration of grazing land, forest resources, and timber production activities. The majority of the project site is managed for timber harvest, and the eastern portion of the project site is managed for grazing operations.

3.3.1 ENVIRONMENTAL SETTING

AGRICULTURAL RESOURCES

Humboldt County is the state’s 29th largest county in terms of agricultural production but is first in the state’s timber production, with 23 percent of the state’s total timber value in 2016 (California Department of Food and Agriculture 2017). The gross valuation for all agricultural commodities produced in Humboldt County in 2016 was approximately \$326.1 million, representing a 7 percent increase from the adjusted 2015 production values. Livestock and livestock products had the highest commodity value (\$190.2 million), representing 58 percent of Humboldt County’s production value. Timber production is the number two commodity, at \$70.4 million, followed by nursery stock (\$55.9 million), field crops (\$5.3 million), and vegetable crops (\$2.5 million) (Humboldt County Agricultural Commissioner 2017).

Prime and Non-prime Agricultural Lands

The land best suited for a wide range of agricultural crops is called “prime” agricultural land. The California Farmland Mapping and Monitoring Program (FMMP) is a nonregulatory program that provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The modern soil surveys produced by the U.S. Natural Resources Conservation Service (NRCS) are the basis for the FMMP. Humboldt County currently is conducting an NRCS countywide soil survey; therefore, the County is not included in the latest FMMP released by the California Department of Conservation (Humboldt County 2017a).

The County defines prime agricultural lands based on California Government Code Section 51201(c), which is described in Policy AG-S7 of the County’s General Plan (Humboldt County 2017b) (see Section 3.3.2 for further discussion). The highly productive soils of the Mad River, Redwood Creek, Eel River deltas, and Humboldt Bay as well as other areas provide the basis for Humboldt County’s agricultural resources. The majority of its prime agricultural lands, which contain prime soils, are found in these areas.

Prime agricultural soils in the project area and vicinity are adjacent to the Eel River (Figure 3.3-1). No features of the project would be located on prime soils.

Agricultural Land Conversion

Agriculture remains an important industry in Humboldt County; however, operators are facing increasing challenges to maintain economically viable operations. The long-term sustainability of the agricultural industry depends on continued profitability and the availability of productive farmlands. A study of the County’s agricultural conversions identified that the major contributors to land potentially lost to production were zone reclassifications—subdivisions—conditionally permitted uses that conflict with agricultural operations and the issuances of certificates of compliance on historic parcels (Humboldt County 2017a).

According to the U.S. Department of Agriculture (USDA), the land in farms and the average size of farms has steadily decreased over a 20-year period. As shown in Table 3.3-1, between 1992 and 2012, Humboldt County lost 4,169 acres or 0.7 percent of farmland, and the average farm size decreased in those 20 years, from 684 to 638 acres. However, the county added 56 farms during the same period.

Table 3.3-1. Farmland Statistics in Humboldt County (1992–2012)

Item	1992	1997	2002	2007	2012
Farms	874	792	993	852	930
Land in Farms (acres)	597,766	584,538	613,931	597,477	593,597
Average Size of Farms (acres)	684	738	638	701	638

Source: USDA 2014

Williamson Act Contract Lands

Under the California Land Conservation Act of 1965, also known as the Williamson Act, local governments can enter into contracts with private property owners to protect land (within agricultural preserves) for agricultural and open space purposes for a 10-year period (see Section 3.3.2 for further discussion). Humboldt County had approximately 202,934 acres of land under Williamson Act contracts in 2015 (the most recent year for which data is available) (DOC 2016). In addition, Humboldt County contains an additional 697 acres that are designated as Farmland Security Zone (FSZ) lands (DOC 2016). FSZs function similarly to land under Williams Act contracts; however, the length of the contract is 20 years rather than 10 years.

The nonrenewal process is the most common mechanism for termination of Williamson Act contracts, and most Williamson Act contracts are terminated through this process. In Humboldt County as of 2015, approximately 2,649 acres were in some stage of the nonrenewal process, and the amount of contract land terminated through nonrenewal expirations totaled approximately 440 acres (DOC 2016).

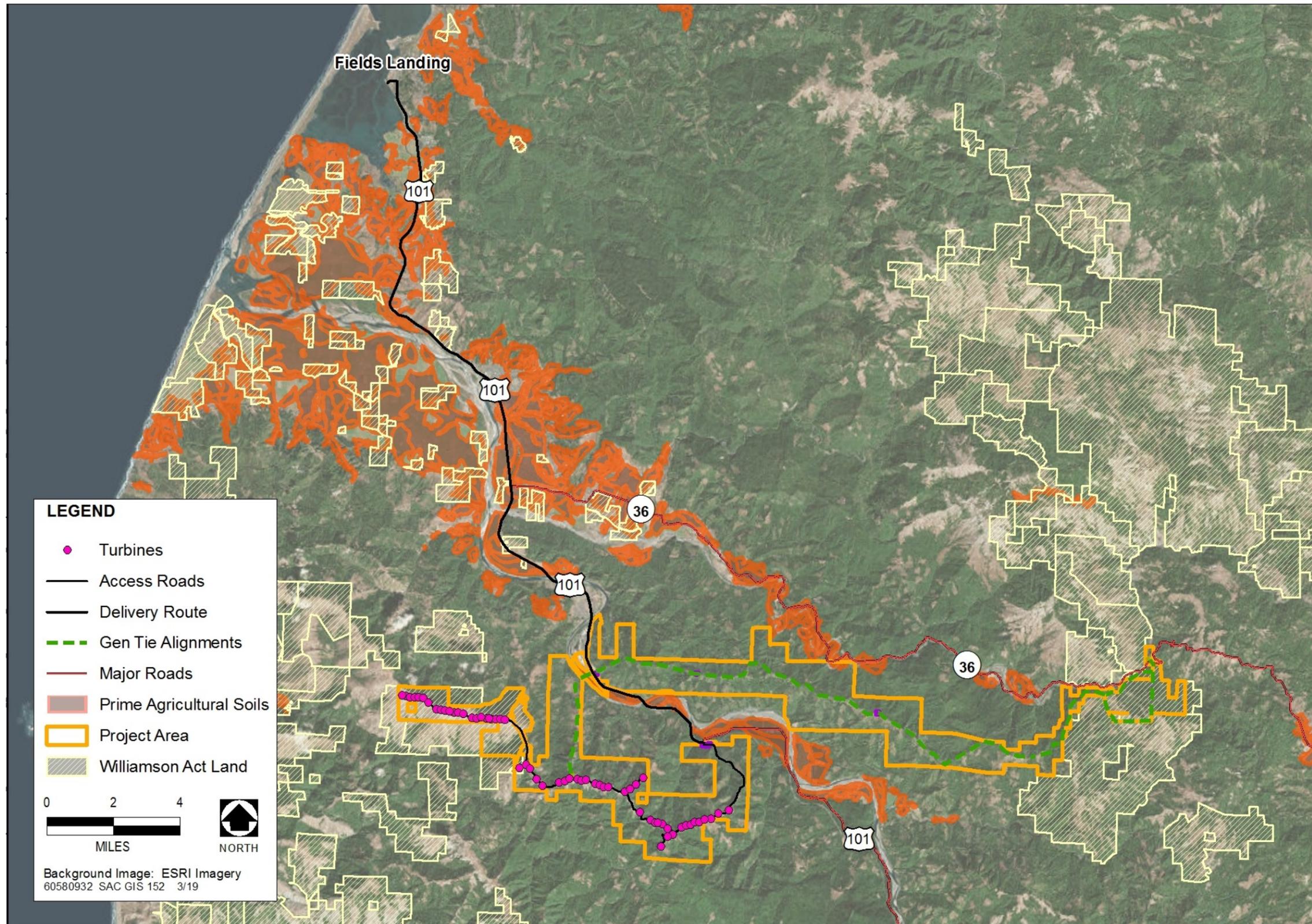
As shown in Figure 3.3-1, lands under Williamson Act contracts are in or in the vicinity of the eastern and western portions of the project area. In total, approximately 6,820 acres of land in the project site are under active Williamson Act contracts. No FSZ contracts are in or adjacent to the project site.

Agricultural Zoning

Lands mainly in the eastern and western portions of the project area are zoned Agriculture Exclusive (AE). The AE classification is applied to fertile areas in which agriculture is and should be the predominant use, and where the protection of this use from encroachment by incompatible uses is essential to the general welfare. All general agricultural uses, including accessory uses and structures (e.g., silos, tank houses, barns, outbuildings, coops, and horse stables) are permitted in this district. Use permits may be granted for uses not enumerated in the district description, provided that the use is similar to and compatible with uses permitted in the AE zone.

FORESTRY RESOURCES

Approximately 1.9 million acres of forested land are in Humboldt County, covering more than 80 percent of the county’s total land area. Of these 1.9 million acres of forestland, 1.7 million acres are considered to be suitable for



Source: Data compiled by AECOM in 2019

Figure 3.3-1. Williamson Act Contract Land and Prime Agricultural Soils

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timber production. About 1 million acres are designated as Timberland Production Zone (TPZ). This acreage is equal to 45 percent of the total land acreage in the county.

As stated previously, Humboldt County is first in the state's timber production (California Department of Food and Agriculture 2017). However, the county's timber industry has been in decline. In 2000, the county's total gross value of timber production was more than \$285 million (Humboldt County 2017a). By 2008, the total gross value of timber had dropped to \$108 million (Humboldt County 2017a). In 2016, the county's total gross value of timber production was \$70 million (Humboldt County Agricultural Commissioner 2017).

Forest Types

Trees generally are classified as hardwood (including oak, alder, and other deciduous or broadleaf species) or softwood (including fir, spruce, pine, redwood, and all other coniferous or needle-bearing species). The project site primarily consists of managed timberlands that are dominated by redwood and Douglas-fir forests, with hardwood trees, such as bigleaf maple, California bay, and tanoak also common (Stantec 2018). Douglas-fir stands in early seral stages are present in recently logged areas and areas grazed by cattle (Stantec 2018). As shown in Table 3.5-2 in Section 3.5, these forest types cover over 1,500 acres (approximately 68 percent) of the project site. Land cover types, including forest types, are described in Section 3.5.1, "Environmental Setting," in Section 3.5, "Biological Resources."

Timberland Conversion

Change in land management priorities, based on parcel size, market conditions, and ownership values, also contribute to timberland conversion (Humboldt County 2017a). As parcel sizes go down, the cost of timber harvest per acre (permitting and harvest costs) increases, and timber production may no longer be the most economical use of the property. When this occurs, timberlands become more valuable as rural residential properties. In addition, when houses are placed on timberlands, the value of the structures may be greater than the standing timber and can render purchase of the land for timber production infeasible (Humboldt County 2017a). In the conservation realm, large tracts of timberland have been sold to state and federal agencies to create parks. These parklands have increased conservation and open space values, and have made Humboldt County a tourist destination (Humboldt County 2017a).

Timber Production Zones

Lands throughout the project site are zoned TPZ. The TPZ classification places standards and restrictions for preservation of timberlands, for growing and harvesting timber. Acceptable uses include growing and harvesting timber and accessory uses. Provided that they do not inhibit the growing and harvesting of timber, permitted uses include management for watershed and fish and wildlife habitat—a use integrally related to the growing, harvesting, and processing of forest products—including roads, log landings, and log storage areas; the erection, construction, alteration, or maintenance of gas, electric, water, or communication transmission facilities; grazing and other agricultural uses; construction of single-family dwelling units; and passive recreational use of the land by the public.

3.3.2 REGULATORY SETTING

FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations, or laws related to agriculture and forestry resources are applicable to the project.

STATE PLANS, POLICIES, REGULATIONS, AND LAWS

Williamson Act Contracts

The California Land Conservation Act of 1965, commonly known as the Williamson Act, enables local governments to form contracts with private landowners to promote continued agricultural or related open space uses. In return, landowners receive property tax assessments that are based on farming and open space uses rather than full market value and development potential. The State of California ceased subvention (subsidy) payments in 2009 because of statewide budget concerns. The contracts are renewable annually and may restrict the land to agricultural use for at least 10 years.

The landowner may end the contract by submitting a Notice of Nonrenewal, which starts a 9-year nonrenewal period during which the annual tax assessment continually increases until it is equivalent to current tax rates. The contract is then terminated. Contract cancellation involves an extensive review and approval process. In addition, if a contract is cancelled, the landowner may be required to pay a fee of up to 25 percent of the property value under state and local Williamson Act requirements. The local jurisdiction approving the cancellation must find that the cancellation is consistent with the purpose of the California Land Conservation Act or is in the public interest (California Government Code Section 51282).

An expanded version of the Williamson Act, known as the Farmland Security Zone Act, was enacted in 1998. A Farmland Security Zone Act contract offers landowners greater property tax reduction in return for an initial contract term of 20 years, with renewal occurring automatically each year. Land restricted by a Farmland Security Zone Act contract is valued for property assessment purposes at 65 percent of its land conservation act valuation, or 65 percent of its Proposition 13 valuation, whichever is lower.

Z'berg-Nejedly Forest Practice Act of 1973

The Z'berg-Nejedly Forest Practice Act of 1973 (California Code of Regulations Title 14, Article 7) is the primary forest regulation statute in California and generally is referred to as the Forest Practice Act (FPA). The FPA provides for creation of a State Board of Forestry to manage forest practices and resources, and the Board has developed forest practice rules to implement the FPA.

The California Department of Forestry and Fire Protection (CAL FIRE) enforces the requirements of the FPA and serves as lead agency for projects that fall within the scope of the FPA. If timber operations (as defined by California Public Resources Code [PRC] Section 4527) are part of a project (or would be affected by a project), these operations must be approved by CAL FIRE. The FPA requires that owners of nonfederal timberland apply for a timber conversion permit (TCP) for a project that would convert timberland to another use. Certain exemptions apply, including exemptions for small areas of conversion (less than 3 acres), and for utility rights-of-way. If CAL FIRE determines that a TCP is required, a timber harvesting plan or notice of exemption also may be required (CAL FIRE 2018).

Timberland Production Zones

According to the Z' Berg-Warren-Keene-Collier Forest Taxation Reform Act (California Government Code Sections 51110 to 51119.5), enacted in 1976, counties must provide the zoning of land used for growing and harvesting timber as Timberland Production Zones. TPZs were established to preserve and protect timberland from conversion to other uses and avoid land use conflicts.

The Timberland Productivity Act (California Government Code Sections 5110 to 5115) of 1982 later formalized the state's policy in favor of sustainable harvest, focusing on the long-term availability of timber resources. Five compatible uses are identified for TPZ lands:

- ▶ watershed management;
- ▶ fish and wildlife management, including hunting and fishing;
- ▶ uses related to the growing, harvesting, and processing of forest products;
- ▶ construction, alteration, or maintenance of utility facilities; and
- ▶ grazing.

Lands zoned TPZ must be maintained for timber production for 10 years following the zoning declaration; after 10 years, the TPZ status automatically renews each year. If a property owner petitions to have the land rezoned out of TPZ, the land is normally subject to a 10-year slide-out process. Alternatively, if immediate rezoning is requested, an extensive review and approval process is required. The minimum parcel size for TPZ zoning is 160 acres, although smaller parcels may be zoned TPZ, if a joint timber management plan is prepared.

California Public Resources Code

PRC Section 21060.1 contains the following definition of agricultural land:

- a) "Agricultural land" means prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture land inventory and monitoring criteria, as modified for California.
- b) In those areas of the state where lands have not been surveyed for the classifications specified in subdivision (a), "agricultural land" means land that meets the requirements of "prime agricultural land" as defined in paragraph (1), (2), (3), or (4) of subdivision (c) of Section 51201 of the Government Code.

The PRC provides the following definition for forest land:

- ▶ Section 12220(g) defines forest land as land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.
- ▶ Section 4526 defines timberland as land, other than land owned by the federal government and land designated by the 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.

California Government Code

California Government Code definitions applicable to the project include the following.

- ▶ Section 51104(g) defines “timberland production zone” to mean an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses. Compatible uses are defined under Section 51104(h) and include the construction and maintenance of electric transmission facilities.
- ▶ Section 51112 identifies situations which would warrant a decision that a parcel is not devoted to and used for growing and harvesting timber or for growing and harvesting timber and compatible uses.
- ▶ Section 51113 allows the opportunity for a landowner to petition that his or her land be zoned timberland production.
- ▶ Section 51201(c)(5) defines “prime agricultural land” as land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than \$200 per acre for 3 of the previous 5 years.

REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

Humboldt County General Plan

The following policies in the Land Use Element of the *Humboldt County General Plan* (Humboldt County 2017b) are applicable to the project.

- ▶ **Policy AG-P6: Agricultural Land Conversion—No Net Loss.** Lands planned for agriculture (AE, AG) shall not be converted to non-agricultural uses unless the Planning Commission makes the following findings:
 - A. There are no feasible alternatives that would prevent or minimize conversion;
 - B. The facts support an overriding public interest in the conversion; and
 - C. For lands outside of designated Urban Development Boundaries, sufficient off-setting mitigation has been provided to prevent a net reduction in the agricultural land base and agricultural production. This requirement shall be known as the “No Net Loss” agricultural lands policy.

“No Net Loss” mitigation is limited to one or more of the following:

1. Re-planning of vacant agricultural lands from a non-agricultural land use designation to an agricultural plan designation along with the recordation of a permanent conservation easement on this land for continued agricultural use; or
2. The retirement of non-agricultural uses on lands planned for agriculture and recordation of a permanent conservation easement on this land for continued agricultural use; or
3. Financial contribution to an agricultural land fund in an amount sufficient to fully offset the agricultural land conversion for those uses enumerated in subsections a and b. The operational details

of the land fund, including the process for setting the amount of the financial contribution, shall be established by ordinance.

- ▶ **Policy AG-P16: Protect Productive Agricultural Soils.** Development on lands planned for agriculture (AE, AG) shall be designed to the maximum extent feasible to minimize the placement of buildings, impermeable surfaces or nonagricultural uses on land as defined in Government Code Section 51201(c) 1- 5 as prime agricultural lands.
- ▶ **Policy AG-S7: Prime Agricultural Land.** Prime agricultural land per California Government Code Section 51201(c) means:
 - A. All land which qualifies for rating as Class I or Class II in the Soil Conservation Service land use capability classifications.
 - B. Land which qualifies for rating 80 through 100 in the Storie Index Rating.
 - C. Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the USDA.
 - D. Land planted with fruit or nut bearing trees, vines, bushes or crops which have a non-bearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than \$200.00 per acre.
 - E. Land which has returned from the production of unprocessed agricultural plant products on an annual gross value of not less than \$200.00 per acre for three of the five previous years.
- ▶ **Policy FR-P8: Protection of High Quality Timberlands.** Timberlands planned and zoned for timber production should be retained for timber production, harvesting and compatible uses, and reclassification of the Timberland Production Zones (TPZ) shall be done in accordance with the statutory requirements.

3.3.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are based on the environmental checklist in Appendix G of the State CEQA Guidelines, as amended. Implementing the project would result in a significant impact related to agriculture or forestry resources if it would:

- ▶ convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to nonagricultural use;
- ▶ conflict with existing zoning for agricultural use or a Williamson Act contract;
- ▶ conflict with existing zoning for, or cause rezoning of, forestland (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]);

- ▶ result in the loss of forestland or conversion of forestland to nonforest use; or
- ▶ involve other changes in the existing environment that, because of their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to nonforest use.

Humboldt County is not included in the latest California Department of Conservation FMMP. Humboldt County defines Prime Agricultural land based on criteria listed in California Government Code Section 51201(c). Therefore, this DEIR has considered the factors outlined in Section 51201(c) to determine whether conversion of Prime Farmland would result from implementation of the project.

ANALYSIS METHODOLOGY

The evaluation of potential impacts of the project on agricultural resources was based on a review of field conditions, aerial photographs, policy guidance from the *Humboldt County General Plan* (Humboldt County 2017b), and the Humboldt County Zoning Code.

Humboldt County’s Williamson Act Land and Prime Agricultural Land maps and the criteria provided in California Government Code Section 51201(c) were used to evaluate the agricultural significance of lands on the project site. Geographic information system (GIS) data were used to determine the potential acreage of Williamson Act contract land and prime farmland that would be affected by implementation of the project.

As discussed above, Appendix G of the State CEQA Guidelines defines forestland as land that can support 10 percent native tree cover and woodland vegetation of any species—including hardwoods—under natural conditions, and that allows management of one or more forest resource—including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation—and other public benefits (PRC 12220[g]). Therefore, evaluation of impacts on forestry resources was based on the potential for the project to substantially affect timber resources, reduce native tree cover, affect suitable habitat for birds and other wildlife, or affect scenic values. See Section 3.5, “Biological Resources,” for a detailed description of the methodology used to identify forestry resources.

ISSUES NOT DISCUSSED FURTHER

Conversion of Important Farmland to Nonagricultural Use—Humboldt County is not included in the latest California Department of Conservation FMMP. Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the FMMP, to nonagricultural uses.

Conversion of Prime Farmland as Defined by California Government Code Section 51201(c)—No project features would be located on soils rated Class I or II in the NRCS land use capability classification for irrigation or located on soils with a rating of 80–100 on the Storie Index (NRCS 2019). Based on NRCS soil productivity data, the project features would not be located on soils that have an annual carrying capacity equivalent to at least one animal unit per acre as defined by the USDA (NRCS 2019). The project area is not planted with fruit or nut bearing trees, vines, or bushes, and the project area has not been used for the production of unprocessed plant products within the last 5 years. Therefore, the project features would not be located on prime agricultural land as defined under California Government Code Section 51201(c).

Conflict with Existing Zoning for Agricultural Use—Lands in the eastern and western portions of the project area are zoned AE. A conditional use permit is required in the AE zone for the project. Accordingly, the project

applicant is submitting a conditional use permit application, pursuant to County Code Section 3.1.2, which would allow all project-related activities. With approval of the conditional use permit, the project would not conflict with the AE zoning district.

Conflict with Existing Zoning for, or Cause Rezoning of, Forest Land, Timberland, or Timberland Zoned Timberland Production—Lands throughout the project area are zoned TPZ. Construction and operation of electrical distribution and transmission lines are permitted uses in a TPZ. Construction and operation of wind generation facilities are conditionally permitted in a TPZ. Thus, the project would not conflict with existing zoning for, or cause rezoning of, forestry resources.

IMPACTS AND MITIGATION MEASURES

<p>IMPACT 3.3-1</p>	<p>Conflict with Existing Williamson Act Contracts. <i>Long-term project features would be located on approximately 27 acres of Williamson Act contract lands that would no longer be devoted to the production of agricultural commodities for commercial purposes. However, wind generation is a compatible use. Therefore, this impact would be less than significant.</i></p>
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The 6,820 acres of AE zoned property are under existing Williamson Act contracts. Lands under Williamson Act contracts generally are within and in the vicinity of the eastern and western portions of the project site (Figure 3.3-1). General Provision 4 of the *Guidelines for Establishment of Agricultural Preserves in the County of Humboldt* (Humboldt County 2016) states:

Lands under contract within an agricultural preserve shall be used for the producing of agricultural commodities for commercial purposes and uses compatible with agriculture. The majority of the land area of any property under contract must be devoted to agricultural pursuits consistent with the purpose of the preserve in which the property is located.

The wind turbine generators and the permanent access road in the western portion of the project area and the generation transmission line (gen-tie) alignment in the eastern portion of the project area would occupy approximately 27 acres of Williamson Act contract lands within the project site that are used for livestock grazing. The Williamson Act includes “electric facilities” as a compatible use (California Government Code Section 51238.1[s][1]). The County’s updated Resolution Establishing Uniform Rules Including Compatible Uses identified such facilities as a compatible use, provided that a use permit is secured. The project was presented to the Humboldt County Williamson Act Advisory Committee on February 14, 2019. The committee recommended that the use be found compatible with the Williamson Act program guidelines. This impact would be **less than significant**.

The Bridgeville Substation site is not on land subject to an agricultural preserve; thus, **no impact** would result from the expansion of the substation.

<p>IMPACT 3.3-2</p>	<p>Conversion of Forestland to Nonforest Uses. <i>Project implementation would include the harvest of merchantable timber from up to 836 acres and would permanently convert up to 91 acres of forestland. This impact would be less than significant.</i></p>
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There are 1.9 million acres of forestland in Humboldt County, 35 percent of which are publicly held (Humboldt County 2017b). Construction of the wind turbine generators, meteorological towers, gen-tie, substation, and access roads would temporarily affect up to 836 acres of forestland. Trees that meet the definition of “merchantable timber” under the Forest Practice Rules and fall within forestland as defined by PRC Section 12220[g] would be cut, hauled from the site, and processed in local mills. Following the removal of merchantable timber, temporary impact areas would be revegetated with trees at a 1:1 ratio; however, up to 91 acres of project features would remain permanently, thereby reducing the total amount of timberland available. Removal of up to 91 acres of timber would result in a reduction of less than 0.00007 percent of the total private timberlands in Humboldt County. The project applicant would apply for the applicable timber harvest document, and CAL FIRE would ensure that the timber harvest is done in accordance with the Forest Practice Rules and all industry standards. Given the project’s minimal contribution to net forest loss, this impact would be **less than significant**.

The expansion of the Bridgeville Substation site would not remove any timber; thus, **no impact** associated with the substation expansion would occur.