

3.2

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## AGRICULTURAL RESOURCES

## **3.2 Agricultural Resources**

This section of the Draft EIR addresses potential impacts to agricultural resources on the project site and its surroundings. The analysis specifically focuses on the potential agricultural productivity of the soils on-site and the potential impacts that the project may have on the continued use of surrounding properties for agricultural production. At the Scoping Meeting on February 19<sup>th</sup>, 2009 and during the Notice of Preparation (NOP) period, comments were received from several public citizens regarding agriculture resources.

### **3.2.1 SETTING**

#### ***Environmental Setting***

##### **REGIONAL AGRICULTURAL INDUSTRY**

Shasta County was ranked 37<sup>th</sup> in the state for total value of agricultural production in 2007 as ranked in the *California Agricultural Resources Directory 2008-2009*, from the California Department of food and Agriculture. The County contains 1, 473 farms with a total land area of 390,812 acres according to the *2007 Census of Agriculture*, from the U.S. department of Agriculture. Main agricultural commodities include unspecified forest products, other hay, stockers and feeders, strawberry nursery plants, wild rice, alfalfa hay, pollination fees, rangeland and irrigated pastures, and breeding stock as ranked in the *California Agricultural Resources Directory 2008-2009*.

The *Shasta County General Plan* recognizes the importance of agricultural resources and the agricultural industry as a significant component of the County's economic base, as well as their role in maintaining the rural character of the County and supporting wildlife values. According to the General Plan, there is a trend toward small-scale agriculture within the County; since 1969, the number of farms has increased and the size of the farms decreased. The General Plan accordingly includes provisions directly related to small-scale agriculture, or part-time or second income farming, as well as for full-time farm operations. These provisions include a specific land use designation for small-scale agricultural uses, Agricultural Small Scale Cropland/Grazing (A-cg), and smaller minimum parcel size requirements for these types of uses.

##### **AGRICULTURAL ZONING AND LAND USE DESIGNATIONS**

The current General Plan land use designation for 86 acres of the project site is Agricultural Small Scale Cropland/Grazing (A-cg). However, six acres of the southern portion of the site along Knighton Road is designated as Commercial (C). General Plan Policy CO-t specifies that commercial development in the Churn Creek Bottom area shall be strictly limited to the I-5 interchange/Knighton Road intersection. Commercial development adjacent to the interchange has been recognized as appropriate in the Shasta County General Plan.

Similarly, the current zoning classification for most of the project site is Limited Agriculture (A-I), combined with Restrictive Flood District (F-2); and the southernmost portion of the site along Knighton Road is zoned Planned Development (PD), combined with the Restrictive Flood

District (F-2). Figures 3.9-1 and 3.9-2 in Section 3.9, illustrate current land use designations and zoning classifications for the project site and adjacent lands. It should be noted that Shasta County has historically limited rezoning on properties until a specific application for development is presented. This is consistent with the County’s intention to limit commercial development to the Knighton Road interchange while allowing some flexibility in setting the boundary for such development.

**AGRICULTURAL SOILS**

According to the Natural Resources Conservation Service (NRCS) the project site consists of three different soil types: Churn loam (CcA), Churn gravelly loam (CeB), and Tehama loam (TbA). These soil types are described in Table 3.2-1 below and are illustrated in Figure 3.2-1.

**Table 3.2-1  
Project Site Soil Types**

Soil Name	# of Acres	% of Project Site	Storie Index	Capability Classification	Crop Suitability
Churn loam, 0 to 3 percent slopes (CcA)	80.8	87.4%	69	Ile	Dry grain, irrigated pasture and alfalfa, orchard, berries, truck crops
Churn gravelly loam, 3 to 8 percent slopes (CeB)	7.5	8.1%	90	I	Dry grain, irrigated pasture and alfalfa, orchard, berries, truck crops
Tehama loam, 0 to 3 percent slopes (TbA)	4.2	4.5%	72	IIs	Small grains, pasture, row crops, orchards

Source: Natural Resource Conservation Service (NRCS), 2004

The Storie Index rating expresses numerically the relative degree of suitability of a soil for general intensive agricultural uses at the time of the evaluation. The rating is based on soil characteristics and is obtained by evaluating soil surface and subsurface chemical and physical properties, as well as landscape surface features. A Storie Index rating of 100 is considered the best while a rating of 1 is considered the worst.

Land capability is a system of grouping soils primarily on the basis of their capability to produce common cultivated crops and pasture plants without deteriorating over a long period of time. Capability classes, the broadest groups, are designated by numerals I through VIII with I indicating few limitations that restrict the soil’s use and VIII indicating that the soil has limitations that nearly preclude its use for commercial crop production. Capability subclasses are soil groups within a class and are designated by the letters *e*, *w*, *s*, or *c*. In the case of the project site two capability subclasses are listed: *e* indicates that the main hazard is the risk of erosion unless close-growing plant cover is maintained and *s* indicates that the soil capability is limited because it is shallow, droughty, or stony. Capability units are designated by numerals 1 through 10 each indicating a different problem associated with the soil. In the case of the project site no capability units are listed.

## **IMPORTANT FARMLANDS**

The Farmland Mapping and Monitoring Program is a farmland classification system that is administered by the California Department of Conservation. The system classifies agricultural land according to its soil quality and irrigation status. The best quality agricultural land is called “Prime Farmland.” Prime Farmland is land that has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed according to current farming methods. The land must have been used for production of irrigated crops at least sometime during the two crop cycles prior to the mapping date.

The 2004-2006 Shasta County Soil Survey, which covers 1,021,213 acres of the county, indicates that 25,727 acres of the County are considered Important Farmland, 13,282 acres of which are considered Prime Farmland (California Department of Conservation, Division of Land Resource Protection). Between 2004 and 2006, the portion of the County included in the soil survey experienced a net loss of 202 acres of agricultural land to urban and built-up land, 67 of which were classified as Prime Farmland. The soil survey encompasses land within Shasta County’s incorporated cities as well as unincorporated areas.

As shown in [Figure 3.2-2](#), 78.4 acres of the project site are designated as Prime Farmland and 6.8 acres are designated as Unique Farmland. The remaining portion of the project site (7.5 acres) is classified as Other Land or Urban and Built Up. Large areas of Prime Farmland are located to the northeast and southeast of the site.

## **WILLIAMSON ACT**

As of 2007, there were approximately 187,184 acres in Shasta County under Williamson Act contracts. None of the parcels on the project site are currently under a Williamson Act contract. Additionally, no lands adjacent to the project site are currently under Williamson Act contracts ([Figure 3.2-3](#)).

## **LAND EVALUATION AND SITE ASSESSMENT MODEL (LESA)**

The Land Evaluation and Site Assessment (LESA) model was released by the Natural Resources Conservation Service (NRCS) in 1981. It is designed to provide objective ratings of the agricultural suitability of land compared to demands for nonagricultural uses of land. The model is composed of two sets of factors. The first set, Land Evaluation (LE), includes factors that measure the inherent soil-based qualities of land as they relate to agricultural suitability. The second set, Site Assessment (SA), includes factors that are intended to measure social, economic, and geographic attributes that also contribute to the overall value of agricultural land. The final LESA score is based on a scale of 0 to 100 with each set of factors contributing up to 50 points. [Table 3.2-2](#) below shows the thresholds of significance established by the NRCS.

**Table 3.2-2  
California LESA Model Scoring Thresholds**

<b>Total LESA Score</b>	<b>Scoring Decision</b>
0 to 39 Points	Not Considered Significant
40 to 59 Points	Considered Significant only if LE and SA subscores are each greater than or equal to 20 points.
60 to 79 Points	Considered Significant unless either LE or SA subscore is less than 20 points.
80 to 100 Points	Considered Significant

Source: California Department of Conservation Office of Land Conservation, 1997

A LESA model was prepared for the proposed project to determine if the conversion of the project site from potentially productive agricultural land to an urban use would be considered significant according to the NRCS. The proposed project achieved a total LESA score of 83.58 with a Land Evaluation sub-score of 40.08 and a Site Assessment sub-score of 43.5. This score indicates that the conversion of the project site would be considered significant.

### **AGRICULTURAL IRRIGATION FACILITIES**

The Anderson Cottonwood Irrigation District (ACID) maintains an open channel irrigation lateral that runs north to south through the project site (see [Figure 3.2-4](#)). This lateral flows into a 36-inch diameter irrigation pipe that runs along Knighton Road off the project site. From this lateral, two irrigation ditches run easterly, one bordering and one bisecting the eastern portion of the site, supplying irrigation water to the existing agricultural uses.

### ***Regulatory Setting***

#### **FEDERAL**

There are no specific federal regulations applicable to agricultural resources.

#### **STATE**

##### ***Williamson Act***

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. Local governments receive an annual subvention of foregone property tax revenues from the state via the Open Space Subvention Act of 1971.

## LOCAL

### ***Agricultural Use Ordinance (94-2)***

This ordinance advises future property owners when land divisions occur adjacent to an agricultural use area and that they may be subject to impacts from the conduct of existing and future agricultural activities which may be considered objectionable.

### ***Shasta County General Plan***

Policy AG-a: Agricultural lands in Shasta County shall be classified according to three general categories based on the following criteria:

Land designated on the land use maps as A-cg capable of supporting crop production by part-time or second income operators, with the following characteristics:

- Existing lands used for this purpose
- Lands which are not now, but could be, used for this purpose, based on resource characteristics (e.g., soil, climate, access to water)
- Applicable parcel size minimums of 5, 10, or 20 acres, as best suited to the locale, and applied to part-time agricultural areas found in table AG-3.

Policy AG-b: Existing agricultural lands and other County lands meeting the criteria in Table AG-2 shall be reviewed by the County at five year intervals to determine the appropriateness of either their current or potential classification as agricultural lands...Removal of land from the agricultural designation shall occur only when evidence and findings are provided which shows an overriding public need to develop the property for non-agricultural uses...

Policy AG-g: Lands designated A-cg shall be maintained to support both short- and long-term part-time agricultural activities as the primary land use while allowing subordinate auxiliary uses, including single family residences. Removal of agricultural soils and other activities which reduce the potential for agricultural production as the primary land use are prohibited, except in the following situations:

- a. Mineral extraction or mining on lands in the vicinity of a significant waterway where the County has adopted a stream corridor delineation upon consultation with the Department of Fish and Game...
- b. A deviation from minimum parcel size requirements may allow parcels as small as two acres in lieu of five-acre parcel sizes in exchange for creating a common area which is maintained in perpetuity for open space or other resource conservation activities (i.e. wetland)...

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

Table 3.2-3 provides a discussion of the proposed project’s consistency with applicable portions of Shasta County General Plan Policies related to agricultural resources.

**Table 3.2-3  
General Plan Consistency – Agricultural Resources**

<b>Policy No.</b>	<b>Finding</b>	<b>Discussion</b>
AG-a	Potentially Inconsistent	The project site has the characteristics listed in the General Plan for the A-cg designation and has been designated as such. Implementation of the proposed project will result in the redesignation of the site to Commercial. Potential inconsistencies with the site’s existing General Plan designations is discussed in Impact #3.9-2. The conversion of the site from agricultural to urban is discussed in Impact #3.2-1. The final determination of project consistency is a policy matter reserved for the Shasta County Board of Supervisors. This impact is potentially significant, unavoidable, and irreversible.
AG-b	Consistent	The project site is currently classified as Agricultural Land. The site would be removed from this classification in order to implement the proposed project. See Impact #3.2-1. Project approval will require the adoption of a Statement of Overriding Consideration by the County for the conversion of the project site from agricultural to non-agricultural uses. Adoption of this statement would indicate that sufficient evidence and findings were provided showing an overriding public need to develop the proposed project.
AG-g	Potentially Inconsistent	The project site is currently designated A-cg. Implementation of the proposed project would eliminate the potential for agricultural production as the primary land use on 67 acres of the project site. The final determination of project consistency is a policy matter reserved for the Shasta County Board of Supervisors. The conversion of the site from agricultural to urban is discussed in Impact #3.2-1. This impact is potentially significant, unavoidable, and irreversible.
AG-h	Consistent	A major open channel irrigation lateral runs from north to south through the center of the project site. Two irrigation ditches run easterly from this lateral providing irrigation water for agricultural uses on the site. Implementation of the proposed project would likely impact these facilities. See Impact #3.2-4 for a full analysis of this potential impact. With implementation of Mitigation Measure 3.2-4 the project will avoid unmitigatable short- and long-term adverse impacts on these facilities.

### **3.2.2 THRESHOLDS OF SIGNIFICANCE**

Consistent with Appendix G of the CEQA Guidelines, the proposed project is considered to have a significant impact on the environment if it will:

- 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
- Conflict with existing zoning for agricultural use, or a Williamson Act contract
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use

### **3.2.3 IMPACTS AND MITIGATION MEASURES**

#### ***Impact #3.2-1: Conversion and loss of Prime Farmland to a non-agricultural use.***

**Discussion/Conclusion:** A large portion of the project site is designated as Prime Farmland or Unique Farmland. Implementation of the proposed project would therefore result in the conversion of approximately 67.2 acres of Important Farmland (18 acres of the project site will remain viable for farming above the on-site waste water treatment plant subterranean leach field).

According to the County General Plan, there has been a significant loss of agricultural land in Shasta County since 1969.

As discussed above, a Land Evaluation and Site Assessment (LESA) model was prepared for the proposed project. The final score, 83.58, indicates that the conversion of the project site to a non-agricultural use is considered significant.

Because prime agricultural land is a non-renewable environmental resource, this impact is ***potentially significant, unavoidable, and irreversible.***

#### ***Mitigation Measures***

Implementation of the following mitigation measure will reduce this impact; however, there are no mitigation measures that can reduce this impact to a level of less than significant. Therefore, this impact is ***significant, unavoidable, and irreversible.***

#### ***Mitigation Measure #3.2-1:***

*Prior to recording any final map or issuance of any building permits for the project site, the project proponent shall preserve in perpetuity Prime Farmland of equal quality or better quality at a minimum ratio of 1:1, or 67.2 acres, and shall protect the land for agricultural uses through land use restrictions such as agricultural conservation easements. A qualified land conservation organization shall be used to facilitate the establishment of the conservation easements. To accomplish the above, the project proponent shall select three potential sites for consideration by the County Director of Resource Management. The sites shall be available as close as possible to the project site, to the satisfaction of the County Director of Resource Management. The proposed*

*conservation easement for the selected property shall be submitted to the County for review and approval.*

***Impact #3.2-2: Indirect conversion and loss of surrounding Important Farmland to non-agricultural use.***

**Discussion/Conclusion:** All lands adjacent to the project site are classified by the NRCS as “Prime Farmland if Irrigated.” The proposed project will not result in the expansion of any infrastructure to these lands thereby facilitating development; however, the project may still put pressure to develop on these adjacent lands by placing commercial development in close proximity. Placing commercial development adjacent to undeveloped Important Farmland may result in land use conflicts and nuisance complaints. In addition, the development of a retail commercial center may encourage landowners to convert agricultural land for complementary commercial uses or residential uses (see Impact #3.9-3). Because prime agricultural land is a non-renewable environmental resource, this impact is *potentially significant, unavoidable, and irreversible*.

***Mitigation Measures***

No mitigation measures are available to reduce this impact to a less than significant level; therefore, this impact is *significant, unavoidable, and irreversible*.

***Impact #3.2-3: Conflict with existing zoning for agricultural use.***

**Discussion/Conclusion:** As stated above, none of the parcels on the project site are currently under a Williamson Act contract. However, most of the project site is currently zoned Limited Agriculture (A-1) and Planned Development (PD), combined with a Restrictive Flood (F-2) district. The purpose of the A-1 zoning district is to preserve agricultural lands at a size capable of supporting part-time agricultural operations, typically operated as a hobby or to supplement the occupant’s income. Permitted uses include one family residence and various agricultural uses.

Additionally, the current General Plan land use designations for the project site are Agricultural Small Scale Cropland/Grazing (A-cg) and Commercial (C). The A-cg land use designation is applied to lands capable of supporting crop production by part-time or second income operators. (See Shasta County General Plan policy AG-g above.)

With the exception of the southern portion of the project site along Knighton Road, most of the site is designated in the General Plan and zoned for agricultural uses. However, the General Plan allows commercial development along the I-5 interchange/Knighton Road intersection. General Plan policy CO-u specifies that commercial development in the Churn Creek Bottom area shall be strictly limited to the I-5 interchange/Knighton Road intersection. Commercial development adjacent to the interchanges has been recognized in the Shasta County General Plan. The proposed project would convert adjacent acreage that contains prime agricultural land designated in the General Plan for small-scale agricultural uses to commercial uses. The proposed project raises the issue of the extent of commercial development around the I-5 interchange/Knighton

Road intersections as balanced against the amount of prime agricultural land that would be irreversibly lost as a result of commercial development. As previously noted, Shasta County has historically limited pre-zoning on properties until a specific application for development is presented. This is consistent with the County's intention to limit commercial development to the Knighton Road interchange while allowing some flexibility in setting the boundary for such development.

The proposed project would require approval of changes to the current General Plan land use designations and zoning classifications for the subject property. This potential impact related to conflicts with the existing General Plan land use designation and zoning classification that encourage agricultural use on the project site is *potentially significant*.

### **Mitigation Measures**

No mitigation measures are available to reduce this impact to less than significant level; therefore, this impact is *significant and unavoidable*.

### **Impact #3.2-4: Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use**

**Discussion/Conclusion:** As described above, an open channel irrigation lateral and two irrigation ditches are located on the project site. These facilities are used to provide irrigation water to existing agricultural uses that may no longer be viable if historically supplied irrigation water is diverted. A conceptual site plan has been prepared for the project which indicates that at least some of these facilities could be affected by project implementation. However, the specific project design has not yet been completed and specific impacts to irrigation facilities cannot be determined at this time. This impact is *potentially significant*.

### **Mitigation Measures**

Implementation of the following mitigation measure will reduce this impact to *less than significant*.

#### **Mitigation Measure #3.2-4:**

*Prior to issuance of a building permit, the final project site design including all proposed improvements to existing irrigation facilities shall be submitted to the Anderson-Cottonwood Irrigation District (ACID) for review and any statutory approvals. The applicant shall demonstrate that they are in compliance with statutory requirements prior to any construction activities. No building permits that would be dependent on use of ACID facilities for disposal of stormwater shall be issued by the County without demonstration that the applicant is in compliance with statutory requirements. Further, prior to any construction activities on the project site, the project proponent shall consult with ACID staff regarding short-term impacts to irrigation facilities resulting from construction of the project. All feasible mitigation measures for such impacts shall be*

*identified and implemented. These measures may include providing a buffer around irrigation facilities during construction, the notification of water recipients that may be affected, or the temporary rerouting of irrigation waters, including piping the water through the facility.*