

3.2 Agricultural and Forest Resources

This section describes existing agricultural and forest resources in the county, describes the proposed project's effects on agricultural and forest resources, and recommends mitigation to reduce significant impacts to a less-than-significant level. Information about the project vicinity was obtained from a review of the Shasta County General Plan and data from the Farmland Mapping and Monitoring Program.

3.2.1 Existing Conditions

Environmental Setting

This section discusses the existing conditions in the project area. Federal, state, and local regulations related to agricultural and forest resources that would apply to the proposed project are discussed in *Regulatory Setting* below.

Study Area

The study area for the analysis of agricultural and forest resources is Shasta County.

Agricultural Resources

Land Classification Concepts and Terminology

Farmland quality refers to the ability of land to support various types and intensities of crop or livestock production. The factors that affect farmland quality include physical and chemical composition of soils, topography, climate, and availability of irrigation water. Various assessment tools are used to evaluate these factors and characterize farmland quality.

One of these tools is the Important Farmland Mapping System, which is used by the California Department of Conservation as part of its Farmland Mapping and Monitoring Program. Important Farmland maps are prepared periodically for most of the state's agricultural areas based on information from Natural Resources Conservation Service soil survey maps, land inventory and monitoring criteria developed by the Natural Resources Conservation Service, and land use information mapped by the California Department of Water Resources. These criteria are generally expressed as definitions that characterize the land's suitability for agricultural production, physical and chemical characteristics of the soil, and actual land use. Both the maps and definition criteria are utilized in this section to evaluate potential impacts.

The Important Farmland Mapping System incorporates eight mapping categories; five of them relate to farmlands, and the other three are associated with lands used for nonagricultural purposes. The five farmland mapping categories are summarized below.

- **Prime Farmland:** Lands with the combination of physical and chemical features best able to sustain long-term production of agricultural crops. The land must be supported by a developed irrigation water supply that is dependable and of adequate quality during the growing season. It also must have been used for the production of irrigated crops at some time during the 4 years before mapping data were collected.

- **Farmland of Statewide Importance:** Lands with agricultural land use characteristics, irrigation water supplies, and physical characteristics similar to those of Prime Farmland but with minor shortcomings, such as steeper slopes or less ability to retain moisture.
- **Unique Farmland:** Lands with lower-quality soils used for the production of California's leading agricultural cash crops. These lands are usually irrigated but may include nonirrigated orchards or vineyards, as found in some of the state's climatic zones.
- **Farmland of Local Importance:** Lands of importance to the local agricultural economy, as determined by each county's board of supervisors and a local advisory committee.
- **Grazing Land:** Lands in which the existing vegetation is suited to the grazing of livestock.

Agricultural Resources in the Study Area

Agriculture accounts for an important segment of the county's economic base and comprised 333,828 acres in Shasta County in 2002. Field crops comprised nearly 40% of this total and livestock sales comprised approximately 32%. Shasta County ranked 42nd among the 58 California counties in 2002 in the value of total agricultural production. The General Plan describes numerous benefits of agricultural use; these include wildlife, aesthetic, and water quality benefits.

Recent trends in Shasta County show an increase in the number of farms and a decrease in their size, with a loss of agricultural land from 1997 to 2004 amounting to 14,246 acres, or a 4.1% decline. Most farms are devoted to pastureland and/or rangeland (Shasta County 2004).

Agricultural Resources in the Project Vicinity

Figure 3.2-1 shows farmland designations in the project vicinity. As shown in the figure, while most of the project area has not been inventoried for agricultural importance, the northern portion of the project site is considered Grazing Land and Other Land by the Farmland Mapping and Monitoring Program.

The General Plan describes the project vicinity's agricultural resources as consisting of large mountain meadows at elevations above 3,000 feet in the northeast portion of the county. Burney Creek Valley, immediately north of Burney, and Goose Valley, approximately 4–5 miles east of the project site, are the nearest large agricultural areas, with irrigated meadows for grazing and growing crops. Much of the Burney Creek Valley and Goose Valley areas are under Williamson Act contracts, with just under half considered prime agricultural land (California Department of Conservation 2006).

Forest Resources

Forest Resources in the Study Area

In 2002, Shasta County was the third ranking timber county in California. Approximately one-half of the county's total land is in commercial timber production; nearly one-half of the county's timberland is in non-federally owned timber production zones (TPZs) pursuant to California's Forest Taxation Reform Act of 1976.

Under the Forest Taxation Reform Act, non-federal timber producing lands can be classified by the County's Zoning Ordinance as TPZs through a process involving the Assessor, Planning Commission, Board of Supervisors, and timber owners. Such lands may be used for growing of

forest products and compatible uses only, and property taxes for these lands are based on these limited uses.

Forest Resources in the Project Vicinity

The project area is designated as a Timberland (T) district in the Shasta County General Plan and is zoned as a Timber Production (TP) district in Chapter 17.08 of the Shasta County Zoning Ordinance. The proposed project is located in an area predominantly used for timber production (Figure 3.2-2). The project area is on private land replanted with ponderosa pine following the 1992 Fountain Fire. The Fountain Fire was a devastating forest fire that began on August 20, 1992. The blaze was set by an arsonist approximately 10 miles southwest of Moose Camp. The fire destroyed a total of 64,000 acres, or 100 square miles, prior to containment on August 28. A large amount of the timbered areas burned were lands managed by Roseburg Resources, Sierra Pacific Industries, and Fruit Growers Supply Company. All three timber companies have played significant roles in replanting the burned areas through extensive reforestation programs.

Most of the land east of Hatchet Mountain is either held by private timber companies or under the jurisdiction of Lassen National Forest. Most of the land west of Hatchet Mountain is under private ownership or within the Shasta-Trinity National Forest (Figure 3.2-3).

Regulatory Setting

Federal Regulations

Timber production on federal land in Shasta County, including Shasta-Trinity and Lassen National Forests, is governed by federal regulations administered by the U.S. Forest Service (Forest Service) and through resource management plans established for each forest. The role of local government is limited with respect to projects, planning, and management of lands under Forest Service jurisdiction. If a proposed project on National Forest Lands is determined to be incompatible with the direction of an adopted forest plan, the project will be revised or not permitted. Conflicts that recur will result in a review of the relevant management direction of the Forest Plan according to its monitoring and evaluation process, and may lead to an amendment or revision to the Forest Plan. Projects on private lands that could affect Forest Service land downstream of the project would be evaluated by the Forest Service for cumulative or indirect impacts on federal lands.

State Regulations

California Farmland Mapping and Monitoring Program

The goal of the California Farmland Mapping and Monitoring Program is to provide consistent and impartial data to decision makers for use in assessing present statuses, reviewing trends, and planning for the future of California's agricultural land resources. The Farmland Mapping and Monitoring Program produces updated Important Farmland maps, which are a hybrid of resource quality (soils) and land use information, every 2 years. These maps identify Prime Farmland, Unique Farmland, Farmland of Statewide Importance, Farmland of Local Importance, urbanized land, and other lands. Data also are released in statistical formats, principally the biennial California Farmland Conversion Report.

California Land Conservation Act of 1965 (Williamson Act)

The purpose of the California Land Conservation Act of 1965 (California Government Code 51200–51295), commonly known as the Williamson Act, is to provide incentives, through reduced property taxes, to deter the early conversion of agricultural and open space lands. In return for the preferential tax rate, the landowner is required to sign a contract with the county or city agreeing not to develop the land for a minimum 10-year period. Contracts are automatically renewed annually unless a party to the contract files a notice of nonrenewal or petitions for cancellation. All lands defined by the state as “prime farmland, other than prime farmland, and open space land” are eligible for coverage by a Williamson Act contract. Land classified as other than Prime Farmland or open space land can be placed under contract if it is located in an area designated by a county or city as an agricultural preserve.

Forest Taxation Reform Act of 1976

Private timberlands in California are governed by the Forest Taxation Reform Act of 1976. The Act created the TPZ concept to preserve forest lands from encroachment by other incompatible land uses. The Act identifies five compatible uses: management for watershed; management for fish and wildlife (i.e., hunting and fishing); uses related to the growing, harvesting, and processing of forest products; construction, alteration, or maintenance of utility facilities; and grazing. Other uses, such as residential use, may be discouraged but allowed by approval of a special use permit. Landowners of timber harvests on private lands not located within a TPZ are required to submit and obtain approval of a Timber Harvest Plan from the California Department of Forestry and Fire Protection (Cal Fire) or file for an exemption.

Z’berg-Nejedly Forest Practice Act of 1973–California Forest Practice Act

The first California Forest Practice Act was adopted in California in 1946 to regulate the harvest of timber on private lands. The original Forest Practice Act was superseded by the Nejedly-Z’berg Forest Practice Act of 1973, which is now the primary forest regulation statute in California and is generally referred to as the Forest Practice Act (FAO Corporate Document Repository 2007). This new law reestablished a nine-member State Board of Forestry, whose mandate is to manage forest practices and forest resources in California. The Board of Forestry developed a set of Forest Practice Rules to coincide with implementation of the Forest Practice Act. The Board of Forestry is the policy arm of Cal Fire.

Cal Fire has enforcement responsibility for requirements of the Forest Practice Act. Cal Fire is also the lead agency for those parts of projects involving the scope of the Forest Practice Act. If any timber operations (as defined by PRC Section 4527) are involved with a project, they must be approved by Cal Fire prior to undertaking operations. Accordingly, the potential conversion of the 73 acres of timberland to developed uses may require a Timberland Conversion Permit (TCP) from Cal Fire (Robertson pers. comm.). The Forest Practice Act requires owners of nonfederal timberland to apply for a TCP using form RM-56. If a TCP is determined to be required by Cal Fire, a Timber Harvesting Plan (THP) or notice of exemption may also be required to be filed in conjunction with the landowners. THPs are submitted to Cal Fire for review and approval of commercial timber harvesting on all non-federal timberlands. The THPs are reviewed for compliance with the Forest Practice Act and Forest Practice Rules. THPs must be prepared by Registered Professional Foresters, and operations must be carried out by timber operators licensed by Cal Fire. THPs are considered functionally equivalent to EIRs under CEQA, and require the detailed evaluation of forestry, soil, water, plant, fish and wildlife resources (Klamath Resource Information System 2007).

The project area, or portions of the project area may be determined to be exempt from TCP requirements upon evaluation by Cal Fire under 14 CCR 1104(b) or (c), which allows for the “harvesting of trees in order to construct or maintain a right of way by a public agency, public or private utility that is exempt from the requirements to obtain a TCP or file a THP.” This exemption, known as the *Public Agency, Public and Private Utility Right of Way Exemption*, exempts public and private utilities from the TCP and the THP requirements for construction and maintenance of gas, water, sewer, oil, electric, and communications rights-of-way. 14 CCR 1104.1(d), (e), (f), and (g) contain specifications of allowable right-of-way widths and supplemental clearances. If the harvest is a timber operation per PRC 4527, a notice of exemption is required to be filed by the timber owner. A licensed timber operator is required in order to remove the harvested trees from the property. If the harvested trees are not sold, bartered, or traded for commercial purposes, a notice of exemption is not required. The timber owner is responsible to pay all yield taxes for the timber harvested.

Local Regulations

Shasta County General Plan

Chapter 6.1 Agricultural Lands

Objectives

AG-1 Preservation of agricultural lands at a size capable of supporting full-time agricultural operations (designated on the land use maps as A-C or A-G) in order to allow the continuation of such uses and to provide opportunities for the future expansion and/or establishment of such uses.

AG-2 Preservation of agricultural lands at a size capable of supporting part-time or second income, but not full-time, agricultural operations (designated on the land use maps as A-cg) in order to allow the continuation of such uses and to provide opportunities for the future expansion and/or establishment of such uses.

AG-3 Recognition by Shasta County residents that the preservation of agricultural lands for agricultural uses, both large and small scale, is in the public interest because it preserves local and regional food supplies and is an important contributing industry to the Shasta County economy.

AG-4 Recognition by Shasta County residents that preservation of agricultural lands, both large and small-scale, provides privately maintained open space, facilitates a rural lifestyle, and requires Countywide understanding of the problems facing ranchers and farmers.

AG-5 Protection of agricultural lands from development pressures and or uses which will adversely impact or hinder existing or future agricultural operations.

Policies

AG-h The site planning, design, and construction of on-site and off-site improvements for nonagricultural development in agricultural areas shall avoid unmitigable short- and long-term adverse impacts on facilities, such as irrigation ditches, used to supply water to agricultural operations.

Chapter 6.2 Timberlands

Objectives

T-1 Preservation of timberlands suitable for forest management and production to allow for the continuation of such uses or to provide opportunities for the future establishment of such uses.

T-2 Protection of timberlands from incompatible adjacent land uses which adversely impact forest management activities.

Policies

T-a Preservation of timberland shall be achieved by the use of the Timberlands land use designation. This designation shall be applied to lands as follows:

- Lands now within a Timber Production Zone (TPZ) in accordance with the Forest Taxation Reform Act (hereinafter Act).
- Lands which may be eligible to enter into a TPZ in accordance with the Act.
- Lands not contained within either of the above categories which are suitable for timber production as shown on the adopted land use maps.
- Timber producing lands which are sold or traded to a private landowner by a federal or state agency.

T-b Timberlands within a TPZ shall be regulated as to use and subdivision as set forth in the Act. In addition to the permitted uses listed in the Act, other related and compatible uses may be conditionally permitted under applicable provisions of the Zoning Plan.

T-c Timberlands submitted for entrance into a TPZ in accordance with the Act shall be comprised of single or contiguous parcels whose resource value(s) and size(s) comply with Table T-3.

T-d Timberlands not within a TPZ shall be subject to the County development standards and to the following requirements as to their use and residential density.

Use—The primary use of these lands shall be for forest management and production. Secondary uses may include uses which do not impede forest management or the processing or utilization of timber. Such uses include limited residential and recreational uses, mineral exploration and extraction and processing where the surface area will be reclaimed, power generation facilities, and small hydropower facilities.

Shasta County Zoning Ordinance

The Shasta County Zoning Ordinance provides for a Timber Production (TP) zoning designation, which is separate from, but consistent with, the federal TPZ. Section 17.08.020 of the Zoning Ordinance provides that the TP zoning designation is intended for the growing and harvesting of timber and for uses that are an integral part of a timber management operation, as well as recreational uses compatible with timber production. Living quarters for persons employed in a TP zoning district, uses supporting timber production, mineral extraction, and public improvements are conditionally permitted under Section 17.08.030 of the Zoning Ordinance.

Chapter 17.08, Timber Production (TP) Zoning District

17.08.020 Permitted uses

The following uses are permitted outright in the TP district.

- A. Forest management.

- B. Grazing, beekeeping, watershed management, fish and wildlife habitat, and other uses directly incidental to and wholly compatible with the primary use.
- C. Hunting, fishing, camping, and similar recreational uses not involving any permanent improvement of the land or interfering materially with the primary use.
- D. Christmas tree farm. (Prior code §5.02.030[B].)

17.08.030 Uses requiring use permit

The following uses are permitted in the TP district if a use permit is issued.

- A. Living quarters for persons fully and necessarily employed on the premises.
- B. Other uses indirectly incidental to forest management, including permanent wood processing installations.
- C. Development and use of mineral resources, such as sand, gravel, cinders, rock, ores, minerals, water and steam, for other than forest management, provided the development will not significantly detract from the use of the property for forest management. Development which will preclude forest management in limited areas and which will be restored for forest management shall not be deemed significant under this section.
- D. The erection, construction, or alteration of a gas, electrical, water or communication transmission facility, or other public improvements, in accordance with Government Code Section 51152.
- E. Processing of diatomaceous earth on a site consisting of less than three acres when the site is located within the same region and in relatively close proximity to the mining operation. (Prior code §5.02.030[C].) (Amended March 16, 1995.)

3.2.2 Impact Analysis

This section describes the impacts relating to agricultural and forest resources that could result from implementation of the proposed project. It describes the methods used to determine the project's impacts and lists the thresholds used to conclude whether an impact would be significant. Measures to mitigate (avoid, minimize, rectify, reduce, eliminate, or compensate for) significant impacts accompany each impact discussion.

Methodology

Farmland designations were identified on the basis of Farmland Mapping and Monitoring Program mapped data from the Department of Conservation (2004). Properties currently under Williamson Act contract were identified by a review of available maps from the Department of Conservation (2006).

This analysis is a qualitative assessment of the proposed project's potential effects on agriculture and forest resources in the project area.

Thresholds of Significance

The proposed project would have a significant impact on agricultural and forest resources if it would result in any of the conditions listed below.

- Convert to non-agricultural use Prime Farmland, Farmland of Statewide Importance, or Unique Farmland as defined by the Department of Conservation.
- Conflict with existing zoning for agricultural or forest uses or a Williamson Act contract.
- Involve other changes in the existing environment, which, due to their location or nature, could result in the conversion of farmland or timberland to nonagricultural use and result in a substantial reduction of the available of agricultural or forest resources.

Impacts and Mitigation Measures

The project site is not shown as prime, unique, or important farmland in the current report of the Department of Conservation's Farmland Mapping and Monitoring Program (2004). Consequently, the proposed project would not convert prime farmland, unique farmland, or farmland of statewide importance to nonagricultural use. There would be no impact.

The project site is not currently under a Williamson Act Contract nor is it zoned for agricultural use. Consequently, the project would not conflict with existing zoning for agricultural use or a Williamson Act Contract.

The project site is designated as Timberland (T) in the Shasta County General Plan and is zoned as a Timber Production (TP) district in Chapter 17.08 of the Shasta County Zoning Ordinance. Uses allowed under the Timberland General Plan land use designation are the same as those allowed within the TP zoning district, and generally consist of timber production and timber production support uses. Electrical power generating facilities are also allowed in the TP district with the issuance of a Conditional Use Permit. See discussion of *Consistency with Adopted Plans and Policies and Zoning* in Section 3.9, *Land Use and Planning*, for a more detailed analysis of the project's consistency with TP zoning.

The project site is not located on farmland, nor are there adjacent farming uses. Consequently, the project would not result in the conversion of farmland to nonagricultural uses. Agricultural areas in the general project vicinity are located approximately 4–5 miles east of the project site across mountainous terrain. Because of the limited size of the project and its distance to these areas, the project is not anticipated to result in their conversion.

Impact AG-1: Temporary (136 acres) and permanent (73 acres) conversion of timberland to developed uses (less than significant)

The project would result in the temporary conversion of approximately 136 acres (for project construction) of timberland and the permanent conversion of approximately 73 acres of timberland to developed power generation facilities uses. Between 42 and 68 turbines would be installed on foundations in the project area. The area of permanent conversion is not the entire area under lease, but rather the footprint of the permanent project components (e.g., turbine foundations, operations and maintenance facility, road widening) as described in Chapter 2, *Project Description*. The applicant is required under the lease agreements to replant the areas temporarily affected by construction activities. All timber surrounding the permanent project footprint, including the areas replanted after project construction, will continue to grow without

interference from the proposed project. Trees will also continue to grow under the rotor-swept area of the turbines and to within 30 feet of the buildings. All lands in the project area beyond the project footprint (i.e., unutilized portions of the leased area) would remain in timber production.

This impact is considered less than significant because a majority of the project area would be replanted by the applicant, and timber would continue to be allowed to grow and be harvested in the project vicinity. In addition, the project lies within the TP district as defined in the Shasta County Zoning Ordinance. The purpose of the TP district is to preserve lands devoted to and used for growing and harvesting timber and to provide for uses compatible with the growing and harvesting of timber. Public utilities are permitted within the TP district with a Conditional Use Permit, provided the use is found to be compatible with and will not adversely affect surrounding land uses. The permanent conversion of 73 acres of timberland to the proposed developed power generation use is considered compatible with adjacent timber operations because the project would be a private energy production facility providing power for public consumption, as defined in the Shasta County Zoning Code. This impact is considered less than significant, and no mitigation is required.