

Chapter 3

Environmental Setting and Impacts

Chapter 3. Environmental Setting and Impacts

The following is a description of the baseline assumptions used to evaluate the impacts of the GPU during the planning period 2016-2040. This introduction builds on the general growth assumptions for the planning area described in Chapter 2 – Project Description, and is supplemented by details in the individual technical sections of the RDEIR (Sections 3.1 through 3.16) regarding the specific assumptions and methodologies used in the analysis for that particular subject matter.

3.0 Baseline Environmental Conditions Assumed in the RDEIR

Section 15125(a) of the State CEQA Guidelines requires that an EIR include a description of the physical environmental conditions in the vicinity of a project, as they exist at the time the Notice of Preparation (NOP) is published. The CEQA Guidelines also specify that this description of the physical environmental conditions should serve as the baseline physical conditions by which a lead agency determines whether the impacts of a project are considered significant.

The environmental setting conditions of the County of Humboldt are described in detail in the individual technical sections of the RDEIR (see Sections 3.1 through 3.16). In general, these sections describe the setting conditions of Humboldt County as they existed when the NOP for the project was released on January 22, 2007. In addition, the RDEIR also includes information about the environmental setting that has been updated since release of the NOP, such as the release of the 2010 Census; updates regarding local development proposals; updated housing and population estimates from the State of California; updates from local agencies regarding their infrastructure and services; and updated information from local, state, and federal regulatory agencies.

Unfortunately, comprehensive and reliable data regarding baseline conditions related to the pervasive and unregulated development of illicit cannabis cultivation in Humboldt County is still not available. Although this RDEIR attempts to summarize some of the data that is available in Chapter 3.2 - Agriculture and Timber Resources, future regulation of cannabis cultivation, processing, manufacturing, or distribution is not within the scope of the draft GPU and potential impacts of such a regulatory program are not analyzed in this RDEIR. The County of Humboldt is in the process of developing a separate Environmental Impact Report for ordinances regulating commercial cannabis industry development in accordance with rapidly evolving state and federal law.

Growth Assumptions under the General Plan associated with the Planning Area & Period

Future growth in the General Plan Planning Area and Period is guided by the land uses identified in the General Plan Land Use Diagram (See General Plan Update Appendix F, Map Book). In the RDEIR, impact analysis of both temporary [i.e. construction-related] and operational effects is based on these proposed land use patterns. The estimated maximum feasible housing development potential of the General Plan Update land uses is far greater (38,972 housing units) than can reasonably be expected to be developed within the planning period of the General Plan (2016-2040). As explained in Chapter 2 - Project Description, the most recent population projections for Humboldt County from DOF reveal that Humboldt County's population is projected to grow fairly slowly in the coming years, and reach a peak population in 2028 of

141,441 persons, and then it is projected to start to decline to 138,307 persons in 2040, at the end of the planning period.

Appendix T of this RDEIR explains the methodology used to estimate that 1,721 new housing units will be needed to meet the demand of the increase in population to 2028 and 2040. The methodology goes on to explain how those new units were distributed across the county, reflecting historic development patterns that are most likely to continue into the future. This assumption is based on access, availability of infrastructure (water, sewer, schools, etc.), distance to work and shopping, and other factors that influence cost and market desirability. The methodology also describes how the projected increase in employment (5,980 jobs countywide) is used to estimate the commercial and industrial space constructed during the period.

Parcel-specific development potential estimates are used in this RDEIR to inform the environmental impact discussion presented later in this chapter. The estimates represent a future development pattern that most closely resembles historic development patterns. Should future development be proposed in a manner that is inconsistent with the projections and estimates in the RDEIR, additional environmental assessments pursuant to CEQA will be necessary before any such proposal could be approved.

Review of potential future development applications beyond that as set forth in this RDEIR is outside the scope of the analysis of this RDEIR, and may require supplemental or subsequent CEQA analysis.

3.1 Land Use, Housing and Population

This section contains an analysis of the impacts that the General Plan Update (GPU or Plan) may have on land use, population, and housing in Humboldt County. The section provides a description of existing land use pattern, population trends, and housing conditions as well as a brief analysis of regulations and plans pertinent to the implementation of the General Plan Update.

Existing land use, population, and housing conditions are described in detail in Chapter 2, Project description, Section 4.2 – Growth Planning of the GPU, and Appendix G of the Housing Element, August 2014 (Appendix K of this document). The General Plan Update process relied upon the *Building Communities Report*, February 2002 (Appendix C), which includes a discussion of existing land use patterns, population and housing, development trends, resource land conversion, and future land use requirements. Discussions of population and housing in the County are also found in the *Community Infrastructure and Services Technical Report*, July 2008. These reports are incorporated herein by reference, and summarized below. The reports are available for review at the Planning Division public counter at 3015 H Street in Eureka during normal business hours, or for download at <http://humboldt.gov.org/571/Background-Reports>. Where any discrepancies may exist between the referenced material and the material presented here, the material presented here should be considered as the most up to date and is to be relied upon for the environmental setting and analyses.

3.1.1 Land Use, Housing and Population -Environmental and Regulatory Setting

State Land Use Planning Law

California state law requires that each city and county adopt a general plan “for the physical development of the county or city and any land outside its boundaries which bears relation to its planning” (California Government Code, Section 65300). The plan can be understood as an expression of a community's values and its vision for the future, a “blueprint” for anticipated growth and development, both public and private, which forms the basis for most local government land-use decision making. In a larger sense a county general plan is a “constitution for future development,” which is how the California Supreme Court has described it.

The general plan establishes the kinds, locations, and intensities of land uses as well as applicable resource protection and development policies. Land use maps are used to show land use plan designations, constraints, and public facilities. According to California law, a general plan must contain at least seven elements: land use, open space, conservation, housing, circulation, noise, and safety. It may also contain other elements that a county wishes to adopt. The law also requires periodic review and revision of a general plan, as necessary.

Article 10.6 of the California Government Code defines the requirements for General Plan Housing Elements. The Housing Element must analyze existing and projected housing needs, examine special housing needs within the population, evaluate the effectiveness of current goals and policies, identify governmental and other constraints, determine compliance with other housing laws, and identify opportunities to incorporate energy conservation into the housing stock. The element must also establish goals, policies and programs to maintain, enhance, and develop housing. State Housing Element law also requires that each city and

county accommodates its fair share of its region's new housing construction needs for all income groups and ensure there is, or that there will be, adequate zoned land, infrastructure, and services present for such housing. The feasibility of accommodating lower-income housing (homes for households earning 80% of less of median county income) typically requires higher densities, which in turn must often be served by public or shared water and sewer facilities, even in rural areas.

The General Plan sets forth the general distribution and location of uses within the County, as well as standards of population density and building (Government Code 65302) and zoning regulations serve as the primary implementation tool for the general plan, and must be consistent with the general plan (Government Code 65860).

The State Aeronautics Act (Public Utilities Code Section 21001) sets forth requirements for airport land use compatibility planning around public use airports. The California Airport Land Use Planning Handbook (California Department of Transportation [Caltrans] 2011) provides guidance for determining consistency between a general plan and an Airport Land Use Compatibility Plan (ALUCP). The ALUCP contains policies relating to airport noise, the height of structures, trees, and other objects in the vicinity of an airport that affect the use of that airport, and potential safety risks both to people on the ground and to the occupants of aircraft. General plan amendments must be consistent with any applicable ALUCP unless a local governing body overrules the plan by a 2/3 vote and makes specific findings. Prior to amendment of a general plan, a local agency must refer the proposed amendment to the Airport Land Use Commission.

Local Land Use Planning

Humboldt County General Plan. Humboldt County's General Plan was last updated in a comprehensive manner in 1984. However, the current General Plan contains elements and community planning maps and policies that were adopted as long ago as 1966. There is a complete discussion of the current General Plan in Chapter 2, Project Description. Chapter 2 describes the existing Humboldt County General Plan – Volume I - Framework Plan, adopted in 1984; the ten Community Plans, adopted between 1981 and 2002; the Northern Humboldt, Arcata, and Southern Humboldt General Plans which were adopted between 1965 and 1968; as well as the Open Space and Conservation Elements, Recreation Element, Noise Element, Trails Element, and Seismic Safety and Public Safety Elements; all of which comprise the County's current General Plan. These components of the General Plan apply to varying degrees in different areas of the County. The Housing Element for the Humboldt County General Plan was adopted by the Board of Supervisors on May 13, 2014.

Community Plan Areas. The Framework General Plan identified and mapped 18 inland Community Plan Areas (CPA). Some CPAs have an adopted Community Plan, and others do not. The purpose of a Community Plan is to develop an internally consistent General Plan, allow for expanded public participation in the planning process, and meet the needs of individual communities. Given that the Hoopa Valley Community Plan boundary is coterminous with the Hoopa Valley Reservation and almost exclusively under the jurisdiction of the Hoopa Valley Tribe and the Bureau of Indian Affairs, no community plan was prepared for that area, and the Hoopa Valley Community Plan Area is not included in further discussion. The following is a brief description of the inland Community Plan Areas:

- The Arcata CPA (no adopted Community Plan) is approximately 5,000 acres and is comprised of five separate areas, including pocket areas between the City of Arcata

and the coastal zone boundary, portions of the Aldergrove, Warren Creek and West End Road areas, and the Fickle Hill area.

- The Avenue of the Giants CPA (Community Plan adopted in 1999) includes five separate areas totaling approximately 11,250 acres, begins in Stafford in the north and extends south along SR 254 (the Avenue of the Giants), and includes Pepperwood, Holmes, Redcrest, and the communities of Shively and Larabee across the Eel River. The Avenue of the Giants CPA area also includes the four additional separate community areas: Weott, Myers Flat, Miranda, and Phillipsville. This CPA contains mapped Urban Developed Areas in Miranda, Myers Flat, Phillipsville, and Weott, and Urban Expansion Areas in Redcrest and Weott.
- The Blue Lake CPA (no adopted Community Plan) is approximately 7,500 acres and surrounds the City of Blue Lake, including the West End/Hatchery Road areas on the south side of the Mad River and the Liscom Hill and Korbel areas on the north side of the river.
- The Carlotta-Hydesville CPA (Community Plan adopted in 1985) is approximately 12,000 acres and extends east along the Van Duzen River and SR 36 from the coastal zone boundary, and includes the communities of Carlotta and Hydesville with a mapped Urban Development Area in Hydesville.
- The Eureka CPA (Community Plan adopted in 1995) is approximately 11,000 acres and includes the developed area around Eureka outside of the coastal zone, including Cutten, Ridgewood, Pine Hills, Humboldt Hill, and portions of Myrtle town. Urban Development Areas and Urban Expansion Areas (see Section 4-7, Growth Planning, of the General Plan Update for a detailed discussion of Urban Development and Expansion Areas) within this CPA are defined in terms of density and service available rather than mapping.
- The Fortuna CPA (Community Plan adopted in 1984) is approximately 5,500 acres and includes the Palmer Creek area and pocket areas around the City of Fortuna, including Rohnerville; Wolverton Gulch; the Mill Street area and the golf course; and the areas along Loop Road, Newburg Road, and Carson Woods Road. Urban Development and Urban Expansion Areas are mapped within the Palmer Creek area and around the City of Fortuna.
- The Fieldbrook-Glendale CPA (no adopted Community Plan) is approximately 12,500 acres in area and includes the Fieldbrook valley and community, and extends south to include Glendale.
- The Freshwater CPA (Community Plan adopted in 1984) is approximately 7,000 acres and includes the inland portions of Indianola, upper Mitchell Heights and Cummings Road, and the entire Freshwater valley.
- The Garberville-Redway-Benbow-Alderpoint CPA (Community Plan adopted in 1985) is approximately 13,000 acres and includes the communities of Alderpoint, Benbow, Garberville and Redway, as well as areas between them and the hill slopes along Old Briceland Road west of Garberville. This CPA includes mapped Urban Expansion Areas in Redway.
- The Jacoby Creek Community Plan (adopted in 1982 – prior to the adoption of the Framework Plan) is approximately 11,500 acres and includes the entire Jacoby Creek drainage as well as the communities of Jacoby Creek and Bayside. This CPA includes a large Urban Development Area in the lower Jacoby Creek valley and an Urban Expansion Area along Graham Road.
- The McKinleyville Community Plan (adopted in 2002) is approximately 10,000 acres and includes the developed McKinleyville area and the surrounding watersheds as well as the Dows Prairie area. Most of the developed area of McKinleyville is mapped as an Urban Development Area and the Dows Prairie, Beau Pre Heights, and areas off of Azalea Avenue are mapped as Urban Expansion Area.

- The Orick Community Plan (adopted in 1985) is approximately 1,350 acres and includes the inland portion of the town of Orick. Core areas along US 101 are mapped as Urban Development Area, and as Urban Expansion Areas.
- The Orleans CPA (no adopted Community Plan) is approximately 5,500 acres containing the Orleans community on either side of the Klamath River and surrounded by Six Rivers National Forest.
- The Rio Dell-Scotia CPA (no adopted Community Plan) is approximately 4,200 acres and includes the Monument, Dinsmore Plateau, and Metropolitan areas around the City of Rio Dell. In addition, the Scotia area is added by this GPU, connecting this CPA to the Avenue of the Giants CPA.
- The Shelter Cove CPA (no adopted Community Plan) is approximately 1,800 acres and contains the inland residential areas on the upper hill slopes.
- The Trinidad-Westhaven CPA (no adopted Community Plan) is approximately 1,900 acres in area and includes the hill slopes primarily east of US 101 between Stumptown Road and Little River.
- The Willow Creek CPA (adopted in 1984) is approximately 5,000 acres and includes the developed area of Willow Creek along SR 299 and SR 96 as well as along Patterson and Seeley McIntosh Roads. The Green Point area where SR 299 crosses Redwood Creek is also included in this CPA.

Within the Humboldt County coastal zone there are six Local Coastal Program coastal planning areas, listed below from north to south:

- The North Coast Area Plan extends from the Del Norte/Humboldt County line to Patrick's Point and includes the lagoons, portions of Orick and Big Lagoon.
- The Trinidad Area Plan, extends south from the North Coast Area Plan to Little River, and includes all of the developed area of Patricks Point, areas surrounding Trinidad, and Westhaven.
- The McKinleyville Area Plan extends from the Trinidad segment to the Mad River.
- The Humboldt Bay Area Plan extends from the Mad River to Table Bluff and includes the north and south spits, the Arcata Bottoms, Indianola, Freshwater, Mitchel Heights, King Salmon, Fields Landing, and the Humboldt Bay Wildlife Refuge.
- The Eel River Area Plan extends from Table Bluff to Centerville and includes Loleta, Fernbridge, the Ferndale bottoms, Waddington, and Alton.
- The South Coast Area Plan extends from the Eel River Area Plan to the Mendocino County line and includes Cape Mendocino, the Petrolia area, the King Range, and Shelter Cove.

Humboldt County Zoning Regulations. Humboldt County Inland Zoning Regulations can be found in Title III, Chapter 4 and Coastal Zoning Regulations can be found in Title III, Chapter 3). When a general plan amendment creates inconsistency with zoning regulations, the zoning regulations must be changed to re-establish consistency "within a reasonable time" (Government Code 65860(c)). However, state law does not specify what constitutes "a reasonable time" to re-establish consistency, so the Governor's Office of Planning and Research General Plan Guidelines (2003) recommends that "for extensive amendments to the general plan (such as a revision that results in the inconsistency of large areas)", two years would be considered a reasonable amount of time.

The Humboldt County Zoning Regulations set forth regulations relating to minimum lot size, maximum building height and setback from property lines, as well as the uses that are principally permitted and those that require a use permit. The Zoning Regulations also specify procedures

for things such as variances to compensate for hardships such as the size, shape, or topography of a site, and for zoning modifications, consistent with the General Plan.

The Zoning Regulations contain the following zoning districts:

Table 3.1-1 Zoning Districts

Use Types	Inland Zoning Districts	Coastal Zoning Districts
COMMERCIAL	C-1: Community Commercial Zone C-2: Community Commercial Zone C-3: Industrial Commercial Zone CH: Highway Service Commercial Zone	CN: Commercial Neighborhood CG: Commercial General CR: Commercial Recreational CRD: Coastal Dependent Commercial Rec.
INDUSTRIAL	MB: Business Park Zone ML: Limited Industrial Zone MH: Heavy Industrial Zone	MB: Business Park Zone ML: Industrial, Light MG: Industrial General MC: Industrial Coastal Dependent
PUBLIC	AV: Airport Zone	PF1: Public Facility – Urban PF2: Public Facility - Rural
NATURAL HAZARD/FLOOD	DF: Design Floodway Zone FP: Flood Plain Zone	NR: Natural Resource
RESIDENTIAL	RS: Residential Suburban Zone R-1: Residential One-Family Zone R-2: Residential Two-Family Zone R-3: Residential Multiple Family Zone R-4: Apartment Professional Zone RA: Rural Residential Agriculture	RA: Rural Residential Agricultural RS: Residential Single Family R-2: Residential Mixed RM: Residential Multi-Family
RESOURCE	AE: Agriculture Exclusive Zone AG: Agriculture General Zone FR: Forestry Recreation Zone TPZ: Timberland Production Zone	AE: Agriculture Exclusive Zone TC: Coastal Timberland TPZ: Timberland Production Zone
UNCLASSIFIED	U: Unclassified Zone	N/A

In addition to the principal zone districts, there are over 20 different combining zones that may be applied to modify in some way the land uses allowed in the principal zone when necessary for sound and orderly planning. Examples of combining zones include: "AP", Airport Safety Review, which is intended to assist in maintaining compatibility between proposed land uses and development and Humboldt County airports; "B", Special Building Site, which is intended to be combined with any principal zone in which sound and orderly planning indicate that lot area and yard requirements should be modified; and "F", Flood Hazard Areas, which is applied to minimize public and private losses due to flood and tsunami conditions in specific areas of the County.

City General Plans and Spheres of Influence. There are seven incorporated cities within Humboldt County. All cities but the City of Ferndale have Spheres of Influence beyond their city boundaries ranging in size from 160 acres (City of Trinidad) to 8,200 acres (City of Eureka). The boundaries of the city Spheres of Influence are subject to review and approval by the Humboldt County Local Agency Formation Commission (LAFCo). Cities in the County have General Plans that were adopted between 1966 and 2014 that have planning areas that include some or all of their Spheres of Influence. No city in the County has executed an agreement with the County, pursuant to Government Code Section 56425, to "ensure that development within the sphere occurs in a manner that reflects the concerns of the affected city and is accomplished in a manner that promotes the logical and orderly development of areas within the sphere."

Humboldt County Airport Land Use Planning. In Humboldt County, the Board of Supervisors serves as the Airport Land Use Commission and conducts airport land use compatibility planning

around the nine public use airports within the County. On January 27, 1998, the Humboldt County Airport Land Use Commission adopted the Airport Land Use Compatibility Plan for the California Redwood Coast – Humboldt County Airport (previously Arcata-Eureka Airport). See “Airport Safety” and Impact 3.7.3.2, Airport Safety Hazards, in Section 3.7, Hazards, for a more detailed description of airport land use compatibility planning in Humboldt County.

3.1.2 Land Use, Housing and Population - Standards of Significance

This analysis uses the significance criteria from the California Environmental Quality Act (CEQA) Guidelines Appendix G. The proposed General Plan Update would result in a significant impact related to land use if it would:

Land Use and Planning

- a) Physically divide an established community.
- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- c) Conflict with any applicable habitat conservation plan or natural community conservation plan.

Population and Housing

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Land Use and Planning item “a” is discussed in Impact 3.1.3.1, Divide an Established Community. Item “b” is discussed in Impact 3.1.3.2, Conflict with Other Applicable Land Use Plans. Item “c” is discussed in Chapter 3.11, Biological Resources, Impact 3.11.3.5, Habitat Conservation Plans. Population and Housing item “a” is discussed in Impact 3.1.3.4, Induce Population Growth. Items “b” and “c” are discussed in Impact 3.1.3.5, Displace Existing Housing or People.

3.1.3 Land Use, Housing and Population – Impacts and Mitigation Measures

The Land Use Element frames the policies that will govern the use and intensity of development for lands located in the unincorporated area. These policies impact a broad spectrum of uses and development, ranging from creating new residential, commercial and industrial lots, and constructing or remodeling structures on existing lots, to minor projects such as accessory structures. The policies also cover a broad spectrum of land use types ranging from agricultural lands to high-density residential areas.

Impact 3.1.3.1 Divide an Established Community

Implementation of the General Plan Update would result in construction of new facilities or infrastructure, or other land use changes, which could result in the division of existing communities.

This impact analysis addresses Land Use and Planning item “a” of the significance standards listed in Appendix G of the CEQA Guidelines as provided in Section 3.1.2 above. Pursuant to these standards, the proposed County General Plan Update would have a significant impact if it would:

- a) Physically divide an established community.

The General Plan Update Circulation Maps show a number of new road segments in the Eureka and McKinleyville Community Plan Areas. These local road segments are largely comprised of connecting roads between neighborhoods where one currently does not exist and are intended to bridge gaps between existing County roads and new roads in currently undeveloped areas that are planned for future development. Given that these roads are intended to make new connections between neighborhoods, none of these road segments represent facilities that would divide existing communities. In addition, the General Plan Update does not propose any freeways or other major transportation systems or other development that would act to divide established communities.

Rather than divide existing communities, the General Plan Update land use map maintains existing communities and continues a development timing system that identifies urban development and urban expansion areas in a CPA within and adjacent to existing communities. Urban development areas are suitable for development at greater than one unit per acre, where public services are provided. Urban expansion areas are not provided with public water or sewer services, but are expected to be developed to urban densities and to be provided with public water and sewer services in the near future. The General Plan Update identifies these areas to guide future urbanization. The General Plan Update areas also maintains the existing areas of separation between communities that is intended to preserve the unique identities of the county’s cities and communities.

Analysis of Relevant General Plan Update Policies

The General Plan Update has a number of policies that are directed toward protecting community character and help to avoid dividing an established community. Land Use Element, Urban Land Goals UL-G2, Design and Function, and UL-G4, Community Character, call for aesthetically appealing urban development areas that preserve and enhance existing community character and identity, and are supported by several policies. Policy UL-P5, Community Identity, directs the County to preserve community features that residents value and to create development that compliments or adds to community identity and character. Policy UL-P8, Neighborhood Connectivity, requires that subdivisions be designed to promote road and trail circulation between neighborhoods, schools, parks and open space areas, and requires that the subdivision ordinance specify standards and limitations for cul-de-sacs, dead end roads, and block sizes. Policy UL-P11, Natural Amenities, encourages the County to incorporate natural amenities, such a landmark trees and rock outcroppings, into new project design. UL-P12, Design Review, requires development within designated Design Review overlay zones to undergo design review consistent with an adopted Design Review Ordinance. Policy UL-P20 requires all designs to use landscaping to, among other things, enhance the appearance of

neighborhoods. Implementation Measure UL-IM8, Review and Update Design Review Ordinance and Areas, directs the County to comprehensively review and update the Design review standards of the zoning ordinance and maps of areas subject to design review.

The General Plan Update Circulation Element contains policies that are directed toward maintaining neighborhood integrity, connectivity and non-motorized accessibility. Circulation Element goal C-G2, Diverse Transportation Opportunities, seeks a transportation system that integrates and balances needs of vehicles, transit, bicycles, and pedestrians.

Circulation Element Policy C-P1, Circulation System, encourages development of a circulation system that supports orderly development. C-P25, Multimodal Level of Service (LOS) and Quality of Service (QOS) Standards, directs the County to use objective methods and criteria to formulate LOS and QOS standards that consider “walkability audits” and “bikeability audits” suitable for the locality, to assess and plan the multi-modal quality and capacity of County roads and intersections. C-P26, Bicycles and Pedestrian Facilities in New Subdivisions, provides that bicycle and pedestrian facilities should be encouraged to connect neighborhoods, and that standards for urban, suburban, rural and remote contexts shall be developed. Policy C-P28, Landscape Buffer Strips, requires the County to provide landscape buffer strip standards as part of the Countywide Transportation Plan road cross-section standards and according to the context of urban, suburban, rural and remote, and suggests the County should use landscape buffer strips to segregate pedestrian walkways from arterial and collector roadways, where feasible. C-P27, Right-of-Way Design Standards, requires that the County develop and include in the Countywide Transportation Plan right-of-way design standards incorporating the needs of all users, consistent with urban, suburban, rural or remote community character, and also requires the development of incentives for development of multi-modal facilities to offset any potential loss of developable land. C-P29, Removal of Obstacles in Pathways, requires that where feasible and consistent with the Countywide Transportation Plan, new pathways and sidewalks shall be free of obstacles such as utility poles and mailboxes, and where obstacles are unavoidable on existing sidewalks or pathways, pedestrian facilities would be widened or otherwise designed to provide the least amount of obstruction to users. C-P30, On-Street Parking, directs that on-street parking be designed to minimize conflicts with all users consistent with the Countywide Transportation Plan and where appropriate, creative on-street parking arrangements such as parking pockets or bays are required to be considered to improve design flexibility. C-P31, Design Standards for All Pathways, requires that design standards appropriate to urban, suburban, rural and remote character shall be used by the County Public Works Department for the design and construction of pedestrian and bicycle facilities. C-P32, Traffic Calming, directs the County to use traffic calming measures, where feasible and appropriate, as a means of improving safety for all users. C-P?, Encourage Bicycle and Pedestrian-Friendly development, directs that incentives should be given to developers who provide non-motorized facilities that connect neighborhoods in a design that is appropriate to the character of those neighborhoods.

These policies are supported and implemented by Standards and Implementation measures. Standard C-S2, Neighborhood Connectivity, requires that local roads shall be planned to allow for orderly development of the community. Standard C-S7, Transit, Bicycle, and Pedestrian Quality/Level of Service Standards, requires that bicycle and pedestrian Quality of Service and Level of Service standards shall be specified in County code, and that the County shall reference Transit Level of Service standards specified in the Public Transit Service Element of the Regional Transportation Plan as amended. Standard C-S8, Pedestrian and Bicycle System, requires that a Board adopted Pedestrian and Bicycle System Plan consistent with the Regional Transportation Plan shall identify trails and routes considered a part of the County maintained circulation system, and that development projects proposed on lands that include a County

maintained trail or route may be required to dedicate easements or make improvements. Standard C-S9, Prioritization of Pedestrian and Bicycle Facilities and Routes, requires that objective criteria shall be used to prioritize construction of pedestrian and bicycle facilities and routes, and that criteria be developed that reflects consideration of providing safe and continuous connections between a variety of community facilities and areas, reductions in motorized vehicles miles traveled, and community demand and public interest.

Circulation Element implantation measures are defined to ensure that the above neighborhood connectivity programs are carried out. In particular, C-IM1, County-Wide Transportation Plan, requires the County to adopt a clear plan for development and improvement of multi-modal transportation infrastructure consistent with land use plans, intended community character and community priorities in unincorporated Humboldt County; the plan will also include a review and update of roadway, pedestrian, and bicycling facility standards. C-IM12, Pedestrian and Bicycle System Plan, directs the County to prepare a Pedestrian and Bicycle System Plan consistent with the Regional Transportation Plan and incorporate appropriate implementation standards in Title III – Land Use and Development Division 2 Subdivision Regulations.

Conclusion

The General Plan Update does not propose changes such as roads or other public facilities or other land uses that would result in the division of existing communities. In addition, the General Plan Update contains a series of policies in the Land Use and Circulation Elements to prioritize programs that preserve existing communities and facilitate neighborhood connectivity. Therefore this impact would be **less than significant**.

Mitigation

None required.

Impact 3.1.3.2: Conflict with Applicable Land Use Plans, Policies or Regulations

Implementation of the General Plan Update could result in development that conflicts with state law, County zoning or other land use regulations, city general plan, public land management plans, or other applicable land use plans, policies or regulations.

This impact analysis addresses Land Use and Planning item “b” of the significance standards listed in Appendix G of the CEQA Guidelines as provided in Section 3.1.2 above. Pursuant to these standards, the proposed County General Plan Update would have a significant impact if it would:

- b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

State General Plan Law

California Government Code, Title 7, Division 1, Chapter 3, Article 5, Authority for and Scope of General Plans, beginning with Section 65300, and Article 6, Preparation, Adoption, and Amendment of the General Plan, beginning with Section 65300, together with other relevant statutes and the Governor’s Office of Planning and Research *General Plan Guidelines*, govern and guide the preparation and content of a general plan. The General Plan Update has been prepared consistent with these and other relevant statutes and guidelines.

Open Space Requirements. After October, 2015, when the Board of Supervisors concluded its review of the General Plan Update, state law was revised to specify additional types of open space land to be included in the open-space element of a county general plan and the local open space plan. At the time the Board of Supervisors concluded its review, Government Code Section 65560 defined open space lands to include open space for the preservation of natural resources, managed production of resources, outdoor recreation, and public health and safety.

In 2016, Government Code 65560 was revised (AB 2651, SB 974) to add open space in support of the mission of military installations that comprises areas such as military training routes (Government Code 65560(5)) and Open space for the protection of places, features, and objects described in Public Resources Code Sections 5097.9 (which generally includes Native American sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines located on public property) and 5097.993 (which generally includes Native American historic, cultural, or sacred sites) of the Public Resources Code (Government Code 65560(6)). Consequently, these open space areas are not included in the General Plan Updated Conservation and Open Space Elements.

Although these two open space types are not included in the General Plan Update Conservation and Open Space Elements narrative (pages 10-1 and 10-2, which contain a list of the types of open space lands) and Conservation and Open Space Policy Summary (Table 10-A), they are addressed fully in the General Plan Update. Conservation and Open Space Elements Section 10.6, Cultural Resources, includes Standard CU-S1, Significant Cultural Resources Defined, which defines Public Resources Code Sections 5097.9 and 5097.993 as significant cultural resources and ties these important open space types to resource protection policies and consultation requirements of the Conservation and Open Space Elements. The Safety Element describes Military Training Routes and Military Operating Areas on page 14-8 in a

description of airport safety and shown in GPU Military Operation Area Figure 14-1. Protections for these open space types are included in Safety Element policy S-P1, Reduce the Potential for Loss which directs the County to plan land uses and regulate new development to reduce the potential for loss of life, injury, property damage, and economic and social dislocations resulting from natural and manmade hazards, and S-PX7, Military Operating Areas, which directs the County to provide notification and project information to the military for discretionary development projects within military airspace operating areas as may be required by the California Government Code.

Unincorporated Legacy Communities. In 2011, SB 244 (Wolk) amended the Government Code to require counties to identify the infrastructure and service needs of unincorporated legacy communities in their general plans at the time of the next Housing Element update. SB 244 defines an unincorporated legacy community as a place that meets the following criteria:

- Contains 10 or more dwelling units in close proximity to one another;
- is geographically isolated and has existed for more than 50 years; and
- Has a median household income that is 80 percent or less than the statewide median household income.

The 2014 Housing Element included a detailed analysis of legacy communities in the Housing Element Appendix (§8.20.22), and included an implementation measure, H-IM34, Revise the Land Use Element to Facilitate Development in Legacy Communities, to reference that analysis in the Land Use Element of the Framework Plan in §2611 – Community Plan Areas: Background. To date, the Framework Plan has not been amended to include this reference.

California Coastal Act

The California Coastal Act governs land use and development activities within the coastal zone. The Act empowers the California Coastal Commission to review and approve (certify) local coastal programs (LCP). LCPs meet the requirements of, and implement the provisions and policies of, the Coastal Act at the local level, and serve as local government's land use plans and zoning regulations within the coastal zone.

Changes proposed by this countywide general plan update may require amendment of the County's LCP. The current LCP will continue to govern land use within the coastal zone unless and until amendments are submitted to and certified by the California Coastal Commission. This certification review will ensure amendments proposed by this General Plan Update will not conflict with the provisions of the Coastal Act.

Under Section 15251 of the CEQA Guidelines, the Secretary of Resources has certified the Coastal Commission's regulatory program as a "functionally equivalent process" to CEQA. Accordingly, this EIR is not a decision document for amendments within the coastal zone, but may be used as a technical background document in assessing the project's environmental effects and conformance with applicable policies and standards of the County's LCP and/or the Coastal Act.

Humboldt County Community Plans

Project Description Section 2.4, The Proposed Plan, Key Features, describes proposed changes to the Humboldt County Community Plans that would be included in the General Plan Update. See Section 2.7, Relationship to Other Documents, in Chapter 2 Public Guide of the General Plan Update, including the portion of that section entitled “Companion Documents” for a detailed discussion of proposed amendments to the Community Plans to maintain consistency with the proposed General Plan Update. Proposed changes to the Community Plans include changes in land use designations; the deletion or modification of the existing Community Plan glossary, definitions and policies; the addition of terms, definitions and policies; the renumbering of all policies; and the consolidation and incorporation of Community Plans, except the Avenue of the Giants, Eureka, and McKinleyville Community Plans, into a single document entitled Community Area Plans Extract (Appendix C). The Avenue of the Giants, Eureka, and McKinleyville Community Plans and the Housing Element, will remain as stand-alone documents, but are subject to the mapping and policy revisions to maintain consistency with the General Plan Update.

Adoption of the General Plan Update would therefore add/delete/amend certain Community Plan definitions and policies, harmonize Community Plan land use designations with the General Plan Update, and amend Community Plan land use maps. It would also incorporate all Community Plans, except the Avenue of the Giants, Eureka, and McKinleyville Community Plans, into a single document, Appendix C, Community Area Plans Extract of the General Plan Update. Chapter 2, Public Guide, of the General Plan Update states that the Plan is considered to be the Community Plan for those communities included in Appendix C until such time that the Community Plans are updated. Adoption of Appendix C, which would occur with the adoption of the General Plan Update, would maintain consistency between these Community Area Plans and the General Plan Update.

As part of its review of modifications to Community Plan policies, the Board of Supervisors also considered changes to the three stand-alone Community Plans in a document entitled “Suggested Revisions to Other Community Plans to Maintain Consistency with the General Plan Update.” This document contained suggested changes to the Avenue of the Giants, Eureka, and McKinleyville plans that relate to land use designations revised as a part of the General Plan Update; references to the Framework General Plan or other plans that have since been updated; and corrected references to state law or County Zoning Regulations. Adoption of the “Suggested Revisions to Other Community Plans to Maintain Consistency with the General Plan Update” would be required in order to maintain consistency between the Avenue of the Giants, Eureka, and McKinleyville Community Plans and the General Plan Update.

Humboldt County Zoning Regulations

The County’s Zoning Regulations provide implementation for the General Plan land use designations, and are administered in a manner consistent with the General Plan. Section 4.8, Land Use Classifications, of the General Plan Update, describes each the general plan land use designation, including the allowed use types within each classification and density or intensity standards. The use types are defined within the Zoning Ordinance to help ensure consistency. Section 4.8 of the General Plan Update also provides a Zoning Consistency Matrix for inland land use designations (Table 4-H) and for coastal land use designations (Table 4-I) that identify which zones are compatible with which land use designations.

Amendments to the Zoning Regulations will be necessary to implement the General Plan Update and ensure continuing consistency between to two documents. Examples of required amendments include:

- Changes to Streamside Management Area regulations specified in BR-S5, Streamside Management Area Defined, which will require amendments to Streamside Management Area Regulations contained in Title 3, Division 1 of the County Code, addressed in Conservation and Open Space Element Implementation Measure BR-IMx4, Modifications to the Streamside Management Area Ordinance.
- Establishment of mixed use zoning as directed by the Land Use Element, Urban Lands Policy UL-P6, Mixed Use Zoning, would implement the Mixed Use "MU" plan designation set forth in General Plan Update Section 4.8 and applied in various areas around the County.

In addition, adoption of the General Plan land use map will cause some zoning districts to be inconsistent with the General Plan. The zoning map will need to be amended within "a reasonable time" to re-establish consistency. The following is a general discussion of zoning inconsistencies that will result from the amendment of the General Plan as well as other zoning map changes that will need to occur within approximately two years of General Plan Update Adoption.

Unclassified. Approximately 655,000 acres of the County is zoned Unclassified, "U." The "U" zoning is applied to areas of the County that have not been sufficiently studied to justify precise zoning classifications, and includes regulations to protect the health, safety and general welfare of the citizens and to insure orderly development in conformance with the General Plan. Within the "U" zone, single family dwellings and general agriculture are principally permitted, and all other uses that are consistent with the General Plan are conditionally permitted. Comprehensive zoning for Humboldt County was carried out in the middle 1970's, and at that time "U" zoning was applied to certain areas. Some areas that were originally zoned "U" have since been precisely zoned. A focus of the General Plan Update is to carry out comprehensive planning to allow the precise zoning of those remaining areas currently zoned "U."

Zone Inconsistencies. Zoning inconsistencies with the General Plan exist within the County and may be the result of circumstances such as expected sewer or water system expansions that did not occur, or planned zone changes that have not yet occurred. Upon adoption of the General Plan Update, the zoning of approximately 14,000 acres would remain or become inconsistent with the General Plan.

In the majority of cases, the zoning of a property is consistent with the proposed General Plan Update land use designation, or is zoned "U" and would therefore be re-zoned as part of the comprehensive planning to allow the precise zoning of areas currently zoned "U" described above. However, in some instances, most particularly for landowner requested land use changes considered by the Board of Supervisors described in the Land Use Requests section below, parcels with resource zoning are proposed to be given a residential land use designation. In this case, the resource zone can only be considered consistent with the General Plan Update as a "holding zone." The use of the term "holding zone" implies there is a plan to rezone the property to a zone consistent with the General Plan uses and density or intensity. Therefore, zone changes, or a plan to carry out zone changes would be required.

For areas with land use and zoning inconsistency, consistency could be achieved by one of several zoning map amendments: (1) where the principally or conditionally permitted uses are not consistent with the range of allowable uses of the land use designation specified in the Land

Use Element, apply a new zone classification from Table 4-H, Zoning Consistency Matrix; (2) where the minimum lot size of the zone is not consistent with the density range of the Land Use Designation, apply a combining zone, such as "B", Special Building Site, to ensure that the density/minimum lot size criteria are consistent; and (3) where a resource zone is applied to a non-resource Land Use Designation, evaluate whether or not that planned use is expected to be developed within a "a reasonable time."

Land Use Requests. Property owner requests to change the land use on their property were considered by the Board of Supervisors during the General Plan Update land use mapping process. The Board considered the specifics of each landowner request; a map of the parcel showing its location and current and proposed land use designations, zone, and community planning area, if any; information regarding service availability; and public input. The Board deliberated on each individual request, eventually tentatively accepting all landowner requests for a change in land use without concern for the zoning inconsistency that would result from some of the granted land use changes. Some of these land use inconsistencies resulting from landowner requests occur in resource zones where the concept of "holding zones" as described in the section above would apply. The majority, if not all, changes in land use that result in "holding zones" are a result of Board granted requests for land use changes.

Airport Land Use Compatibility Plans

Airport land use compatibility plans (ALUCP) are required to be prepared for each public airport and the area surrounding the airport within a county to reduce the potential for land use conflicts between airports and surrounding uses. Government Code Section 65302.3 requires that the general plan be consistent with the airport land use compatibility plan adopted or amended pursuant to Section 21675 of the Public Utilities Code. General Plan Update Chapter 14, Safety Element, contains goals, policies, standards, and implementation measures relating to airport land use compatibility and airport safety and noise. Consistency between the General Plan Update and the adopted ALUCP is analyzed in Section 3.7 Hazards, Impact 3.7.3.2: Airport Safety Hazards. Prior to approval of the General Plan Update, it will be referred to the Airport Land Use Commission for a review for consistency between the Plan and the adopted ALUCP.

City General Plans

The seven incorporated cities within Humboldt County all maintain General Plans for their jurisdictional areas. In some cases these General Plans have planning areas that extend into County jurisdiction. Since the cities do not have jurisdiction in these unincorporated areas, differences between city plans and County plans would not be a conflict of applicable land use plans. However such differences inform a discussion of potential areas of concern. To quote the City of Arcata's General Plan EIR, "Defining a Planning Area is a means by which the city can communicate its concerns for the future of surrounding lands under the jurisdiction of the County or neighboring cities."

City of Arcata. Arcata adopted a revised General Plan in 2000, with a planning area that includes the lands west of the city between Humboldt Bay and the Mad River out to the Pacific Ocean, and the entire Jacoby Creek watershed to the east. The Arcata General Plan accommodates projected population growth of approximately 4,000 persons through 2020, with 1,686 dwelling units based on mid-point density range estimates.

On the west side of the Arcata planning area there is generally a match between Arcata's general plan and the proposed County General Plan Update. Two properties identified for residential development in the Arcata General Plan (Assessor's Parcel Number 505-161-011 and

505-192-004) are designated Urban Reserve in the General Plan Update, which reserves these parcels for annexation and development consistent with the City plan. These two parcels are planned in a manner consistent with the Arcata General Plan. Two other parcels that are designated industrial and residential urban reserve, respectively, in current County plans, are designated Agriculture Exclusive in the General Plan Update to match the Arcata plan. APN 505-151-006 is a vacant approximately 12 acre parcel used for the production of hay and grazing is designated RE2.5 in the General Plan Update, which differs from the Agriculture-Exclusive designation applied in the Arcata General Plan. The balance of the land in this area is designated Agriculture Exclusive and Natural Resources in the Arcata plan and the General Plan Update.

On the northeast side, there is general agreement between Arcata's general plan and the proposed County General Plan Update. However the Arcata plan designates most of the Jacoby Creek watershed area Natural Resources (NR), which includes existing residential development and land zoned Timberland Production Zone (TPZ). The Arcata plan NR designation allows timber production and buildout of one residential unit per existing parcel. Therefore, the General Plan Update allowance for buildout at greater than one unit per existing parcel would not be consistent with the City of Arcata's preference. However, because Arcata's plan is not the applicable land use plan outside city limits, the County's proposed General Plan Update does not conflict with an applicable plan in this case. The City continues to pursue land acquisitions of forested land within the Jacoby Creek watershed area, consistent with the goals of their plan, and these land transactions are aided by the County's General Plan designations, which help maintain a reasonable market value during appraisal and acquisition. Since the City continues to produce timber on these lands, these acquisitions are consistent with the County's General Plan designation of Timber Production.

City of Eureka. The City of Eureka's general plan was adopted in 1997, and has a planning area that covers the unincorporated areas of Cutten, Ridgewood Heights, and Humboldt Hill. The City's plan for these areas is generally consistent with the County's existing 1995 Eureka Community Plan and the proposed General Plan Update. The City's plan has slightly higher densities for the Low Density Residential areas (4.1- 8 units per acre) than the County's existing Plan (1- 7 units/acre) or the proposed General Plan Update (3 – 8 units/acre), and encourages accommodation and retention of neighborhood commercial areas, similar to the County plans. The City of Eureka is in the process of updating its General Plan; however, the adopted land use map was not available during the period of this analysis for comparison.

City of Fortuna. The City of Fortuna updated its General Plan in October 2010. Humboldt County initiated its General Plan Update prior to the City of Fortuna and mapped land uses around the City in consultation with City staff. There are several differences between the proposed General Plan Update land use map and the Fortuna General Plan Land Use Diagram (Figure LU-1, Land Use Diagram, Fortuna General Plan 2030). Based on past consultations with City staff, the General Plan Update land use map identifies several areas as Urban Reserve; however, these areas do not entirely match the City of Fortuna's annexation planning carried out as part of that jurisdiction's general plan update process. The City of Fortuna has recently annexed the River Walk Annexation Area and portions of the Carson Woods Annexation Area, and is in the process of annexing portions of the Strong's Creek Annexation Area. The County General Plan Update plans portions of the Strong's Creek Annexation Area as Urban Reserve.

The Fortuna General Plan Land Use Diagram is largely similar to the proposed General Plan Update land use map. Some of the major differences include portions of the unincorporated area to the north, east, and south east of the city that the Fortuna General Plan Land Use Diagram identifies as Open Space. The Fortuna Open Space land use designation provides for

natural resource use such as timberland management, public uses, and hazards areas, and specifies no residential use. Over half of these lands are proposed to be planned Agriculture Grazing (AG) or Timberland (T) and the remainder is proposed to be planned Rural Residential and Residential Estates under the General Plan Update. Most of these areas contain scattered rural residential development with parcels greater than five acres. Another area of difference would be the area along Hillras Way north of the Rohnerville Airport, which the General Plan Updates plans Residential Estates and the Fortuna General Plan Land Use Diagram plans Industrial. However, because Fortuna's plan is not the applicable land use plan outside city limits, the County's proposed General Plan Update does not conflict with an applicable plan in this case.

City of Rio Dell. The City of Rio Dell updated its General Plan in 2008. The City identified a planning area that includes the entire City's Sphere of Influence, but does not identify land use designations or zoning classifications for areas outside the City. The General Plan Update identifies land use designations for all unincorporated area around the City. In addition, the General Plan Update identifies approximately 44 acres of the unincorporated area as Urban Reserve/Rural Residential 5-20 (acres per unit), outside of the City of Rio Dell Sphere of Influence. This area was jointly identified as Urban Reserve by City of Rio Dell and County staff. The City of Rio Dell Sphere of Influence area is proposed to be planned Rural Residential 5-20, but is not identified as Urban Reserve. However, because Rio Dell's plan is not the applicable land use plan outside city limits, the County's proposed General Plan Update does not conflict with an applicable plan in this case.

City of Trinidad. The City of Trinidad General Plan was last updated in 1992. The City of Trinidad General Plan indicates that proposed land uses in the City of Trinidad Planning Area (Plate 2 of the Trinidad General Plan) which includes all land between the City and the Burris Creek watershed to the north, (approximately 3.25 miles north of the City limit) and the Luffenholtz Creek watershed to the south (approximately 1.5 miles south of the City limit). The land uses mapped in the City of Trinidad General Plan include rural residential, suburban residential, and resource production, and are generally consistent with the proposed General Plan Update.

City of Blue Lake. Humboldt County consulted with the City of Blue Lake in identifying land uses for the unincorporated areas surrounding the City of Blue Lake. Humboldt County utilized draft pre-zoning maps provided by the City of Blue Lake consulting planner to determine the City's plans for these areas. The land uses contained on the proposed General Plan Update or very similar to those mapped by the City of Blue Lake on the draft pre-zoning map.

City of Ferndale. The City of Ferndale General Plan Land Use Map was initially adopted in the 1970s and has undergone few revisions since that time. Ferndale has had a very stable population of just over 1300 for more than 40 years. The 1970 population was 1352; the 2010 population count is 1371. The General Plan Update proposes no changes in land use designations adjacent to the city, and the policies of the proposed plan should help to maintain the existing uses surrounding the town.

Public Land Management Plans

Various federal and state agencies manage lands within Humboldt County and a number of these lands have adopted management plans. Land Use Element Section 4.7, Public Lands, of the General Plan Update contains goals and policies to promote consistency between the General Plan Update and the management plans of other agencies.

Conclusion

With respect to applicable land use plans and policies, the above analysis does not identify any inconsistencies between the proposed General Plan Update and other applicable plans, programs, and regulations with jurisdiction over the project that would result in adverse physical effects pursuant to CEQA. However, the description of open space types on pages 10-1 and 10-2 in the Conservation and Open Space Element does not include new open space definitions established in recent changes in state law. Although Policies and Standards in the Conservation and Open Space Elements and the Safety Element contain protections for these newly defined open space lands consistent with state law, they are not adequately described as open space land.

Regarding unincorporated legacy communities, the Housing Element contains the analysis that is required by Government Code Section 65302.10(a)(2). However, the General Plan Update should include a policy to require that on or before the due date for each subsequent revision of its Housing Element, the County shall review, and if necessary amend, the General Plan to update the analysis of unincorporated legacy communities.

As part of its review of modifications to Community Plan policies, the Board of Supervisors also considered changes to the three stand-alone Community Plans in a document entitled "Suggested Revisions to Other Community Plans to Maintain Consistency with the General Plan Update." This document contained suggested changes to the Avenue of the Giants, Eureka, and McKinleyville plans that relate to land use maps; land use designations revised as a part of the General Plan Update; references to the Framework General Plan or other plans that have since been updated; and corrected references to state law or County Zoning Regulations. Adoption of the "Suggested Revisions to Other Community Plans to Maintain Consistency with the General Plan Update" would be required in order to maintain consistency between the Avenue of the Giants, Eureka, and McKinleyville Community Plans and the General Plan Update.

In addition, the proposed changes to the General Plan Update land use map would cause the zoning of various areas of the County to either remain inconsistent or become inconsistent with Plan land use designations. State land use regulation requires that cities and counties re-establish consistency within a reasonable time after a comprehensive general plan revision, which is interpreted to be up to two years. The General Plan Update contains some specific policies and programs to map zoning changes, such as UL-IM2, Neighborhood and Town Centers, which would create a zoning overlay for this land use type, or AG-IM1, Develop Planned Rural Development Program, which directs the Zoning Regulations to be updated to include provisions for a planned development program for rural areas. However, there are no implementation measures or programs to ensure that consistency between the General Plan land use map and zoning map is re-established in a reasonable time. As a result, the above described deficiencies would pose a **potentially significant impact**.

Mitigation

The following implementation measure below shall be fulfilled to help address the potential impacts related to the re-establishment of zoning consistency with the General Plan Update.

Mitigation Measure 3.1.3.2.a. Add the following implementation measure to the Growth Planning section of the Land Use Element to reduce potential impacts related to conflict between the General Plan Update and applicable land use regulations:

Implementation Measure GP-IMX, Zoning Consistency. *Within two years after the adoption of the General Plan Update, revise the Zoning Regulations to re-establish zoning consistency with the policies of the General Plan and amend the Zoning Map to achieve consistency with the General Plan Land Use Map.*

Mitigation Measure 3.1.3.2.b. Add the following narrative to Section 10.1.1, Relationship to Other Elements, and Table 10-A Conservation and Open Space Policy Summary, of the Conservation and Open Space Elements to fully demonstrate consistency between General Plan Update and state law:

Add the following text to the Section 10.1.1, Relationship to Other Elements:

- **Open Space for military bases, installations, and operating and training areas** — *areas adjacent to military installations, military training routes, and underlying restricted airspace that can provide additional buffer zones to military activities and complement the resource values of the military lands. [add to the bottom of page 10-1]*
- **Open Space for Native American historic, cultural or sacred site** — *Open space for the protection of places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code. [add to the bottom of page 10-1]*

Open Space for military bases, installations, and operating and training areas:

- *Narrative description of these open space lands and a map showing their locations is included in the Safety Element.*
- *Policies to minimize impacts to military trainings areas are included in the Safety Element.*
- *Policies to provide notification to the military are included in the Safety Element. [add to the bottom of page 10-2]*

Open Space for Native American historic, cultural or sacred site:

- *Narrative description of these open space lands is included in the Cultural Resources Section of the Conservation and Open Space Elements.*
- *Policies relating to Native American Tribal consultation are included in the Cultural Resources Section of the Conservation and Open Space Elements.*
- *Policies relating to the identification, protection, and enhancement of cultural resources are included in the Cultural Resources Section of the Conservation and Open Space Elements. [add to the bottom of page 10-2]*

Add to Table 10-A. Conservation and Open Space Policy Summary	
Open Space for Military Training Areas	Safety Element
<ul style="list-style-type: none"> A. Minimize impacts to military trainings areas B. Provide notification to the military of projects that could affect military readiness. 	

Mitigation Measure 3.1.3.2.c. Add a map identifying the Unincorporated Legacy Communities within the County as well as the following policy to the Community Infrastructure and Services

Element to reduce potential impacts related to conflict between the General Plan Update and state General Plan law:

***Appendix F: Map Book.** Add a map of Humboldt County showing the location of Unincorporated Legacy Communities.*

***Policy IS-PX3, Unincorporated Legacy Communities.** On or before the due date for each subsequent revision of its Housing Element, the County shall review, and if necessary amend, the General Plan to update the analysis of unincorporated legacy communities.*

Level of Significance after Mitigation

Therefore, with implementation of the mitigation measure identified above, impacts related to conflict between the General Plan Update and applicable state laws relating to the open space and land use elements would be **less than significant**.

Impact 3.1.3.3: Habitat Conservation Plans

Implementation of the General Plan Update would facilitate additional development that could conflict with habitat conservation or natural community conservation or recovery plans.

This impact analysis addresses Land Use and Planning item “c” of the significance standards listed in Appendix G of the CEQA Guidelines as provided in Section 3.1.2 above. Pursuant to these standards, the proposed County General Plan Update would have a significant impact if it would:

- c) Conflict with any applicable habitat conservation plan or natural community conservation plan.

For a discussion of potential conflict with any habitat conservation plan or natural community conservation plan see Chapter 3.11, Biological Resources, Impact 3.11.3.5, Habitat Conservation Plans.

Impact 3.1.3.4. Induce Population Growth

Implementation of the General Plan Update would create opportunities for new development that could induce growth directly or indirectly.

This impact analysis addresses Population and Housing item “a” of the significance standards listed in Appendix G of the CEQA Guidelines as provided in Section 3.1.2 above. Pursuant to these standards, the proposed County General Plan Update would have a significant impact if it would:

- d) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Implementation of the General Plan Update would maintain and create new opportunities for the development of residential, commercial, and industrial land uses. These additional growth opportunities could induce growth directly (e.g., through the construction of new dwelling units) or indirectly (e.g., through the creation of new jobs or the extension of roads, or the extension of sewer or water mains). Population growth itself is not considered growth inducing if it is consistent with what has been projected in regional population forecasts.

The General Plan Update is the long range land use plan that establishes development patterns and guides future growth in the unincorporated area. The land use map identifies areas for development of residential and commercial land uses, as well as roads and other infrastructure, to accommodate forecasted population growth. As such, the General Plan Update would induce population growth; however, growth would not be considered substantial unless the General Plan Update induced growth beyond state and regional projections.

Humboldt County is projected to grow at a significantly slower rate than the rest of the State of California. The State of California is anticipated to grow approximately 38 percent from 39,255,883 in 2016 to 54,266,115 in 2040. The DOF forecasts that Humboldt County will grow approximately 2.4 percent between 2016 and 2040 to a population of 138,307 in 2040. The County would represent substantially less than one percent of the statewide population in 2040.

Unlike most areas of the state, growth projections are not prepared by the regional transportation planning agency for this county. The HCAOG relies on DOF population forecasts for the regional transportation plan. Therefore, growth that can be accommodated by the General Plan Update cannot be compared with state or regional projections other than DOF projections.

The Humboldt County Board of Supervisors adopted the County Housing Element that identifies, based on the 2014-2019 Regional Housing Need Allocation (RHNA), a need to construct 859 new dwelling units in the unincorporated area at various income levels during the 2014 through 2019 planning cycle. The Housing Element identifies a specific need for 212 units for the extremely low and very low income categories (0 to 50 percent of median income), 135 for the other low income (51 to 80 percent of median income), 146 for moderate income (81 to 120 percent of median income), and 366 for above moderate income households. The General Plan Update estimated maximum feasible development potential is 38,972 dwelling units (See Section 2.5, Proposed Plan Estimated Maximum Feasible Development Potential, of the project description for additional information regarding the estimated maximum feasible development potential). The General Plan Update land use map provides a wide range of locations that can accommodate growth, which would ensure that the implementation of the Housing Element would not be jeopardized.

The General Plan Update provides sufficient flexibility in terms of its ability to accommodate growth to allow for the Housing Element to be implemented without obstruction. In order to provide a reasonable opportunity to obtain the RHNA housing goal, adequate potential area for development of various housing types has been provided. The General Plan Update maintains the potential area for development as considered in the Housing Element, and therefore, would not conflict with the Housing Element housing objectives.

According to the project description, the proposed General Plan Update provides for modest expansion of urban areas. The General Plan Update also provides for a slight increase in planned urban residential densities, increasing infill opportunities and urban-serviceable

development. Additional industrial and commercial lands would be made available based on historic proportion to residential land uses.

Development under the General Plan Update has the following characteristics:

- Generally maintains the characteristics of existing communities.
- Applies land use designations that support mixed-use development and other techniques to increase efficiency of land utilization, including the use of alternative subdivision standards, density bonuses, second unit incentives, live-work commercial centers, etc.
- Maintains current planned residential densities outside of community planning areas and facilitates opportunities for second residential units.
- Increases resource production land protections using a range of planning tools such as, clustered development incentives, open space standards, conservation easements and regulatory reform.

Analysis of Relevant General Plan Update Policies

The Land Use Element, Housing Element, Community Infrastructure and Services Element, Conservation and Open Space Element, and Water Resources Element provide a framework to accommodate future development in an efficient and sustainable manner that is compatible with the character of unincorporated communities and the protection of valuable and sensitive natural resources. Humboldt County has not been confronted with significant growth pressures in recent decades. However, even though population growth rates are low, the supply of land in urbanized areas capable of supporting development continues to decrease. In order to accommodate growth, the General Plan Update establishes increased residential densities and mixed use zones, encourages the provision of diverse housing choices, commercial facilities, and infrastructure to accommodate forecasted growth while protecting resource lands and the established character of existing urban and rural neighborhoods. The Land Use Element also contain development timing policies, which are described in Impact Topic 3.1.3.1, Divide an Established Community, above, that are intended to allow for the orderly expansion of existing urban areas.

Conclusion

The proposed General Plan Update accommodates the growth that is projected to occur within the County by the State Department of Finance. Population growth in Humboldt County is projected to peak in 2028 and then steadily decline thereafter through the remainder of the planning period and beyond. The General Plan Update does not propose any specific development proposals or contain policies that are intended induce growth. These policies address how growth is intended to be accommodated. The General Plan Update utilizes development timing policies similar to what is currently reflected in the community plans. The General Plan Update also provides for a slight increase in planned urban residential densities in a few cases, increasing infill opportunities and urban-serviceable development, as well as maintains or increases densities in other areas. Such policies are not intended to induce growth, but would accommodate growth to the greatest extent possible within urbanized area that can best provide needed community services.

The General Plan Update is a comprehensive plan to guide future growth throughout the County and accommodate growth to the greatest extent possible within urbanized areas

that can best provide needed community services. Therefore, the proposed project would not result in the direct or indirect inducement of unplanned population growth and potential impacts would be **less than significant**.

Mitigation

None required.

Impact 3.1.3.5 Displace Existing Housing or People

Implementation of the General Plan Update would facilitate new development that could displace substantial numbers of existing housing units or people, thereby requiring construction of replacement housing in a different location.

This impact analysis addresses Population and Housing items “b” and “c” of the significance standards listed in Appendix G of the CEQA Guidelines as provided in Section 3.1.2 above. Pursuant to these standards, the proposed County General Plan Update would have a significant impact if it would:

- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

The General Plan is a long range land use plan that defines development patterns and establishes guidance for future growth in the unincorporated area, including the development of housing. New development or infrastructure consistent with the proposed General Plan Update could have the potential to displace existing housing, and would result in a significant impact if replacement housing would be required elsewhere outside of the unincorporated area.

The General Plan Update Land Use Element is intended to support growth within urban areas, maintain levels of development elsewhere, and increase resource production land protections. A substantial portion of the population growth projected by the Department of Finance would be expected occur in areas within CPAs and is intended to occur in a manner that maintains the characteristics of existing communities.

Humboldt County has dedicated substantial resources to the analysis of housing unit capacity within the County, especially within Urban Development and Water Service Areas. The Humboldt County Planning and Building Department has been refining its analysis of residential development capacity since the adoption of the 2003 Housing Element, and has utilized an on-line housing inventory to gather information from the public regarding development potential and constraints at the Assessor’s parcel level. The ongoing housing inventory analysis was informed by the Urban Study Area planning that was conducted as part of the preparation of the Community Infrastructure and Services Technical Report, 2008, and provided the basis for the Housing Element housing inventory and the land use projections for the General Plan Update. In addition, Dyett and Bhatia conducted a housing demand and land capabilities analysis as part of the preparation of the Building Communities Report, 2002.

The development capacity analyses described above confirm that the proposed land use map would allow for an adequate number of dwelling units to meet the projected population growth within the unincorporated area, and additional housing outside the unincorporated area would not be required to accommodate demand.

The General Plan Update does not contain specific development projects; rather it contains policies and applies land use designations to guide development within the unincorporated area. The implementation of the proposed General Plan Update would generally retain the existing land use pattern of the unincorporated area. However, development consistent with the General Plan Update could displace existing housing. Some areas that currently contain residences are designated for commercial or other non-residential land uses under the current General Plan and the General Plan Update; future construction of these non-residential land uses would have the potential to displace the existing housing. However, existing and increased residential density in adjacent areas or other areas of the unincorporated area would sufficiently offset displaced housing so that replacement housing elsewhere would not be necessary.

Analysis of Relevant General Plan Update Policies

The Land Use and Housing Elements contain a series of policies intended to assure adequate land for residential development within the unincorporated area. Housing Element policy H-P9, Maintenance of an Adequate Supply of Residential Land, requires that the County maintain an adequate supply of residentially zoned land to meet projected housing needs. Pursuant to the Land Use Element, Urban Development Areas and Water Service Areas are intended to accommodate the levels of development that are projected to occur over the 20 year planning period of the General Plan. Policy GP-S7, Required Findings for Urban Expansion, contained in the Growth Planning Chapter of the Land Use Element, states that it is permissible to expand into Urban Expansion Areas when land within Urban Development Areas and Water Service Areas are not sufficient to meet Housing Element goals and service systems can accommodate additional demands.

Conclusion

Development during the General Plan Update planning period has the potential to displace people or housing units necessitating the construction of new units elsewhere. However, the General Plan Update does not contain specific development projects; rather it contains policies and applies land use designations to guide development within the unincorporated area. The proposed General Plan Update policies described above would lessen potential impacts to the displacement of people or housing by providing more than sufficient land to accommodate growth during the planning period. Therefore, the General Plan Update would not displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere. Therefore, impacts relating to the displacement of people or housing resulting from the General Plan Update would be **less than significant**.

Mitigation

None required.

3.2 Agricultural and Timber Resources

This section provides background information regarding agricultural and timber resources within Humboldt County, the regulations and programs that provide for their protection, and an assessment of the potential impacts resulting from the implementation of the proposed General Plan Update. The key issues relating to agricultural and timber resources identified through the General Plan Update process include: 1) the effects of increased parcelization for residential development; 2) the purchase and conversion of productive farmlands by resource agencies; 3) the effects of increased regulations on timber harvest activities and economic productivity; and 4) conflicts of land use in the Forest-Residential Interface Areas. The proposed plan buildout information cited in Section 3.1, Land Use, Population, and Housing is also discussed and referenced in this section as it relates to development on agricultural and timber resource lands. Existing agriculture and timber resource conditions are described in Chapter 3, Forest Resources, and Chapter 4, Agricultural Resources, of the *Natural Resources and Hazards Report*, September 2002 (Appendix D), *Agricultural Resources and Policies*, August 2003 (Appendix E); and *Forest Resources and Policies Report*, October 2003, revised April 2006 (Appendix F). These reports, which are available for review at the Planning Division public counter at 3015 H Street in Eureka during normal business hours, or for download at <http://co.humboldt.ca.us/gpu/documentsbackground.aspx>, are incorporated herein by reference and summarized below. Where any discrepancies may exist between the referenced material and the material presented here, the material presented here should be considered as the most up to date and is to be relied on for the environmental setting and analyses.

3.2.1 Agricultural and Timber Resources – Environmental and Regulatory Setting

Agricultural Resources

Significant precipitation, fertile soils, and the mild coastal climate make for productive farming in Humboldt County. Agriculture production is an important component of both the local economy and community character.

The total agricultural acreage in 2008 was approximately 345,238 acres, (tabulated by the Humboldt County Geographical Information Services GIS mapping program for the technical background studies and updated for the Planning Commission Hearing Draft) covering 15% of the County's total land area. As there have been no substantial conversion of agricultural land to non-agricultural uses between 2008 and 2016, total agricultural acreage in 2016 is still about 15% of the total land area.

These agricultural lands can be divided by land type, such as delta land, river and mountain alluvial flats, and upland grazing. Most areas are actively engaged in ranching, row cropping, or specialty agriculture, such as organic foods and organic/grass-fed meats, while some areas are occupied by rural residential development or are being acquired by public agencies for resource protection and parkland.

The total agricultural acreage reported by Humboldt County is significantly lower than the U.S. Department of Agriculture, National Agricultural Statistics Service's Census of Agriculture statistics

and the County Agricultural Commissioner's figures. The 2007 Agricultural Census reported 597,186 acres of productive agricultural lands in the County, while the County Agricultural Commissioner estimated it at 492,876 acres. This difference is primarily due to the tabulation of "grazing" lands, which include timberlands zoned as Timberland Production Zone (TPZ). The County Agricultural Commissioner reported a total of 470,000 acres as "rangelands," whereas the Agricultural Census classified only 295,105 acres as "rangelands".

Prime and Non-Prime Agricultural Lands

The land best suited for a wide range of agricultural crops is called "prime" agricultural land. There is neither a single fixed definition of "prime" agricultural land nor is there a single prescribed system for classifying lands as "prime". A number of different systems of agricultural land classifications are in use in California. Understanding the different classification systems described below is helpful when understanding the use of the term "prime" agricultural lands.

USDA Land Capability Classification System. The United States Department of Agriculture (USDA) defines prime farmland as the land best suited to food, feed, forage, fiber, and oilseed crops. Prime farmland produces the highest yields with minimal inputs of energy and economic resources, and farming it results in the least damage to the environment.

The USDA Land Capability Classification System is the best known and most widely used land capability classification system (USDA Soil Survey Manual, 2012 online publication - <http://soils.usda.gov/technical/>). It is an interpretive classification system for agricultural purposes which uses soil and climatic data to place delineated soil areas into groups of similar management options or problems. The basic foundation of the system is the soil mapping unit found in the soil survey report. Arable soils are placed into groups according to their potentialities and limitations for sustained production of cultivated crops. Non arable soils are grouped according to their potential and limitations for the production of permanent vegetation and according to their risks of soil damage if mismanaged. Classes I and II in the system are often referred to as "prime" agricultural lands.

USDA Prime and Unique Farmland Definition (LIM). The primary intention of the USDA in developing the Land Inventory and Monitoring system (LIM) was to inventory and evaluate the nation's best farmlands. Criteria for designating prime agricultural lands according to the LIM included ten categories (in California) such as water supply, adequate temperature regime, adequate growing season, suitable pH, susceptibility to flooding, depth of soil, soil permeability (including rock fragment content), slope and erodibility, salinity and rooting depth.

The LIM system further defines 1) unique farmland, 2) farmland of statewide importance, and 3) farmland of local importance. "Unique Farmland" is land other than prime farmland that is used for the production of specific high value food and fiber crops (such as artichokes, dates, melons, and several other high value fruits and vegetables). "Farmland of Statewide Importance" is land of statewide importance for the production of food, feed, fiber, forage and oilseed crops (criteria for defining and delineating this land is determined by the appropriate state agency). "Farmland of Local Importance" covers those local farmland areas that are of concern to the local jurisdiction (city and/or county) for the cultivation of crops that do not fit into any of the other previously described categories. These lands are identified by the local agency concerned.

Storie Index. Unlike the USDA Capability Classifications or LIM systems, the Storie Index Rating (SIR) is a quantitative system which rates four soil factors on the basis of 0-100 points. This system rated agricultural land according to its quality which was determined on the basis of

productivity data from a number of major soils in California that were classified in the 1920-s and 30's. These factors included soil profile, soil texture, slope and soil limitations (such as drainage, pH, nutrient levels, erosion, etc.). Each of these factors were rated and then multiplied together to produce the composite index rating. Thus, a poor rating in any one factor may greatly affect the overall grade. Prime agricultural land was not a part of the SIR but "excellent" agricultural land was considered to rate between 80 -100 points.

California Farmland Mapping and Monitoring Program. The California Farmland Mapping and Monitoring Program (FMMP) was established in 1982 in response to a critical need for assessing the location, quality, and quantity of agricultural lands and conversion of these lands over time. The FMMP is a nonregulatory program and provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The modern soil surveys produced by the Natural Resources Conservation Service (NRCS) are the basis for FMMP's qualitative soil ratings range in age, scale, and coverage. Humboldt County is currently in the process of having a countywide soil survey produced by the NRCS (formerly known as the Soil Conservation Service). Therefore, Humboldt County is not included in the California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP).

California Legislative Definition of Prime Land. Of the three previous methods classifying agricultural land, only the LIM system explicitly defines "prime" agricultural lands. The California Land Conservation Act or Williamson Act of 1965 defines prime agricultural lands as a combination of soil properties and/or economic considerations (California Government Code Section 51200-51297). Government Code Section 51201(c) defines prime agricultural land as any of the following:

- All land that qualifies for rating as Class I or II in the Natural Resources Conservation Service (NRCS) land use capability classification; or
- Land which qualifies for rating 80 through 100 in the Storie Index Rating; or
- Land which supports livestock used for 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 United States Department of Agriculture; or
- Land planted with fruit- or nut-bearing trees, vines, bushes, or crops which have a nonbearing 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 per acre; or
- Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than \$200 per acre for three of the previous five years.

This definition was developed as recognition that many of California's specialty crops are not grown on Class I and II lands. This definition is also used in the California Coastal Act for prime agricultural lands.

Agricultural Soils – Humboldt County

The County's agricultural soils were mapped in 1965 in a cooperative project between the Department of Soils and Plant Nutrition, University of California, Davis, and the County of Humboldt utilizing the Storie Index Rating system (SIR) as described above. The NRCS is currently in the process of updating the soils survey. Approximately 75% of the County has been mapped. Because the new soil survey information is not available countywide and has not been incorporated into the Humboldt County GIS mapping system, for purposes of this Environmental Impact Report, the SIR has been utilized for providing guidance on determining prime agricultural lands.

The rating of soils according to the Storie Index Grade, expresses the relative suitability of the soil for general intensive agriculture. Storie Index Grade 1 soils (those with a composite index rating from 80 to 100) are well suited to general intensive agriculture. Grade 1 soils are easily worked, very productive, and irrigation is simple and efficient. The Lower Eel watershed has the greatest amount of land in agricultural production and by far the most Grade 1 soils in proportion to other areas. Grade 2 soils (index rating 60-80) are moderately well suited for agriculture and Grade 3 (index rating 40-60) indicates only fair suitability. Grades 4, 5, and 6 (index rating below 40) indicate poor suitability for agriculture.

Soil types in Humboldt County can be generalized as alluvial or upland. Alluvial soils occur in the river flood plains and deltas and are used for pasture and crop lands. Seasonal flooding replenishes these soils. Upland soils sustain both forests and open rangelands.

Prime Agricultural Lands – Humboldt County

The County currently utilizes the following definition for prime agricultural lands:

PRIME AGRICULTURAL LAND: Under the General Plan, identified by any of the following definitions.

- a. Rated Class I or II by the U.S. Soil Conservation Service.
- b. Rated 80 through 100 percent in the Storie Index.
- c. Land that has a livestock carrying capacity of one animal unit per acre.
- 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 provide a return adequate for economically viable operations during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production.
- e. Land capable of producing an unprocessed plant production adequate for economically viable operations.
- f. Additional lands in proximity to a, b or c above which are necessary to provide for physically and economically viable, coherent agricultural areas. These lands are included to prevent the establishment of incompatible land uses within an area defined by natural or man-made boundaries.

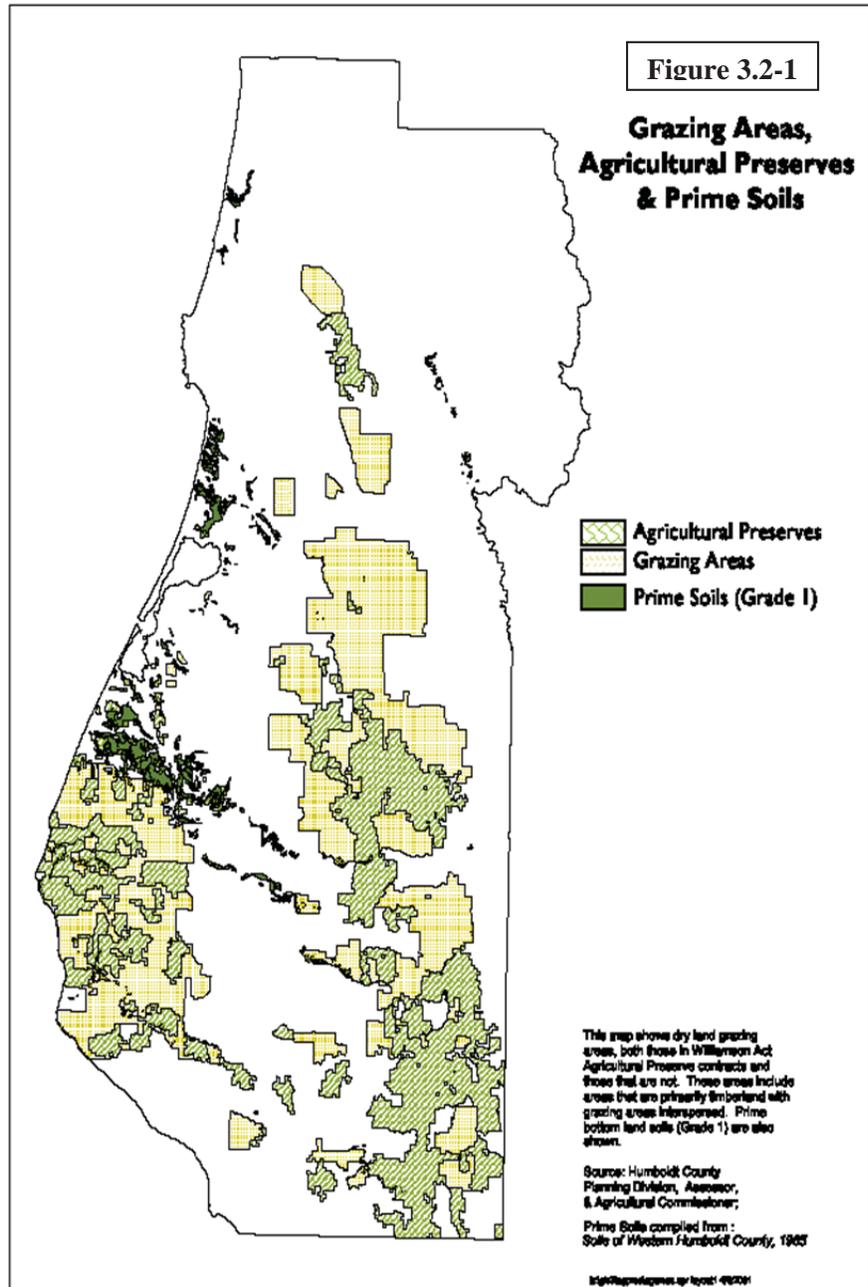
Of the approximately 345,238 acres of land identified as agricultural lands by the Humboldt County GIS mapping system, approximately 12%, or 42,000 acres are identified as prime agricultural lands, primarily based upon soils type. The highly productive soils of the Mad River, Redwood Creek, Eel River Deltas, Humboldt Bay, as well as other areas, provide the basis for Humboldt’s significant agricultural resources. The majority of the County’s prime agricultural lands are found in these areas (see Figure 3.2-1).

Agricultural Productivity

By California standards, Humboldt County’s agricultural production is small. The County produced approximately \$269 million of the State’s \$46 billion of annual farm goods in 2013 (0.5% percent of State production). However, agriculture is a large part of the local economy, sustaining hundreds of farm and ranch families and workers. While the number of farms has declined over the last decade, the agricultural industry has seen an increase in employment of 37% since 1985, accounting for 2.2 percent of the County’s employment sector 2008.

Excluding timber production values, Humboldt County ranked 35th in the state for gross value for agriculture production in 2008 (with timber receipts, it ranked 18th). The top four valued agricultural crops in 2013 and 2015, based on the Humboldt County 2013 Crop and Livestock Report published by the Humboldt County Agricultural Commissioner and data provided by the Commissioner’s office, were:

1. Livestock (includes aquaculture) - \$77 million (2013); \$108 million (2015)
2. Timber Production - \$73 million (2013); \$70 million (2015)
3. Milk and Milk Products - \$62 million (2013); \$60 million (2015)
4. Nursery Stock - \$50 million (2013); \$57 million (2015)



Livestock Production. The two major livestock industries in the County are cattle and sheep production. While cattle production has maintained a consistent market level production over the last 20 years, sheep production has undergone a steady decline. Goat production, for milk and meat, is a small but growing industry.

Cattle ranching has a long history in Humboldt County and currently supports over 250 ranching families. Beef production utilizes almost 470,000 acres of grazing land within the County (areas not in timber production). There were 52,000 cattle in Humboldt County in 2013 according to the 2013 Humboldt County Crop and Livestock Report published by the Humboldt County Agriculture Department. The total value of Humboldt's beef and cattle herds was estimated to be \$51.8 million.

Milk and Dairy Products. Until recently, the largest agricultural industry in Humboldt County was dairy production. Historically, the industry in the County was an important milk supplier for the San Francisco Bay Area beginning in the mid-to-late 1800's. After World War II, better refrigeration and transportation technologies caused the bulk of California's dairy industry to shift to the San Joaquin Valley, which is now responsible for producing over 70 percent of California's milk production.

The value of dairy production continued to increase steadily over time. According to the 1980 Humboldt County Agricultural Report, the value of milk produced in 1980 was estimated at a little under \$20 million (this value is not adjusted to compensate for inflation). By 2013, Humboldt County dairies grossed approximately \$50 million.

County dairy operators must compete with large operators in the San Joaquin valley. Milk products are "pooled" in California and a set price is determined for all producers. Often, dairy profit lies in the balance of feed costs and milk prices. Dairy operators seek to meet unstable market conditions by getting bigger and more efficient. In the 1950's, the average California dairy herd numbered 40 cows; by 1979, it was over 300. In the San Joaquin valley and other major dairy regions, dairies contain 2,000 cows or more, confining their animals in mechanized barns with food and water delivery systems.

Keeping their animals on pasture year-round, Humboldt County's dairies typically run herds of between 200 and 400 dairy cows. Local dairy ranchers feel the same pressures to increase productivity and expand their herds. However, the ample rainfall and mild climate create cost-effective pastureland with little need for heat or air-conditioning for the cows and goats, unlike dairies in the Central Valley. With these cost savings, the small local dairies are able to compete with dairies located in Central Valley.

Nursery Stock. Nursery production has steadily increased over the last decade. The County Agricultural Commissioner estimated 2001 sales of flowers and nursery products at \$34 million compared with 2013 values of \$49 million. Local floral products have gained national reputations and command top prices.

Humboldt County nursery production is a viable niche industry flourishing in the coastal "fog belt" where temperatures remain moderate year-round. Two forest-tree nurseries and dozens of specialty plant growers were responsible for some of that production, but Sun Valley Floral Farms, located in the Arcata Bottoms, generated the bulk of the value. Sun Valley Farms is the single largest agricultural employer with a workforce of approximately 270 people on about 280 acres. The operation has grown since its start in 1991 to become one of the top three flower distributors in the U.S. The operation produces more than 50 million flowers a year from a 1.5 million square-foot greenhouse complex.

Cannabis Cultivation. Humboldt County is said to be the heart of the Emerald Triangle (Humboldt, Mendocino and Trinity Counties), considered by many to be the epicenter of domestic marijuana (also known as cannabis) cultivation in the United States, if not the world. Current estimates are that there are 8,000 – 12,000 or more outdoor or mixed light cultivation operations (Butsic, Brenner (2016)), and an unknown number of indoor cultivation facilities. The pervasive presence of marijuana cultivation throughout large portions of rural Humboldt County grew gradually over a period of 50 years beginning in the late 1960s, but accelerated at an increasing rate over the past 20 years -- with the last few years at a pace often referred to locally as the “green rush.”

For most of this history, growing marijuana was an illicit, clandestine, contraband activity, and is still prohibited by federal criminal law. As a consequence, it developed in remote rural locations, disbursed in relatively small areas of cultivation on large tracts of land. Access to sites is often over old private logging or ranch roads built with little or no consideration for erosion control and sedimentation of watersheds. New roads have been bulldozed into the landscape without permits or proper design to prevent erosion. Traffic on unpaved roads is estimated to contribute as much as 60% of Humboldt County's PM₁₀, the only criteria air pollutant for which the County exceeds established standards. (See Section 3.12 Air Quality.)

The primary value of these remote locations to illicit growers is concealment and difficulty of enforcement. The location of the bulk of marijuana cultivation operations is in areas which were previously suited only for forest or grazing lands, too steep and without sufficient water or adequate soils that could support commercially viable cultivation of other legal field or orchard crops.

As of 2014, outdoor and greenhouse marijuana cultivation was most prevalent in southern Humboldt County. In some areas of the County the density of grows evident from Google Earth were as high as 27 grow sites per square mile in 2014. One three square mile area southwest of Alderpoint, known as Rancho Sequoia with 158 parcels, included more than 82 separate grow areas in 2012-2014. Parcel sizes in this area range from about 4 acres to over 112 acres, with the average about 10 acres. About 41% of the parcels appeared to have one or more grow sites on them during 2012-2014. The largest site incorporated over 3 acres of cleared forest and 36 separate hoop houses as of 2012.

Estimates of the value of marijuana produced in Humboldt County are speculative and based on wholesale value that can vary widely depending on whether for legitimate medical use in California under state law, or for black market national and international export. Figures range from \$1 – 4 billion annual street value. A study of outdoor and greenhouse production in 60 of 112 randomly sampled watersheds in the County estimated a wholesale gross value to growers of \$150,000,000 in 2014 (Butsic, Brenner (2016)). One study conservatively estimated that cash spending of revenue from marijuana cultivation in the Humboldt County economy may have amounted to as much as \$500,000,000 in 2016 (Times-Standard article, “Pot Economy: ‘Ours to Lose’”, published 8/5/2016: www.times-standard.com/article/NJ/20160805/NEWS/160809935). By any measure, marijuana accounts for a very significant proportion of the economic activity in the County.

In large part because it has been an illegal contraband commodity, marijuana is a very high value crop. That value underwrites cultivation practices that are costly and inefficient. Outdoor planting areas have to be cleared and graded. Cultivators import specialized soil for planting in beds or pots, often discarding and replacing it annually with new soil. Low and seasonal flows from local springs or creeks requires construction of ponds or tanks for water storage, often supplemented by water delivered by truck. These locations are often far off the electrical grid;

power for supplemental lighting to increase the yield of crops and to power pumps, fans and other equipment is often supplied by diesel or propane powered generators. The result is noise and increased fire hazards in sensitive forest habitat area, as well as air quality and carbon emissions that would not exist or could be more easily mitigated if cultivation and processing occurred in areas on the grid. Inappropriate use of herbicides, rodenticides and fertilizers has resulted in deaths of wildlife (Gabriel, et al 2012)). Unregulated water diversions from surface streams and springs likely result in decreased stream flows adversely affecting threatened or endangered species (Bauer, et al 2015). The demand for remote sites for marijuana cultivation is believed to have played a role in illegal land divisions in violation of the Subdivision Map Act, and contravening Williamson Act land conservation contracts in several large areas of the County, resulting in parcelization of agricultural and timberlands.

The expansion of marijuana cultivation in Humboldt County has been, in part, spurred by changes in attitudes and regulations beginning in 1996 with the passage of the Compassionate Use Act, Proposition 215, codified at Health and Safety Code section 11362.5, which provided state law protections from criminal prosecution for the cultivation, possession and use of medical marijuana by qualified patients. Legislation to provide a partial framework to implement the initiative did not follow until 2003 with the enactment of SB 420, Stats. 2003, Ch. 875. In 2008, then-Attorney General Jerry Brown provided further guidance for law enforcement to focus law enforcement resources away from quasi-legitimate medical marijuana cultivation. These developments established a non-profit cultivation / collective-cooperative model for medical marijuana cultivation, product manufacturing and dispensaries.

Adoption of the Medical Marijuana Regulation and Safety Act in the fall of 2015, since renamed the Medical Cannabis Regulation and Safety Act (MCRSA), represents a paradigm shift to a regulated commercial marketplace model. MCRSA refers to medical cannabis as an agricultural product (Health and Safety Code sec 11362.777 (a).) Humboldt County became the first county in California to adopt land use regulations to implement local permitting required by MCRSA.

Medical cannabis under the protection of the Prop 215/SB 420 regime to be transitioned to MCRSA, is believed to account for a relatively small percentage of marijuana cultivated in Humboldt County, perhaps as little as 10 – 20%. Participation in the Humboldt County's permitting program for medical cannabis is therefore expected to represent a proportionately small fraction of the total of cannabis activity. Proposition 64, the Adult Use of Marijuana Act enacted in November 2016, makes it likely that the legal marketplace for cannabis products in California will be much larger, resulting in a higher participation rate. Because there will still be a market for marijuana in other states and internationally where marijuana is not legal, it is expected that the black market activity for marijuana products will persist in Humboldt County.

On January 26, 2016, the Board of Supervisors approved Ordinance 2544 to implement land use regulations for commercial cultivation, processing, manufacturing and distribution of cannabis for medical use within the County consistent with the state Medical Marijuana Regulation and Safety Act ("MMRSA")(SB 643, AB 266, and AB 243 as approved by the Governor on October 9, 2015). These regulations, entitled the Commercial Medical Marijuana Land Use Ordinance (CMMLUO), were modified for clarity on September 13, 2016 by Ordinance 2559. The County's regulations are intended to reduce or eliminate any adverse environmental effects of existing commercial cannabis cultivation operations, and to prevent adverse environmental effects of any new commercial cannabis activities. The regulations include mitigation measures to avoid significant environmental effects of medical marijuana cultivation, and to reduce the effects of unregulated cannabis cultivation below existing baseline conditions.

The regulations recognize the commercial cultivation of cannabis for medical use is a highly regulated specialty crop and the cultivation and processing of that specialty crop shall not be allowed as a principally permitted use under the General Agriculture use type classification applicable within the County of Humboldt, unless a Zoning Clearance Certificate, Special Permit, or Use Permit is first obtained from the County, and unless the person engaged in such activity has obtained all state licenses and permits which may be required by the applicable state licensing authorities whenever such licenses become available. The CMMLUO allows applications for commercial cannabis activities to be accepted until December 31, 2016.

The County is considering adopting future regulations for commercial cannabis operations in separate independent phases or stages through successive revisions of the regulatory program. Each phase or stage would have its own independent utility, and the substance of any anticipated possible future phase or stage would not be a reasonable foreseeable consequence of any previous phase or stage. No phase or stage would include a commitment to proceed with possible future revisions until the potential environmental effects of any future phase or stage were evaluated by subsequent environmental review in accordance with CEQA Guidelines section 15162.

The environmental impacts of the future regulatory program will be evaluated in a separate environmental document, and are therefore not discussed any further in this EIR.

Agricultural Preserves (Williamson Act Lands)

The California Land Conservation Act of 1965, better known as the Williamson Act, created a program for counties to protect viable agricultural land by offering a tax incentive to property owners to keep their land in agricultural production. The Act provides an arrangement where private landowners voluntarily restrict their land to agricultural and compatible open space uses under a contract with the County, known as a land conservation contract, or Williamson Act contract.

The Williamson Act contract is an enforceable restriction on land and is binding on successors to both the landowner and the local government. The minimum term for a contract is 10 years, and the contract is automatically renewed annually, unless either party gives advance notice on non-renewal. Contracts may be canceled immediately, terminating the restriction to agricultural uses, only if the local legislative body finds that termination or canceling of the contract would be consistent with the Act and in the public interest. The purpose of the Act is to encourage property owners to continue to farm their land and to prevent the premature conversion of farmland to urban uses.

Humboldt County's Board of Supervisors first adopted guidelines for the Williamson Act on June 24, 1969. From 1972 to 1981, nearly 243,000 acres were put under Williamson Act contracts in the County's jurisdictional area. As of December 2011, there were just under 300,000 acres in the program in 169 established preserves, of which approximately 200,000 acres are eligible to receive subvention funding from the state (approximately 100,000 acres are enrolled in the TPZ program and are not eligible for subventions). Currently, only 50 percent of farmland in the County is actively preserved under the Williamson Act, utilizing the acreage figures from the U.S. Department of Agriculture. Of this amount, only 2% is located on prime agricultural soils (approximately 15% of all prime agricultural lands are in Williamson Act program).

The Board of Supervisors continues to support the Williamson Act program in spite of the state eliminating subvention funding in 2010 by establishing grant funding to cover the costs of enrollment for new preserves, and by upholding County policies that strive to protect and enhance existing contracted lands.

Conservation Easement Support Program

Despite the efforts to protect agricultural lands through zoning and tax incentive programs, the pressure for development on agricultural lands is increasing. Agricultural land is often valued higher for use as residential estates than for agricultural production capabilities. The County funded a Recreational and Conservation Easement Support Program in 2003 that uses grant funds to help keep working lands in production. Private landowners may voluntarily decide to put working lands under conservation easements for the preservation of resource production, open space, and/or habitat values.

To date, these project funds have been utilized to support easement costs for six large ranches (protecting approximately 24,000 acres), three forestland easements (protecting approximately 2,000 acres) one dairy farm, and two coastal access easements. The funding has also been instrumental in the establishment of 16 new Williamson Act Preserves, protecting approximately 8,500 acres of farmland.

Right to Farm Ordinance

Humboldt County has undertaken several actions to reduce urban and rural conflicts, including the 1984 adoption of the Right to Farm Ordinance. This ordinance declares that it is the County's policy to enhance and encourage agricultural operations within the County. The ordinance strives to reduce the loss of the County's agricultural resources by limiting the circumstances under which existing and planned agricultural operations may be considered a nuisance. The ordinance promotes a good neighbor policy between agricultural and non-agricultural property uses by advising purchasers and users of property adjacent to or near agricultural operations of the inherent potential problems associated with agricultural uses, including, but not limited to, the noises, odors, dust, chemicals, smoke, and hours of operation that may accompany agricultural operations.

Agricultural Land Conversion

While agriculture is one of the most enduring industries in Humboldt County, 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. Depending upon interests and economics, farms can be broken up into smaller non-viable parcels or taken entirely out of production. For some of these property transfers, unfunded estate taxes can force the sale of all or portions of the ownership.

According to the United States Department of Agriculture 2012 Census of Agriculture, and summarized in Table 3.2 -1, Farmland Statistics in Humboldt County, between the years 2007 and 2012, Humboldt County lost 3,880 acres or 0.6 percent of farmland, but added 78 farms. The average farm size decreased in those five years from 701 acres to 638 acres. The number of full-time farmers increased 25 percent from 417 to 522.

Table 3.2-1. Farmland Statistics in Humboldt County.

Item	1992	1997	2002	2007	2012
Farms	874	792	993	852	930
Land In Farms	597,766	584,538	613,931	597,477	593,597
Land in farms - average size of farm (acres)	684	738	638	701	638
Average Market Value of Products Per Farm	\$70,835	\$95,297	\$97,604	\$175,813	\$218,559

Source: USDA Census of Agriculture

According to the County Framework Plan (1984), nearly 100,000 acres of farmland were converted to non-farm uses over several decades due to subdivision activity. Since the adoption of the Framework Plan, it is estimated that the County has lost approximately 3,000 -5,000 acres per year of productive farmland to other uses from 1984 through 2003 (Humboldt County Agricultural Resources and Policy Report, August 2003). Agricultural operations near population centers are being moved to areas further away, frequently on poorer farmland that requires more energy and increases costs for transportation, fertilization, and irrigation.

A study of the County's agricultural and timberland conversions identified substantial amounts of land potentially lost to production through zone reclassifications, subdivisions, and conditionally permitted uses that conflict with agricultural and timber operations (Humboldt County Forest Resources and Policy Report, October 2003, updated in 2008). In addition to conversion occurring because of General Plan amendments and new subdivisions, resource lands may be converted through the Certificate of Compliance process, which involves recognition of historic parcels that may be substandard to minimum parcel sizes and densities established by the General Plan. Approximately 25 percent of all the Certificate of Compliance applications submitted from 1985 - 2000 occurred on agricultural properties and timberlands, affecting more than 18,000 acres. From 2001 to June 2005, this rate increased from 25 percent to over 67 percent, affecting over 53,000 acres.

These changes in land use as a result of zone reclassifications, subdivisions, and the issuances of Certificates of Compliance on historic parcels, are primarily reflective of the breakup of old family ranches. Commercial grazing operations will likely be negatively affected by the recognition of historic parcels if they are too small to support grazing and are sold off. Urban and rural conflicts occur at the interface of agricultural and non-agricultural uses. Development introduces new residents who are exposed to and/or interfere with agricultural operations. Depending on the types of nearby agricultural operations, visitor and resident complaints typically involve dust, odors, noise, presence of pests, manure, or spray drift where agricultural chemicals are applied. Agricultural complaints generally include trespass, vandalism, and theft. Even when people move to an area expressly for its rural character, these conflicts can occur because of their expectations, urban values, and residential (i.e., not agricultural) activities.

In addition to reducing the quantity of agricultural lands and timberlands, conversion impacts the remaining lands in many qualitative ways. As these types of lands are converted to suburban and urban uses, remaining farms and ranches as well as timber operations are impacted by conflicts over farming, ranching and timber activities, by transportation challenges, and by the loss of support services and infrastructure. In addition, "loss" in terms of the benefits associated with the open space and environmental benefits provided by agricultural lands and timberlands, would be experienced indefinitely. Finally, keeping land in agricultural and timber uses saves local governments money in infrastructure costs necessary to serve residential developments in remote rural areas.

Forested Areas and Timberlands

There are 1.9 million acres of forested land in Humboldt County, covering more than 80 percent of the County's total land area. National Forests encompass nearly 338,000 acres within the County. National and state parks include 70,000 and 72,000 acres, respectively, while national and state wildlife areas cover 2,600 and 2,000 acres. County parks and community parks account for 1,000 acres. The Bureau of Land Management's forest reserves cover 7,600 acres. Altogether, these public forested lands (including reserves, parks, and other holdings) total over 679,500 acres or 35.5 percent of all forested lands in Humboldt County.

Forest resources, much like agricultural resources, are dependent on the quality of the climate and soils. Humboldt County's mild and wet climate is conducive to timber production. Of the 1,900,000 acres of forestland in Humboldt County, 1,700,000 are considered suitable for timber production. About 1,000,000 acres are designated by the County as TPZ. This acreage is equal to 45 percent of the total land acreage in the County. Humboldt County has one of the highest value timber harvest each year of any county in the state of California.

However, the County's timber industry has been in decline over the past 30 years. In 2000, the County's total gross value of timber production was \$285,232,953, for which Humboldt County ranked first in the state. By 2008, the total gross value of timber dropped to \$108 million, 25 percent less than the 2007 gross value of \$147 million.

The forest products industry is currently 29 percent of the County's base economy (export) and about 8 percent of the total economy (excluding cannabis), based on reported payroll information for 2008. This is down from 32 percent of the base and 11 percent of the total in 2006, which is due to the dramatic crash of the housing market and low demand for lumber nationwide. However, forest products are still the single largest exporting industry in Humboldt County, and makes the County the center of the forest products industry in California.

The market value of timberland for the growing and harvesting of trees has also fallen relative to the value of the land for residential uses and conservation purposes. 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 made Humboldt County a worldwide tourist destination, but at a cost of decreased commercial timber production.

Due to a rising market demand for rural homes and falling timberland profits, forestland property which has an adequate building site and road access is often priced too high to be purchased for profitable commercial timber production. As long as valuations of forestland are driven primarily by residential market demand and only secondarily by commercial income potential, the County can expect more forestlands being bought, sold and ultimately developed as residential property.

Fragmentation of timberlands into smaller lot sizes can accelerate this trend. First, lower priced smaller lots appeal to a larger residential market and second, reduced economies of scale for commercial timber production on smaller lots, particularly associated with fixed regulatory costs, results in less commercial income potential. Once a house is built on timberland property, the combined house and land price becomes too high for the property to be subsequently purchased by timber producers for commercial timber production as the primary use. Nonetheless, forest resources have been important in the growth of the tourism and tourist-related industries in the County, which have increased with the global recognition of California's redwood forests.

Forest Types

Trees are generally 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), although some "hardwoods" are softer than softwoods.

Forest types, as listed by the California Department of Forestry and Fire Protection (CAL FIRE), are categorized by the dominant tree species or mix in that region. The most common forest types in Humboldt County include the following:

- Douglas fir forest, the dominant forest type in the County, is found at elevations of 500 to 2,000 feet (normally above redwood, but also below in the southern County), and includes a variety of oaks and pines, with yew, cedar, and hemlock also growing in moister sites.
- Redwood forest, which grows primarily along the coast and in nearby lowland areas, with redwood interspersed with a variety of other conifers and red alder.
- Montane hardwood forest is found largely in steep canyon slopes and ridgetops, and is dominated by the canyon live oak, with other oaks and pines, madrone, and laurel at lower elevations.
- Montane hardwoods conifer forest, which is found farther inland above rainier areas, and includes black oak, white oak, and live oak along with white fir and Douglas-fir.
- Montane riparian forest, which is generally not productive timberland, and is marked by bigleaf maple, California bay, and Fremont cottonwood.

Table 3.2-2, Forest Types in Humboldt County, lists the types of forests in Humboldt County and the acreage covered by that forest type. A more generalized depiction of forest types is provided in Figure 2-2 (Vegetation Types) in Chapter 2, Biological Resources, of the *Natural Resources and Hazards Report* (Dyett and Bhatia, 2002) (Appendix D).

Table 3.2-2. Forest Types in Humboldt County.

<i>Habitat Type</i>	<i>Acres</i>
Douglas-Fir	701,437
Montane Hardwood	469,351
Redwood	428,277
Montane Hardwoods Conifer	167,452
Montane Riparian	51,165
White Fir	33,366
Coastal Oak Woodland	32,812
Klamath Mixed Conifer	18,918
Red Fir	6,884
Jeffrey Pine	2,451
Closed-Cone Pine Cypress	614
Ponderosa Pine	73
Blue Oak Foothill Pine	27
Other	143
Total	1,912,970

Source: Humboldt County GIS, 2008

Timberland Production Zone (TPZ)

The Timberland Production Zone was established by the California Forest Taxation Reform Act of 1976 as a new designation for lands for which the Assessor's records indicated that the "highest and best use" would be timber production and accessory uses. This law made two modifications to the way timberland was taxed. It placed values on undeveloped land that are related to its ability to grow trees, and it substituted a percent tax on the value of timber at the time of harvest ("yield" tax) for the annual property tax on the trees. In exchange for this tax benefit, landowners had to be willing to dedicate their timberland to timber growing and compatible uses for a period of at least 10 years. Unless terminated by the County or landowner, these ten year commitments renew each year, thus creating a rolling minimum 10-year commitment.

Parcels in TPZ must be no smaller than 160 acres, or 40 acres if a joint timber management plan (JTMP) is prepared by a registered professional forester and approved by the Board of Supervisors. A JTMP must include a management plan (identifying access, rights-of-way, and stocking requirements as regulated by state law) and a management guide (describing the property, existing and proposed access, timber inventory and stocking plan). Once approved, the JTMP is recorded with the County Recorder.

Public improvements and urban services are prohibited on TPZ lands except where necessary and compatible with ongoing timber production. TPZ land in Humboldt County is generally clustered along a north-south axis through the middle of the County, from the western side of the Lower Klamath watershed to the center of the Lower Eel watershed.

The original purpose of TPZ zoning was to preserve and protect timberland from conversion to other, more profitable uses and to ensure that timber producing areas not be subject to use conflicts with neighboring lands. The Timberland Productivity Act of 1982 (TPA) later formalized the state's policy in favor of sustainable harvest, allowing for long-term availability of timber resources.

Timberland Conversion

There are multiple viewpoints of "timberland conversion" depending on how it is defined and in what context the term is used. The Forest Practices Act, which regulates timber harvest practices in California, provides a legal definition of "timberland conversion" (see text box). Basically, whenever a timberland owner proposes to carry out a project that will result in timberland (regardless of its zoning) being converted to a non-timber growing use, they must obtain either a timberland conversion permit or an exemption from this requirement. The permits are processed by CAL FIRE as the lead agency. The County is minimally involved in this process unless there is a rezone application out of TPZ, at which point the County becomes the lead agency.

Forest Practices Act (Title 14, Article 7)

(g) "Timberland Conversion":

(1) Within non-Timberland Production Zone (TPZ) timberland, transforming timberland to a non-timber growing use through timber operations where:

(A) Future timber harvests will be prevented or infeasible because of land occupancy and activities thereon; or

(B) Stocking requirements of the applicable district forest practice rules will not be met within five years after completion of timber operations; or

(C) There is a clear intent to divide timberland into ownerships of less than three acres (1.214 ha.).

(2) Within TPZ lands, the immediate rezoning of TPZ lands, whether timber operations are involved or not except as exempt from a timberland conversion permit under 14 CCR 1104.1.

(h) "Conversion Permit":

the timberland conversion permit, issued by the Director or the Board upon appeal, approving the application for timberland conversion and authorizing a conversion of timberland to use or uses other than the growing of timber.

Another type of “conversion” that is more difficult to define and track is the change in land management priorities based upon parcel size, market conditions, and ownership values. 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 what the standing timber is worth and can price resource land purchasers out of the market.

Timber production on such parcels may still be viable; it is unclear what specific effects this trend has had on the timber economy. However, forest management practices are generally not enhanced with smaller parcel sizes. Land ownership patterns, for example, are likely to become more complicated with smaller parcel sizes, which may inhibit resource production.

Rezoning out of TPZ. Lands zoned TPZ are committed to timber production for the initial 10 years after the zoning declaration; the TPZ status is then renewed automatically every year thereafter. Land zoned TPZ for which the owner petitions to have rezoned otherwise, may be required to remain TPZ for one year after the rezoning declaration is made.

When TPZ was originally proposed in Humboldt County in 1977, a total of 1,103,842 acres were identified as candidates for TPZ zoning. During the TPZ program, landowners had the opportunity to “contest” the zoning into TPZ by filing a written affidavit that a parcel had a “higher and better use” that was not included as a compatible use in the County’s TPZ ordinance, or that the parcel was not physically suited for timber production. In response to these affidavits, 42,053 acres were not zoned into TPZ, leaving 1,061,789 acres that were ultimately zoned TPZ. Additionally, as a consequence of Redwood National Park expansion in 1978, an additional 51,115 acres were considered but not zoned into TPZ because they were placed into the Park.

According to the Humboldt County Assessor, the total acreage of TPZ as of 2009 was 1,008,408 acres, indicating a loss of 53,381 acres since 1977, when the TPZ was first adopted in Humboldt County. Approximately 1,000 acres of this conversion out of TPZ has been as a consequence of direct rezones approved by the Planning Commission and Board of Supervisors. Approximately 910 acres of this were part of the County’s Eureka Community Plan in 1995.

There have not been many property owner requests to rezone properties in the County out of TPZ. During the period of 2001 - 2008 there were only nine direct rezones affecting TPZ lands, and of these, seven were rezones from other zones into TPZ. The two rezones out of TPZ during this seven-year period involved 10-year phase-outs of TPZ for a 30 acre parcel and a 20 acre parcel.

Conversion from Fragmentation. Fragmentation and “parcelization” studies have found that there is a direct positive relationship between timber production volumes and land holding size.¹ As the *California Forest Legacy Program Assessment* notes:

¹ “Parcelization” is used by the Forest Legacy Program to refer to subdivisions that occur without additional, immediate non-forest development. The CAL FIRE Fire and Resource Assessment Program’s (FRAP) Forest and Range 2003 Assessment considers parcelization to be the process of landownership being broken into increasingly smaller holdings—FRAP’s definition of “rural residential” is a housing density of one or more units per 20 acres and less than one unit per acre. The meaning in this paper is not limited only to subdivisions that create new parcels, but includes a shift of land holdings to many landowners with smaller holdings, which may or may not require review by the County. (California Department of Forestry and Fire

“While this process of creating new parcels and reducing average parcel sizes, or “parcelization”, does not in and of itself reflect on the quality of forest resource management occurring on that property, it can have several adverse effects on the maintenance of certain forest values and traditional forest uses. Where parcels are divided to facilitate the construction of housing or other “developed” uses, parcelization brings with it increased roading, fencing, and vegetation changes, increased human and domestic animal populations, and other direct impacts to timber stocks, wildlife populations and habitat, water quality and other forest resources. Increased development in resource lands also places a fiscal and management burden on local governments and other bodies responsible for providing infrastructure and other public services.”

A study commissioned by the North Coast Regional Land Trust for Humboldt County in 2009 documented the effects of timberland parcelization on annual harvest volumes. The study found that as parcel size went down, the amount and rate of harvest went down significantly. A survey of TPZ landowners in the Mattole conducted by the Mattole Restoration Council found that as parcel size decreased, the number of property owners interested in harvesting timber also decreased significantly. For those TPZ landowners with 160 acres or more, 79 percent responded that they were interested in harvesting timber compared with 44 percent of TPZ landowners holding less than 160 acres.

Fragmentation of the forest resource land base in Humboldt County is affected by the existence of patent parcels and strong support for the property rights assumed to be associated with land ownership. A land patent is the right of ownership to a parcel of land granted by government to an individual or private company. The Subdivision Map Act sets out a process that determines whether a patent parcel is considered a separate legal parcel under the law, a process usually culminating in the recordation of a Certificate of Compliance or Conditional Certificate of Compliance.

According to the Bureau of Land Management, over 18,000 patent parcels have been issued in Humboldt County, of which many have been altered by subdivision, lot line adjustments, and mergers, and do not retain their original status. Development rights associated with many of these patents imply that lands that would not otherwise be considered for rural residential development may in fact be available for such use. Thus, several policies were incorporated into the Framework Plan to consider the potential impacts of these parcels on fragmentation and parcelization of the forest resource land base.

The County adopted a merger ordinance in 1986 that set forth a process that merged substandard TPZ lands. A section of the merger ordinance, Article II, applies to “new mergers,” and provides conditions for merging substandard parcels zoned TPZ, and to parcels enforceably restricted by a Williamson Act contract. To date, this section of the merger ordinance has only been implemented as a precondition to entry into Williamson Act contracts, and not lands zoned TPZ.

Protection, Fire and Resource Assessment Program, 2003. *The Changing California: Forest and Range 2003 Assessment*. <http://frap.cdf.ca.gov/assessment2003>)

During the development of the merger ordinance, which followed the adoption of the Framework Plan in 1984, the County raised concerns over the impacts of the unregulated transfer of substandard patent parcels on the ability of the County to meet land use planning goals. Specific concerns included:

- Allowing smaller units of land without regard to general plan policies addressing resource management
- Adequate access
- Building site suitability
- Sewage disposal
- Water supply
- Slope stability
- Impacts on public service delivery

These issues are still relevant today, as loss of resource lands was one of the key issues identified during the General Plan Update discussions.

There has also been an overall decrease in acres held by industrial timber owners in the past eight years. During the years of 2001 through 2008, industrial timberland owners transferred approximately 8 percent (51,000 acres) of their total ownership of forest lands for purposes ranging from sales to public agencies (primarily BLM) to rural residential development. As was stated in the Agricultural Resources section above, the County has experienced a significant increase in the recognition of patent and legal parcels in the resource lands, which can serve as a legal mechanism to break up large ranches and timberland into smaller ownerships.

A trend recorded throughout the planning period has been the construction of residential structures in the rural lands without the benefit of building permits. From 1998 to 2008, 134 TPZ parcels changed from “vacant” to “improved” on the assessment rolls. During this same time period, only 63 building permits were issued by the County on lands zoned TPZ, and of those, only 35 were for residential structures (totaling 26 percent). It is unknown exactly how many houses have been built without the benefit of permits; however, without these permits, compatibility with resource production values cannot be evaluated.

Another trend is the increased monetary valuation of resource lands for rural residential purposes rather than resource production uses. In the past decade, several large tracts of land totaling more than 30,000 acres that were previously in timber production have been proposed for conversion to rural residential uses. During the bankruptcy hearings for the Pacific Lumber Company’s lands in 2007, MAXXAM Corporation submitted a Plan for Reorganization to the courts that included a plan for development on approximately 22,000 acres of timberlands for the purposes of developing 136 residential parcels. These “kingdom estates” (as referenced in the Reorganization Plan) would be approximately 160 acres in size, based upon the existing patents, and would retain their TPZ zoning designation, even though they would include infrastructure such as roads, utilities, golf courses and tennis courts. In order to prevent this type of development, the County enacted a temporary moratorium on building permits for TPZ lands until the County could review policy options to address the development. Subsequently, the courts dismissed the Plan for Reorganization primarily because of the County action.

In 2003, Eel River Sawmills closed their mills and began selling off their remaining timber holdings of approximately 22,000 acres, with the majority of these lands being transferred to a private real estate developer. Part of this transaction included a portion of the Schmook Ranch, one of the original “tree farms” enrolled in the Williamson Act prior to the development of the TPZ Ordinance. The Schmook Ranch contains approximately 5,200 acres of a mix of TPZ and AE

lands. In 1980, Eel River Sawmills sold approximately 1,200 acres of the ranch to 12 different owners by utilizing the original patent configuration. The remainder of the ranch was sold in 2004. The current owner has an application for 46 certificates of compliances recognizing the original patents and has conveyed the majority of this ranch to multiple owners. Of the parcels under new ownership, only two remain in timber production. Although numerous structures have been built on the ranch, no building permits have been issued for these structures.

In 2006, Vilica Corporation bought approximately 8,500 acres of TPZ lands for the purpose of subdividing and sale for rural residential parcels. An enforcement action by the County was taken for illegal grading and building. During the investigation, it was determined that 51 parcels were sold and eight structures were built without permits.

In 2008, RLF Redwood Properties LLC, a real estate investment firm out of Colorado, bought the Hilltop Ranch, containing timberlands originally owned by The Pacific Lumber Company and Barnum Timber Company. The new owners applied for and received certificates of compliance for the land patents (and two conditional certificates for subdivisions violations) and subsequently sold off all 23 lots between 2009 and 2010. During that time, at least nine new structures were built on the ranch, of which only one has obtained a building permit. Enforcement action is currently pending with the County.

The protection of forestlands and their timber producing capabilities was one of the key issues during the many public meetings during the General Plan Update process. The main source of controversy identified during this process centers around how the County can protect these resources while balancing the desire of property owners to maintain economic value through residential development potential on resource lands.

3.2.2 Agricultural and Timber Resources - Standards of Significance

This analysis uses the significance criteria from the CEQA Guidelines Appendix G. The proposed General Plan Update would result in a significant impact on agricultural and forest (including timber) resources if it would:

- 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 nonagricultural 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.

Items "a", "d", and "e" of the significance criteria are discussed in Impact 3.2.3.1, and Items "b" and "c" are discussed in Impact 3.2.3.2.

3.2.3 Agricultural and Timber Resources - Impacts and Mitigation Measures

Impact 3.2.3.1: Convert Farmland or Forest Land

Implementation of the General Plan Update could result in changes in land use designations that would directly convert farmland or forest land to another use, or could include new policies which could facilitate conversion of farmland or forest land.

This impact analysis addresses items "a", "d", and "e" of the significance standards listed in Appendix G of the CEQA Guidelines as provided in Section 3.2.2 above. Pursuant to these standards, the proposed County General Plan Update would have a significant impact if it would:

- 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 nonagricultural use.
- 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.

Pursuant to item 'a' of Appendix G of the CEQA Guidelines, the proposed County General Plan Update would have a significant impact if it would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use. Humboldt County does not participate in the statewide Farmland Mapping and Monitoring Program, and is therefore unable to analyze the impacts to these lands. Humboldt County is currently in the process of updating the soils maps so that ultimately the County could qualify to participate, but as of the preparation of this DEIR, the soils survey is not complete. However, the County addresses the loss of farmlands, both prime and non-prime, as described in the following sections and provides mitigation measures to address this loss as a result of the General Plan Update.

Conversion of Farmlands and forest land - Overview

Farmland may be converted for one or more of the following reasons: direct conversion to urban uses, falling idle due to conflicts with nearby urban uses, subdivision, and a change in use to parkland or open space. The conversion process involves a complex interplay of a number of factors, including farm profitability, urban growth, land value, personal lifecycle considerations, community expectations, and government incentives and regulations. The conversion of agricultural land would occur if the proposed General Plan Update: 1) includes changes from an agricultural land use designation to another non-agricultural land use designation; 2) retains existing designations or policies that would lead to development of prime agricultural lands; or 3) includes new policies or designations that would allow the development of non-agricultural uses on agricultural lands. Conversion can also occur when parcel sizes of resource lands (for both agricultural and timberlands) become too small for economic viability through either subdivisions or the break-up of ranches and timber holdings from the sell-off of patent and/or legal parcels.

Conversion as a result of a change in land use classification

The General Plan Update contains three resource land use mapping designations to compliment the Land Use Element policies for the identification and protection of agricultural and timberlands in Humboldt County. Provided below is a description for each of these designations from Section 4.7 of the General Plan Update, Land Use Element:

Agricultural Exclusive (AE)

This plan designation applies to bottomland farms and lands that can be irrigated, and is also used in upland areas to retain agricultural character. Typical uses include dairy, row crops, orchards, specialty agriculture, and horticulture. Residential subdivision is not supported. Residential uses must support agricultural operation. Density range is 20-60 acres/unit.

Agricultural Grazing (AG)

This designation applies to dry-land grazing areas in relatively small land holdings that support cattle ranching or other grazing, supplemented by timber harvest activities that are part of the ranching operation and other non-prime agricultural lands. Residential uses must support agricultural operation. Density range is 20 -160 acres/unit.

Timberland (T)

The Timber Production T designation is utilized to classify land that is primarily suitable for the growing, harvesting and production of timber. Prairie and grazing lands may be intermixed. Density range is 40 -160 acres/unit.

Section 3.1 Land Use, Population, and Housing, contains a discussion of the expected buildout based upon the proposed plan changes. The discussion includes summary charts of land use mapping changes illustrating expected buildout on agricultural lands. The information contained below in Table 3.2-3 is a summary of the proposed agricultural land use designation changes under the General Plan Update. A more detailed description of proposed plan changes by watershed is found on the following pages.

It should be noted that the discussion below highlights the changes in land use classifications that are going from a resource production designation (AE, AG and T) to a non-resource production designation (such as Public Lands, Residential or Commercial). There is not an exact correlation in the charts below in the number of acres currently in the Framework Plan and what is proposed in the General Plan Update as to "acres lost", as sometimes these acres "shift" between one resource production classification to another. The proposed mapping for the General Plan Update reflects how the lands are currently managed, and follow parcel lines, not habitat type.

As can be seen in Table 3.2-3 below, there is a net decrease in acreage under the agricultural land use designations for the General Plan Update of approximately 17,729 acres. However, the majority of that change is a result of the transfer of agricultural lands to either timberlands or public lands. Furthermore, there is a net increase in land transferred from residential uses to agricultural uses under the General Plan Update. Additionally, there is a net increase in lands planned for Agriculture Exclusive, representing the majority of prime agricultural lands in the County.

Approximately 1,037 acres of the 42,000 acres identified as prime agricultural lands by the County's GIS mapping program (primarily through the identification of prime soils) have been re-designated to a non-agricultural designations. These changes reflect either the acquisition by a public agency or the current use and parcelization of the land. The average parcel size for these properties that were re-designated out of an agricultural land use designation was approximately 6 acres. A more detailed discussion of these changes can be found in the following sections by watershed description.

Table 3.2-3. Countywide Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	899,717	19,876	897,026	19,398
AE	59,465	1,925	76,311	2,181
AG	409,722	18,041	377,838	17,201
Total	1,368,904	39,842	1,351,175	38,780

Land use changes under the General Plan Update and Framework Plan, Humboldt County GIS Mapping, 2016.

The proposed land use maps also include numerous changes to land use designations that reflect the actual uses of land versus the land use designation that had been applied by the 1984 General Plan (Framework Plan). For example, several large tracts of land that had previously been given agriculture or timberland land use designations were subsequently acquired for public uses such as state park land or wildlife refuge acreage. In these instances, the land use designation was changed to reflect the fact that the land is no longer used for agriculture and has been converted to public use. Rather than indicating a policy shift of the General Plan Update to encourage or facilitate the conversion of agricultural land to other uses, changes such as this represent an effort to align the land use map with the actual uses put to the land. Humboldt County does not have land use jurisdiction over these lands. Nevertheless, while the General Plan Update does not directly call for conversion of these lands to non-agricultural uses, and measures to reduce or avoid this conversion are often beyond the County's jurisdiction, such conversion would still represent a significant effect.

Rural Residential (RA) Land Use Category

The proposed Rural Residential Agriculture (RA) designation replaces existing land use categories that are currently represented as agricultural lands in the Framework Plan. These include:

Agricultural Lands (AL) Lands characterized as remote, steep, and high natural hazards areas with marginal timber, grazing, mining and quarrying, recreational areas, watershed and wildlife areas, and occasional rural residences. The primary and compatible uses include resource production allowing intensive management opportunities, recreational uses, single family residences and cottage industries. The density range is one dwelling unit per 20 acres to one dwelling unit per 160 acres.

Agricultural Rural (AR) Lands characterized as large lot areas on slopes generally less than 30 percent, located outside of Urban and Rural Community Centers areas, with few public services required. The primary and compatible uses include agriculture and

timber harvesting under intensive management, single-family residences, cottage industries, educational and religious activities, and recreational uses. The density range is one dwelling unit per 5 acres to one dwelling unit per 20 acres.

During the initial scoping process for the General Plan Update, the agricultural community, through the Humboldt County Farm Bureau, requested that the County re-designate areas that were not being used for commercial agricultural production and that are likely not appropriate for such use due to existing parcel size, intensity of development, and other land use factors, to another land use category more reflective of the primary use of the property. In most cases, this was rural residential. This action would then provide a "brighter line" for the lands currently under cultivation or managed for commercial agricultural (such as grazing lands). In most cases, the lands designated AL or AR were re-designated as RA. Where agriculture is still the primary use of the property, lands were re-designated to AG.

The RA designation applies to large lot residential uses that typically rely upon onsite water and wastewater systems. Agricultural uses are considered a compatible use, but not the primary use. Varying densities are reflective of land capabilities and/or compatibility issues. RA5-20 and RA20 are rural residential designations for lands with slopes generally less than 30 percent and served by individual water and wastewater systems and good road access. The RA40, RA60, and RA160 designations are applied to more remote, steep, and high hazard areas or where necessary to ensure compatibility with adjacent resource production and open space uses.

The second largest change reflects proposed changes from AG to RA. In the proposed General Plan Update, most AG lands designated in the current 1984 General Plan have been designated AG or T in the General Plan Update, which reflects the current primary use of these properties and does not reflect a conversion from resource production use. In some cases though, AG lands have been re-designated to RA to reflect the de facto use of these lands.

Some of the largest scale changes in resource land mapping were due to a change in mapping style, from mapping timber and agriculture soils to mapping land management. Lands managed primarily for timber production are designated T and lands managed as ranches are given AG designations. This approach is more in keeping with General Plan land use classifications, rather than attempting to map the intricate intermixing of agricultural and timber soils. All the resource production land use designations allow both timber production and general agriculture as primary uses to reflect the intermixed land capabilities of these lands. The impact analysis in this EIR, however, is based on the permitted uses on high quality soils.

This re-designation of lands from AG to T or vice versa is not likely to promote the change or conversion in resource production uses; however, if the density for these land use categories changes and increases the residential development entitlements, this could cause a loss of resource production lands because the land may be more valuable as rural residential than for resource production.

Following is a summary of the mapping changes for resource lands based upon watershed boundaries. It should be noted that the existing Plan(s) currently contains over 100 separate land use designations. Many of these categories will not be used in the new Plan. In order to provide for comparison between the existing Plan and the proposed Plan, some categories were consolidated to facilitate analysis of the changes. For instance, the Humboldt Bay Area Plan contains an Agriculture Exclusive – Grazing (AEG) land use category, which is not included in the proposed Plan. This land use designation is most similar to the AG land use designation. In order to compare changes between plans, the AEG acreage was included in the AG category. Appendix T describes how this consolidation was done for the proposed project and provides a

conversion chart for all the land use designations and the assumptions used in developing the buildout numbers.

South Fork Eel

The South Fork Eel River watershed includes Richardson Grove and Humboldt Redwoods State Park, the Avenue of the Giants and a number of community areas: Benbow Briceland, Garberville, Miranda, Myers Flat, Phillipsville, Redway, and Weott.

The General Plan Update proposes to make changes from agricultural and timber related land use designation to other non-resource production related land use designations as shown in the table below and described in the paragraphs that follow.

Table 3.2-4. South Fork Eel River Planning Watershed Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	54,901	1,090	60,255	1,117
AE	110	0	0	0
AG	43,650	2,064	39,135	1,788
Total	98,661	3,154	99,299	38,780

Note: No re-designation of prime agricultural lands is proposed from a resource designation to a non-resource land designation in the South Fork Eel Watershed.

Changes from AG. There are approximately 43,650 acres planned AG within the South Fork Eel watershed, approximately 4,605 acres of which are proposed to be redesignated to other uses. The majority of this acreage will be re-designated to T. Approximately 33 acres at various locations across the watershed are proposed to be redesigned to PF or CR. Approximately 100 acres are proposed to be redesignated to RA, most of which is the result of re-aligning land use boundaries to parcel boundaries, and consists mostly of parcels less than 20 acres with the exception of a 37-acre parcel in the Salmon Creek area and a 24-acre parcel east of Benbow.

Changes from AE. There are 110 acres planned AE in the South Fork Eel watershed that contain a portion of the Benbow Lake State Park, all of which are proposed to be redesignated to P.

Changes from T. There are approximately 54,901 acres currently planned T within the South Fork watershed. The General Plan Update provides an increase of 5,354 acres in lands planned T, mainly from lands being re-designated from AG to T. However, while there will be a net increase in lands designated T, some lands are also proposed to be re-designated from T to other classifications, primarily to RA. Many of these changes are proposed to better align plan boundaries with property boundaries. Also, lands are being re-designated to P to reflect public acquisitions by BLM and State Parks. Approximately 55 acres of land owned by the Redway Community Services District containing wastewater facilities is proposed to be redesignated to PF. Approximately 13 acres along the Eel River and U.S. 101 at the County line and containing gravel extraction operations is proposed to be redesignated to IR. Approximately 7 acres is

proposed to be redesignated to CR along U.S. 101 south of Phillipsville to align the land use map with current non-timberland uses.

Lower Eel

The Lower Eel watershed extends from the Middle Eel and South Fork Eel in Dyerville to the Pacific Ocean, and includes the communities of Redcrest, Scotia, Rio Dell, Fortuna, Ferndale, and Loleta.

The General Plan Update proposes to make changes from agricultural and timber related land use designation to other non-resource production related land use designations as shown in the table below and described in the paragraphs that follow.

Table 3.2-5. Lower Eel River Planning Watershed Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	87,506	1,990	89,162	2,027
AE	32,517	1,039	35,173	1,059
AG	47,626	1,999	43,248	1,866
Total	167,649	5,028	167,583	4,952

Note: 285 acres considered prime agricultural lands are proposed to be changed from a resource designation to non-resource land designations.

Changes from AG. There are approximately 47,626 acres planned AG within the Lower Eel watershed, of which approximately 4,378 acres are proposed to be re-designated. The majority of this acreage will be re-designated to T. Less than one acre along Francis Creek, outside Ferndale, is proposed to be redesignated to P to reflect use as a water intake facility by the Del Oro Water Company. Approximately 21 acres in Williams Creek is proposed to be redesignated to RE 2.5-5 to reflect the current parcelization of this area and approximately 35 acres, also in the Williams Creek area, is proposed to be redesignated to RA to reflect existing uses.

Changes from AE. There are 32,517 acres planned AE in the Lower Eel watershed, approximately 344 acres of which are proposed to be redesignated to non-resource uses, which includes: 200 acres located between Newburg and Loop Roads within the City of Fortuna Sphere of Influence (SOI) that has been identified by the City as a planned annexation area as part of their General Plan Update; 60 acres along Singley Road containing the trust lands of the Bear River Band of the Rohnerville Rancheria Tribe that is planned to be redesignated to Tribal Lands; 60 acres at the intersection of Blue Slide Road and Price Creek Road containing parcels ranging in size from 0.5 to 6.0 acres and portions of two larger parcels that is proposed to be redesignated to RA; 31 acres proposed to be redesignated to RE, about 15 acres of which contains parcels that range in size from 0.25 to 6.0 acres located in the Metropolitan area north of Rio Dell; and 13 acres located at the edge of the City of Fortuna comprised of three parcels ranging in size from 3.25 to 7.5 acres that are proposed to be redesignated RE.

Changes from T. There are approximately 87,506 acres currently planned T within the Lower Eel watershed, of which approximately 416 acres are proposed to be changed to non-resource production uses. Approximately 110 acres of the Eel River area in Scotia is proposed to be redesignated to CF and approximately 100 acres of the Headwaters Preserve that are located within the Lower Eel watershed are proposed to be redesignated to P. An additional 13 acres of the Humboldt Redwoods State Park near Redcrest is proposed to be redesignated to P. Also, lands to the west and south edges of the City of Rio Dell containing 18 parcels ranging in size from 0.3 to 20 acres are proposed to be redesignated as RA5-20.

Middle Main Eel

The Middle Main Eel watershed is rural and remote, extending from the southeastern corner of the County to the Dyerville and covering approximately 216 square miles. The Middle Main Eel watershed consists of ranch and timberlands, small pockets of dispersed rural residences, a larger rural community around the Alderpoint area, and smaller concentrations of residential development in Island Mountain, Blocksburg, Fort Seward, Eel Rock, Fruitland, and McCann.

The General Plan Update proposes to make changes from agricultural and timber related land use designation to other non-resource production related land use designations as shown in the table below and described in the paragraphs that follow.

Table 3.2-6. Middle Main Eel River Planning Watershed Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	32,557	762	40,906	799
AE	730	33	751	31
AG	78,655	3,679	75,907	3,515
Total	111,942	4,324	117,564	4,345
Note: No re-designation of prime agricultural lands is proposed from a resource designation to a non-resource land designation in the Middle Main Eel Watershed.				

Changes from AG. There are approximately 78,655 acres planned AG within the Middle Main Eel watershed, approximately 2,748 acres of which is proposed to be changed to other land use designations. The majority of this acreage will be re-designated to T. Approximately 160 acres that contains the Casterlin School and the Blocksburg County maintenance facility and a 110-acre parcel in Humboldt Redwoods State Park are proposed to be redesignated to P. A correction of the RCC boundary for the communities of Alderpoint, Blocksburg, and Fort Seward will also remove lands currently planned AG. Approximately 1,890 acres are proposed to be redesignated to RA.

Changes from AE. There are 730 acres planned AE in the Middle Main Eel watershed, of which approximately 15 acres near Fort Seward comprised of two 6 to 7 acre parcels are proposed to be redesignated to RA40.

Changes from T. There is approximately 32,557 acres planned T within the Middle Main Eel watershed, of which about 147 acres located at the edge of the Middle Fork Eel River near McCann is proposed to be redesignated to RA 40-160. In addition, approximately 40 acres are proposed to be designated to RA5-20 and RA40 relating mostly to realignment of land use boundaries to parcel lines.

Lower Klamath

The Lower Klamath Watershed encompasses approximately 519 square miles of the Klamath River basin and its tributaries, including the community of Orleans and the Yurok Reservation. The Six Rivers National Forest and the Yurok Reservation comprise approximately 50 percent of this watershed.

The General Plan Update proposes to make changes from agricultural and timber related land use designation to other non-resource production related land use designations as shown in the table below and described in the paragraphs that follow.

Table 3.2-7. Lower Klamath River Planning Watershed Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	127,810	3,018	127,598	2,949
AE	23	0	60	0
AG	2,027	16	589	22
Total	129,860	3,018	126,247	2,971

Note: 15 acres considered prime agricultural lands is proposed to be changed from a resource designation to non-resource land designations. Land currently planned AE are developed with no additional development potential available.

Changes from AG. Table 3.2-7 indicates that there are approximately 2,027 acres within this watershed that are currently designated AG in the Framework General Plan. The majority of these lands are a part of the Northern Humboldt General Plan that underwent a “lumping” exercise of land use designations. These lands are not strictly designated AG, but instead contain multiple designations that were then combined into one category for comparison purposes. These lands are being redesignated to a category more fitting to the current use of the land. As a result, there are only approximately 589 acres planned AG for the proposed General Plan update for this watershed. The AG area located outside the Orleans Community Plan Area (CPA) is proposed to be redesignated as Timber as this area is currently zoned AE or TPZ and used primarily for timber production, except for approximately 257 acres which has been acquired by Redwood National Park and is proposed to be redesignated to P. The Orleans CPA does not contain Framework General Plan land use designations. A portion of the area within the Orleans CPA is planned for agricultural uses and through the General Plan Update process AG was applied to this area as the appropriate equivalent land use type. The area within the Orleans CPA is proposed to be redesignated to RA 5-20. The proposed change to RA reflects the use to which this land is currently put, dispersed rural residential development. In addition, almost all of this land is already developed with single-family homes and is projected to have little to no additional development potential.

Changes from AE. Table 3.2-7 indicates that there are approximately 23 acres designated AE in the Framework General Plan. As with the AG land use designation, these lands are a part of the Northern Humboldt General Plan that underwent a “lumping” exercise of land use designations. The General Plan Update utilized the soils map and air photos to determine land use for identifying prime agricultural lands. Because of this action, an increase of approximately 37 acres to AE is proposed primarily in the Orleans area along Highway 96.

Changes from T. Approximately 127,810 acres of this water shed is planned T, most of it located between the Yurok Reservation and the Six River National Forest to the north, and the Yurok Reservation and Redwood National Park to the south. Approximately 212 acres is proposed to be redesignated to other land uses. Most of this is in the upper Pine Creek drainage west of the Hoopa Reservation along Bair Road and is owned by the BLM, and approximately 2.5 acres is in Orleans that has been purchased by the Karuk Tribe and is proposed to be redesignated P. Approximately 85 acres that is served by community water within the Orleans CPA is proposed to be redesignated RE1-5. The remaining changes either reflect proposed changes to CF to reflect Klamath River floodway areas or changes to PF to reflect existing public facilities.

South Fork Trinity

The South Fork Trinity Watershed is the boundary between Trinity and Humboldt Counties for approximately 12 miles. Approximately 72 percent of the land within the watershed is part of Six Rivers National Forest. Less than one percent of land within the watershed is used for residential purposes, most of which is located near State Route 299, and the remainder is used for timber production.

The General Plan Update proposes to make changes from agricultural and timber related land use designation to other non-resource production related land use designations as shown in the table below and described in the paragraphs that follow.

Table 3.2-8. South Fork Trinity River Planning Watershed Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	19,799	422	19,638	383
AE	79	4	10	1
AG	17	0	146	0
Total	19,895	426	19,794	384
Note: 39 acres considered prime agricultural lands is proposed to be changed from a resource designation to a non-resource land designation.				

Changes from AG. There are approximately 17 acres planned AG within the South Fork Trinity watershed located near Stapp Road all of which is proposed to remain in resource production related uses.

Changes from AE. There are 79 acres planned AE within the South Fork Trinity planning watershed located at the confluence with the Middle Fork Trinity. The General Plan Update proposes to retain most of this land in resource production related land uses, with the exception of a parcel that has been acquired by the Six Rivers National Forest and is proposed to be redesignated to P just upstream from the confluence with the Middle Fork Trinity and approximately 17 acres that contain the river bottom that are proposed to be redesignated CF.

Changes from T. Approximately 19,799 acres of this watershed is planned T, the majority of which is proposed to be retained in resource production related uses as part of the General Plan Update. Approximately 161 acres owned by the Six Rivers National Forest in two remote locations within the watershed is proposed to be redesignated to P.

Lower Trinity

The Lower Trinity watershed begins at the junction of the South and Middle Forks of the Trinity at the Humboldt County line and includes the remainder of the Trinity River watershed to its confluence with the Klamath River. The Lower Trinity watershed includes the town of Willow Creek and Hoopa on the Hoopa Reservation.

The General Plan Update proposes to make changes from agricultural and timber related land use designation to other non-resource production related land use designations as shown in the table below and described in the paragraphs that follow.

Table 3.2-9. Lower Trinity River Planning Watershed Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	20,810	414	21,041	356
AE	378	17	468	18
AG	0	0	170	16
Total	21,188	431	21,680	390
Note: No re-designation of prime agricultural lands is proposed from a resource designation to a non-resource land designation in the Lower Trinity River Watershed.				

Changes from AG. There are no lands currently planned AG within the Lower Trinity watershed. Lands currently planned rural residential have been re-designated to AG for agriculture based upon the current use and zoning.

Changes from AE. There are approximately 378 acres planned AE within the Lower Trinity planning watershed, all of which is proposed to be retained in resource production related uses. No re-designation of prime agricultural lands is proposed from a resource designation to a non-resource land designation in the Lower Trinity River Watershed.

Changes from T. Approximately 20,810 acres of this watershed are planned T, most of which is located west of Willow Creek adjacent to Six Rivers National Forest land. These lands are proposed to be retained in a T designation.

Van Duzen

The Van Duzen River watershed is comprised of 60 percent timberland, with grazing, open space, parks, and rural residential land uses making up the remainder. The Van Duzen watershed includes the communities of Dinsmore, Bridgeville, Carlotta, and Hydesville.

The General Plan Update proposes to make changes from agricultural and timber related land use designation to other non-resource production related land use designations as shown in the table below and described in the paragraphs that follow.

Table 3.2-10. Van Duzen River Planning Watershed Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	109,259	2,459	112,170	2,512
AE	8,505	353	8,389	342
AG	72,167	3,357	68,527	3,132
Total	189,931	6,169	189,086	390

Note: 30 acres considered prime agricultural lands is proposed to be changed from a resource designation to a non-resource land designation.

Changes from AG. There are approximately 72,167 acres of land currently planned AG within the Van Duzen watershed. Of this land, all but approximately 1,767 acres is proposed to remain as AG, AE or T. Approximately 1,692 acres are proposed to be redesignated to RA, including approximately 1,257 acres west of the Kneeland Airport that is proposed to be redesignated to RA20-160 ranging from approximately 2.0 to 90 acres, and 267 acres that west and south of Bridgeville ranging from approximately 2.0 to 70 acres.

Changes from AE. There are 8,505 acres of land currently planned AE within the Van Duzen watershed. Approximately 116 acres (net) is proposed to be redesignated to other uses, including: approximately 105 acres on the southwest side of the Dinsmore Airport that is proposed to be redesignated to CF and 33 acres in the same area containing parcels ranging in size from less than one acres to 14 acres that is proposed to be redesignated to RR5-20; approximately 270 acres comprised of parcels 40 acres or less in size located between Bridgeville and Dinsmore to RR40-160. In addition, approximately 49 acres east of Carlotta that is owned by Humboldt County is proposed to be redesignated to P; and approximately 30 acres northeast of Hydesville that is proposed to be redesignated to IG.

Changes from T. There are 109,259 acres of land currently planned T within the Van Duzen watershed, of which most will be retained with the General Plan Update. Some lands currently planned AG will be redesignated to T. There is some acreage that will be redesignated to P to reflect land acquired by BLM located south of the Kneeland Airport, and land acquired by State Parks near Grizzly Creek State Park. Approximately 24 acres

on the northwest edge of Hydesville is proposed to be redesignated to RE, which consists of parcels from less than one acre to 12 acres.

Redwood Creek

The Redwood Creek Watershed extends from near the County’s center to its far northwestern edge, approximately 45 percent of which is Redwood National Park and other public land. Lands designated T comprise another 48 percent, and rural residential and the town of Orick makes up the remainder.

The General Plan Update proposes to make changes from agricultural and timber related land use designation to other non-resource production related land use designations as shown in the table below and described in the paragraphs that follow.

Table 3.2-11. Redwood Creek Planning Watershed Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	77,642	1,654	72,690	1,591
AE	575	10	918	28
AG	21,902	898	21,349	884
Total	100,119	2,562	94,957	2,503

Note: 97 acres considered prime agricultural lands is proposed to be changed from a resource designation to a non-resource land designation.

Changes from AG. There are approximately 21,902 acres of land currently planned AG within the Redwood Creek watershed. Most of the 553 acres proposed to be changed are going to P, reflecting Redwood National Park land acquisitions. The remaining changes to PF reflect purchases of land by Caltrans for improvements to S.R. 299 and the Humboldt County Redwood Creek solid waste container site.

Changes from AE. There are 575 acres planned AE within the Redwood Creek planning watershed, all of which are located in the Orick area. The proposed General Plan Update plans to retain these lands in resource production related uses, except for 97 acres located at the intersection of U.S. 101 and Davidson Road, which were acquired by Redwood National Park.

Changes from T. Approximately 77,642 acres of this watershed are planned T, both outside and within the Coastal Zone. The General Plan Update proposes to retain most of this land in T, but proposes to change property to P to reflect ownership by the federal government, largely in the Bair Road area. Approximately 100 acres is proposed to be redesignated to RA40 or RA40-160 in the Titlow Hill area.

Cape Mendocino

The Cape Mendocino watershed is dominated by timber production and grazing lands which make up over 60 percent of the area, while the King’s Range National Conservation Area

occupies approximately 22 percent. The watershed contains the communities of Shelter Cove, Whitethorn, Ettersburg, Honeydew, and Petrolia.

The General Plan Update proposes to make changes from agricultural and timber related land use designation to other non-resource production related land use designations as shown in the table below and described in the paragraphs that follow.

Table 3.2-12. Cape Mendocino Planning Watershed Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	103,051	2,071	100,074	1,932
AE	838	24	9,188	110
AG	101,011	4,226	92,516	4,155
Total	204,900	6,321	201,779	6,197

Note: 358 acres considered prime agricultural lands is proposed to be changed from a resource designation to a non-resource land designation.

Changes from AG. There is approximately 101,011 acres currently planned AG within the Cape Mendocino watershed, approximately 7,280 acres of which is proposed to be redesignated to non-resource related land uses. These changes included the perfecting of the RCC land use designation boundary for Petrolia and Honeydew communities, and redesignation of lands outside of Petrolia and along the Mattole Road, in the Prosper Ridge area, and along Chamber and French Ranch Road to RA. Land containing the Ettersburg School is proposed to be redesignated to PF. State and federal land acquired as part of the King Range National Conservation Area totaling approximately 5,438 acres is proposed to be redesignated to P.

Changes from AE. There are 838 acres currently planned AE in the Cape Mendocino watershed, approximately 97 acres of in the Dutyville area along the Mattole River is proposed to be changed to RA 40, all of which is currently comprised of parcels 50 acres and less.

Changes from T. There is approximately 103,051 acres currently planned T within the Cape Mendocino watershed. The majority of this will remain T; however, a mixture of lands currently planned AG and T will be re-designated to P to reflect lands contained within the King Range National Conservation Area that have been acquired by BLM. Approximately 18 acres containing the County operated Whitethorn container site is proposed to be redesignated to PF.

Trinidad

The Trinidad watershed is a coastal watershed that includes Westhaven, the City of Trinidad, Big Lagoon, and rural residential development which is scattered along the coast between Moonstone Beach and Patrick’s Point State Park.

The General Plan Update proposes to make changes from agricultural and timber related land use designation to other non-resource production related land use designations as shown in the table below and described in the paragraphs that follow.

Table 3.2-13. Trinidad Planning Watershed Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	71,878	1,515	57,928	1,396
AE	1,293	16	1,165	21
AG	242	0	364	18
Total	73,413	1,531	59,458	1,435

Note: 38 acres considered prime agricultural lands is proposed to be changed from a resource designation to a non-resource land designation.

Changes from AG. There are approximately 242 acres planned AG within the Trinidad watershed, all of which are proposed to be redesignated to PR and RA. Land proposed to be redesignated to PR is located between Stone and Big Lagoons and is owned by California State Parks. Land proposed to be redesignated to RA is also located between Stone and Big Lagoons along Kane Ridge and McDonald Creek Roads and contains parcels that range in size from 2 to 60 acres. About half of the parcels are developed with rural residential type development.

Changes from AE. There are 1,293 acres planned AE within the Trinidad planning watershed located adjacent to Dry Lagoon and in Crannell. The proposed General Plan Update proposes to retain the most of this in the AE land use designation. Approximately 100 acres owned by California State Parks adjacent to Dry Lagoon would be redesignated to PR. The remainder would remain unchanged.

Changes from T. Approximately 71,878 acres of this watershed is planned T, both inside and outside the Coastal Zone. The General Plan Update proposes to change approximately 1,026 acres between Big Lagoon and Freshwater Lagoon now owned by State Parks to PR. Approximately 42 acres proposed to be changed to RE are located on the east side of Big Lagoon and another 172 acres are located east of Trinidad along Stumptown Road, Westhaven Drive, and Adams Foxfarm Road. The remaining 145 acres is located east of Westhaven. Areas proposed to be redesigned to RA are also located on the east side of Westhaven. With few exceptions, the areas proposed to be redesignated to RE and RA are already subdivided to the minimum parcel size and in many cases are developed with single-family residential development.

Mad River

The Mad River planning watershed is comprised of 85% forested areas and includes the City of Blue Lake and the unincorporated communities of Fieldbrook, Glendale, and McKinleyville.

The General Plan Update proposes to make changes from agricultural and timber related land use designation to other non-resource production related land use designations as shown in the table below and described in the paragraphs that follow.

Table 3.2-14. Mad River Planning Watershed Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	120,380	2,901	128,925	2,860
AE	1,686	60	42,733	161
AG	39,712	1,746	38,408	1,765
Total	161,778	4,707	171,659	4,786

Note: 156 acres considered prime agricultural lands is proposed to be changed from a resource designation to a non-resource land designation.

Changes from AG. There is approximately 39,712 acres planned AG within the Mad River watershed, approximately 106 acres of which are proposed to be re-designated, P, which includes pockets of BLM land in the upper Mad River watershed.

Changes from AE. There are 1,686 acres planned AE within the Mad River planning watershed. The General Plan Update proposes to retain the AE land use designation for almost all of this land, and redesignate some lands to PF, IG, CF and various residential designations (RL, RE, and RA). Land to be redesignated to PF is comprised of the S.R. 299 right of way near Giuntoli Lane. The area to be redesignated to IG contains the existing Boyd Road and West End Road industrial areas, also located near Giuntoli Lane. The area proposed to be redesignated to RE is located at the end of Archer Road within the boundaries of the McKinleyville CSD or located along Warren Creek Road and is mostly subdivided into parcels ranging in size from less than one to 2.5 acres, with two parcels between 6 and 10 acres. Land proposed to be redesignated to RL is primarily located along Fieldbrook Road. Land proposed to be redesignated RA is located east of Blue Lake and along West End Road.

Changes from T. Approximately 120,380 acres of this watershed is currently planned T. The General Plan Update includes proposed changes from T to CF, P, PF, and RA. The proposed change to CF is comprised of the land containing the Mad River near Blue Lake. The proposed change to P is comprised of state owned land in the upper watershed. Approximately six acres containing a mobile home park near Glendale is proposed to be redesignated to RM.

Eureka Plain

The Eureka Plain or Humboldt Bay watershed is the most developed of the Humboldt County watershed areas and includes the cities of Eureka and Arcata and numerous unincorporated communities including Manila, Jacoby Creek, Myrtle town, Cutten/Ridgewood, King Salmon and Fields Landing.

The General Plan Update proposes to make changes from agricultural and timber related land use designation to other non-resource production related land use designations as shown in the table below and described in the paragraphs that follow.

Table 3.2-15. Eureka Plain Planning Watershed Resource Land.

Land Use Designation	Framework General Plan		Proposed General Plan Update	
	Acres	Max Buildout (Units)	Acres	Max Buildout (Units)
T	74,107	1,596	63,453	1,476
AE	12,730	369	14,753	408
AG	2,711	56	1,487	40
Total	89,548	2,021	79,693	1,924

Note: 19 acres considered prime agricultural lands is proposed to be changed from a resource designation to a non-resource land designation.

Changes from AG. There is approximately 2,711 acres planned AG within the Eureka Plain watershed, approximately 361 acres of which are proposed to be redesignated to PF and RA, including the radio communications facilities in Kneeland which is proposed to be re-designated to PF.

Changes from AE. There are 12,730 acres planned AE within the Eureka Plain planning watershed. The General Plan Update proposes to retain the AE land use designation for almost all of this land, and redesignate approximately 1 acre to PF, approximately 55 acres to NR, approximately 88 acres to RA10, 4 acres to RE2.5-5, and 13 acres to RM. Land to be redesignated to PF is comprised of the U.S. 101 rights of way. The area to be redesignated to PF contains bay and tide lands within the right of way. The area proposed to be redesignated to RA10 is comprised of one large parcel located within the Elk River area. The area proposed to be redesignated to RE is comprised of small parcels in the Humboldt Hill area. The area proposed to be changed to RM is currently developed with a mobile home park and is located off of South Broadway in the Humboldt Hill area.

Changes from T. Approximately 74,107 acres of this watershed is currently planned Timber Production. The General Plan Update includes proposed changes from T to P, RL, RE, and RA. The proposed 8,238 acre change from T to P is comprised of the BLM Headwaters Forest Reserve and the City of Arcata community forest.

Conversion as a result of increased parcelization and subsequent development

Maintaining parcels in large, minimum sizes no longer protects resource lands as effectively as in the past, as such parcels have become attractive places to live for an increasing number of people. These parcels are acquired primarily for residential purposes. The development of high value residential estates on resource lands drives the cost of land ownership up, beyond the revenues that agricultural and timber operations can generate. While in some cases land may be leased for agricultural or timber operations, factors such as small parcel size or high transition costs may stand in the way. Parcelization can thus result in residential use being the primary use of the land, which can create land use conflicts with surrounding properties still in resource production. These conflicts increase the cost of production on adjoining parcels and create a

disincentive to continue agricultural and timber operations and increase the incentive to pursue residential development.

Although general plans provide density standards to guide development and subdivisions in planning areas, underlying legal lots may not conform to those standards. These lots often existed long before the County started a land use planning program. The State Subdivision Map Act provides a process to recognize these lots without going through a public hearing or rigorous review process required for subdivisions. The County has witnessed the increased use of recognizing legal parcels, in particular land patents, on resource lands as a tool to break up and sell off smaller parcels independently of the Subdivision Map Act procedures that would typically ensure conformity with the General Plan.

As stated previously, over 18,000 patent parcels have been issued in Humboldt County; however, many of these have been altered by subdivision, lot line adjustments, and mergers, and do not retain their original status. The County has mapped over 17,000 of these parcels from the BLM master plats. The parcels ranged from a fraction of an acre to over 11,000 acres, with an average size of 153 acres. Within TPZ, 7,304 original patents were mapped, with sizes ranging from five to 2,227 acres, with a mean size of 136.5 acres. Although a complete review has not been conducted on these patent parcels, many of these retain their historic rights.

Often, these parcels do not conform to the prescribed density range as designated in the General Plan. Development criteria (e.g., adequate roads, water availability, wastewater capabilities, and natural hazards) may or may not be taken into consideration in determining whether the parcel must be recognized. Full build out of patent parcels may jeopardize the open space and resource values of the land.

Other changes that could result in Conversion of Farmland or Forestland

Appendix G of the CEQA Guidelines provides that the General Plan Update would have a significant impact if it would involve changes in the existing environment other than those specifically listed under Section II. Agriculture and Forestry Resources of Appendix G, which due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forestland to non-forest use.

A potentially significant indirect impact to agricultural and timber resources would occur if proposed land uses under the General Plan Update would result in compatibility conflicts with existing agricultural activities and timber operations. Urban and resource land interface issues often arise due to dust, noise, liability concerns, trespassing, theft, competition for water, traffic, pest introduction, agricultural and timber operations related traffic, and conflicts with pesticide use. The type of resource use and the sensitivity of the nearby land uses would be important considerations in determining compatibility. As an example, orchard crops would be more likely to be compatible with surrounding residential uses than a confined animal operation. In addition, if a sensitive use, such as multifamily housing, schools, day care, or other use involving a concentration of people is proposed near an existing agricultural operation, conflicts could increase. If these conflicts would result in the conversion of agricultural resources to a non-agricultural uses, then a potentially significant impact would occur.

Certain land uses proposed near active agricultural and timber operations have the potential to cause the conversion of the existing resource use to a non-resource use because of the potential incompatibility between the proposed use and existing activities. The potential adverse effects that could arise from incompatible development near agricultural and timber

uses would include, but would not be limited to: farm and timber practice complaints; pesticide use limitations; liability concerns; economic instability caused by urbanization and changing land values; trespassing, theft, and vandalism; damage to equipment, crops, and livestock; introduction of urban use pollutants entering farm water sources; competition for water; development affecting recharge of groundwater; soil erosion and storm water runoff emanating from urban use; shading of crops from inappropriate buffering; importation of pests and weeds from urban areas or introduced pest populations from un-maintained landscaping; increased traffic; and effects of nighttime lighting on growth patterns of greenhouse crops.

Buildout of the General Plan Update could create increased pressures to convert agricultural land uses to non-agricultural uses. However, the General Plan Update and Area Plan policies emphasize the long-term preservation of agriculture in Humboldt County and would ensure that such pressures are avoided to the maximum extent feasible. Moreover, these policies emphasize compatibility between land uses and discourage the introduction of incompatible uses adjacent to existing agricultural and forest resource land uses. This is expected to minimize the adverse spillover effects of urban development on agricultural and timber land (e.g., light and glare, urban runoff, litter, trespassing, etc.) to the maximum extent practicable.

Conflicts between timber operations and surrounding land uses (most often, residences) often occur, and can cause a disruption in harvest and ultimate conversion of timberlands to other uses. Managing timber harvest practices is primarily the domain of the state. Given California's regulatory framework, the County's role in timberlands management lies largely in ensuring a continuing stable land base, limiting incompatible uses, and managing land uses along the interface between timberlands and residences. General Plan policy-development issues include topics regarding harvest plan dispute resolution, public notice of resource production, subdivision design, and wildfire risk reduction programs.

Analysis of Relevant General Plan Update Policies

The General Plan Update includes various policies, standards and implementation measures aimed at maintaining resource production lands in agricultural and timber use. These measures will not completely eliminate the non-agricultural dependent development of the County's resource production lands, but would substantially reduce it. Land Use Element, Agricultural Resources Policy AG-P5, Conservation of Agricultural Lands, requires that agricultural land be conserved (which includes prime agricultural lands) and that conflicts be minimized through various means including: promoting infill, minimizing land use conflicts through proper zoning and infrastructure planning; and only allowing lot line adjustments on agricultural lands when planned densities are met and there is not increase in the number of building sites. In particular, Policy AG-P5 requires the establishment of stable zoning boundaries and buffer areas that separate urban and rural areas by developing lands within Urban Development Areas prior to the conversion of agricultural resource production lands in the Urban Expansion Areas.

As indicated above, the General Plan Update would only allow conversions of agricultural and resource lands in specified urban development and expansion areas after other non-resource lands have been developed. In order to lessen the effects of potential future conversions of prime agricultural lands, the General Plan Update includes Policy AG-P6, Agricultural Land Conversion – No Net Loss, which requires that land planned AE or AG shall not be converted to non-agricultural uses unless it can be found that there are no feasible alternatives that would prevent or minimize conversion' there is an overriding public interest in the conversion supported by facts; and for lands outside of Urban Development Boundaries, sufficient off-setting mitigation has been provided to prevent a net reduction in the agricultural land base and agricultural production. AG-Pxx, Protect Productive Agricultural Soils, minimizes the placement of any

buildings and impermeable surfaces on prime agricultural lands for those lands planned for agriculture. AG-S1, Subdivision of Planned Agricultural Exclusive (AE) Lands, reduces the current allowable subdivision on AE lands (those containing prime agricultural lands) from 20 acres to 60 acres. AG-S2, Agricultural Grazing (AG) Land, specifies the minimum parcel size for parcels designated AG is 160 acres, and specifies findings that must be made for rezoning these properties to as small as 40 acres that demonstrate that the protection of agricultural operations will be ensured, maintained or enhanced. Further, Policy AG-P7, Agricultural Production in Conservation Areas, lessens the effects of potential agricultural land conversions by requiring the County to support continued agricultural production on lands placed into conservation easements or acquired by public agencies for conservation purposes through the use of enforceable provisions contained in the terms of the sale, lease or deed restriction that shall require the continued management for agriculture production.

However, the loss of any prime agricultural land cannot be mitigated to a level of insignificance once it is permanently converted to non-agricultural land use. Since the proposed General Plan Update will likely result in the conversion of prime agricultural lands to non-agricultural uses, this is considered potentially significant impact of the proposed General Plan Update.

The General Plan Update also protects against the conversion of agricultural land by improving the viability of farm operations. Policies AG-P2, Support Voluntary Purchase of Development Rights, and AG-P3, Support the Williamson Act Property Tax Incentive Program, require the County's continued support for these existing programs that lessen the cost of owning and operating farms and limit the intrusion of residential development into agricultural lands. These policies are further strengthened by Policy AG-P10, Support to Land Trusts, which supports non-profit organizations that implement land conservation programs. In addition, Policy AG-P4, Supplemental Farm Income, requires the County to support an array of activities on agricultural land that may increase revenue available to farmers.

The General Plan Update also supports a series of programs to foster continued agricultural operations. Policy AG-P8, Right to Farm or Harvest, uses the Right to Farm or Harvest Ordinance to notice adjacent residential uses of the nature of farm and/or timber operations. Policies AG-P9, Predator Control, and AG-P11, Support Vegetative Management Programs, support agricultural management techniques essential to farm operations when it is found that they improve the availability and quality of rangeland for livestock and wildlife, reduce the hazard of disastrous wildfires, and increase water quality and quantity.

Growth Planning Policy GP-P10, Conversion of Resource Lands, specifies that lands less suitable for resource related uses should be converted prior to the conversion of higher quality resource lands. Rural Lands Policy RL-P1, Compatible with Resource Production, requires that rural residential development adjacent to agricultural and timberlands shall be compatible with agriculture and timber production. Standard RL-S1, Compatibility with Timber and Agricultural Production, further reinforces this requirement by conditioning subdivisions to minimize constraints on resource production activities and implementing the right to farm and right to harvest ordinance provisions. Finally, AG-Px, Compliance with Regulations, requires the County to place a priority on the abatement of violations that result in the conversion of agricultural lands or loss of agricultural productivity, and AG-IMx, Compliance with Regulations, , requires the County to maintain an agricultural protection compliance program to enforce land use and building regulations on.

Like the Agricultural Resources policies, the Forest Resources policies discourage uses adjacent to timberland that would conflict with timber production activities. Land Use Element, Policy FR-

P16, Planned Compatible Uses, directs that the County should plan land adjacent to Timberlands for uses compatible with timber management, including timber harvesting

There were approximately 596,000 acres of Timber Site Quality III or higher in Humboldt County zoned TPZ in 2008, according to CAL FIRE. Forest Resource Chapter Policy FR-P8, Protection of High Quality Timberlands, directs that timberlands planned and zoned for timber production should be retained for such use, and reclassification of TPZ shall be done in accordance with statutory requirements.

The Forest Resources Chapter also includes measures to support the continued viability of timber harvest operations. Policy FR-P3, Timber Management Regulations, supports fewer, more effective and lower-cost timber management regulations as a strategy to maintain timber production as the primary use of forestlands. Policies FR-P4, Broader Use of Long Term timber management plan(s) (NTMP), FR-P5, Forest and Rangeland Improvement Programs, and FR-P6, Tax Incentive Programs, support state and local incentive and management programs to facilitate continued timber harvest activities. In addition, FR-P12, Timberland Ownership, requires that the County provide incentives to maintain large-scale land ownerships for commercial timber production and to protect forest ecosystem services. Policy FR-P15, Conservation Easements, directs that the County support voluntary easement programs that combine conservation management with sustainable timber production.

Development timing policies within the Growth Planning Chapter of the Land Use Element are intended to focus and facilitate growth in the urban development areas and away from resource production lands. This includes Policy GP-P10, Conversion of Resource Lands, which discourages the inclusion of high quality timberlands and prime agricultural lands into Urban Expansion Areas unless the County makes a finding that there are no alternatives to increasing the Urban Expansion Areas on lands less suitable for resource production. However, Policies GP-P8 Urban Expansion Areas, and GP-P9, Urban Expansion Area Review, specify that the designation of lands as Urban Expansion indicates that lands are appropriate to be provided with water and sewer and developed at urban densities during the General Plan planning period. These areas are to remain fixed until modified through a General Plan Amendment. Through CO-P1x, Transfer of Development Rights, the Plan also proposes that the County research and develop, if feasible, a voluntary transfer of development rights program as a method of protecting resource lands and open space based on community input. This program could not be initiated without analysis of the potentially significant impacts of increased density in the urban development areas where the development right transfers could be utilized.

The analysis above also indicates that some land planned for agriculture and timber related uses is proposed to be changed to other land uses as part of the General Plan Update. The majority of the changes relate to land that has been acquired by public agencies and integrated into public facilities, parks, and preserves. There are also some changes from agriculture to rural residential. These redesignations are intended to reflect the current land use and do not represent a change in policies intended to protect agricultural or timberlands.

Although there is little the County can do to prevent acquisition of resource lands by public agencies, the General Plan Update provides policy language in the Public Lands section of the Land Use Element that discourages the acquisition of resource lands. Policy PL-P1, Management Plans, encourages public land agencies to prepare management plans that ensure consistency with the General Plan and promote and protect adjacent private resource production lands from conversion, while PL-P3, Acquisitions, specifies that full-fee acquisitions should only be supported by the County where the acquisition is a part of an adopted management plan, and

is within the management boundaries of the public lands, or is for the consolidation of management units, among other requirements. PL-P4, Resource Production Lands, discourages the acquisition and conversion of resource production lands to other uses by, but if acquisition does happen, this policy encourages lease-back options and deed requirements for continued agricultural and timber operations. Finally, through PL-P5, Eminent Domain, the County would only support public acquisitions through the eminent domain process, when it is the last option, is in the interest of the public health, safety, and welfare, is required to protect public rights, or is necessary to national security.

Conclusion

The policies and programs of the General Plan Update would direct future land uses and development primarily into urban development and water service areas within community planning areas and away from prime agricultural lands. Policies and programs of the General Plan Update would continue to promote the economic viability of agriculture and timber production in the County. As a result of the planned growth pattern and the policies described in the Land Use Element, substantial agricultural and timber resource areas will be protected in unincorporated Humboldt County. However, conversion of resource lands to other uses may still occur.

As discussed above, implementation of the General Plan Update would result in the re-designation of approximately 1,037 acres of prime agricultural lands in the unincorporated area from an agricultural and timberland use designation to a non-agricultural or timber designation. As previously described, nearly all of the changes to these lands would be to recognize existing parks and open space use or habitat protection, primarily due to state and federal ownership of these lands as part of their respective park and recreational areas. While the General Plan Update does not directly call for conversion of these lands to a non-agricultural designation, and measures to reduce or avoid this conversion are beyond the County's jurisdiction, such conversion would still represent a significant effect.

The Board considered but rejected a Ranchlands (AGR) land use designation as an additional designation proposed for the large ranches currently protected under a Williamson Act Contract. The minimum parcel size was set at 160 acres. The use of the Ranchlands designation reduces the maximum buildout numbers by 70% from approximately 17,000 units to approximately 5,000 units for lands planned Agriculture Grazing (see table 4.1 of this EIR).

While the implementation of the General Plan Update policies, standards and implementation measures would ensure that further conversion of agricultural and timberland is minimized, it does not fully mitigate the loss of these lands from direct conversion to other uses. Plan policies partially mitigate the loss of agricultural lands by identifying policies and programs to help protect and preserve these lands. However, the loss of agricultural lands cannot be mitigated to a level of insignificance once land is permanently converted to non-agricultural land use, and therefore, is **a significant unavoidable impact** of the General Plan Update.

The Plan also does not fully protect against the loss of timber lands from increased parcelization. Current County Code contains a Merger Ordinance that directs the County to merge substandard parcels zoned TPZ into those that meet density requirements; however, this ordinance was never fully implemented. The proposed Plan recommends revising this section of the code to remove the merger requirement because it was not implemented. This will allow a higher density development on lands planned T and cause conversion of timberlands to rural residential uses. Therefore, the loss of timber lands cannot be mitigated to a level of

insignificance once these lands are converted to a non-timber land use, and therefore **is a significant unavoidable impact** of the General Plan Update.

The Plan also does not fully protect against the loss of resource production lands from conversion to rural residential. Limiting housing on lands managed for industrial timberlands may prevent the conversion of resource production lands to other uses, but this policy option is not considered feasible because it could significantly diminish the economic value of those lands. Therefore, the loss of timber lands cannot be mitigated to a level of insignificance once these lands are converted to a non-timber land use, and therefore, **is a significant unavoidable impact** of the General Plan Update.

Impact 3.2.3.2 Conflict with Agricultural Zoning, Williamson Act contracts, or Timberland Production Zoning

Implementation of the General Plan Update could result in changes in land use designations or could include new policies that could result in conflicts with existing zoning that supports agriculture or timber operations or a Williamson Act contract, or could result in rezoning of farmland or timberland.

This impact analysis addresses items "b" and "c" of the significance standards listed in Appendix G of the CEQA Guidelines as provided in Section 3.2.2 above. Pursuant to these standards, the proposed County General Plan Update would have a significant impact if it would:

- 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)).

The General Plan Update land use map maintains existing or equivalent agricultural or timber production land use designations for lands under Williamson Act Contract or lands zoned T. As analyzed above, policies, standards and implementation measures proposed as part of the General Plan Update support the continued operation of agriculture preserves and timber production, and would not conflict with Williamson Act contracts or TPZ. Policies, standards, and implementation measures include establishing incentives for agricultural use (including Williamson Act participation) and review of development projects to ensure they do not conflict with agricultural uses.

Analysis of Relevant General Plan Update Policies

In addition to the policies described in 3.2.3.1 above, the General Plan Update would support the continuation and enhancement of the Williamson Act through Policy AG-P3, Support the Williamson Act Property Tax Incentive Program and CO-P2, Support for Working Lands, which requires the County to support policies that maintain profitable resource production on timber and agricultural lands as a means to secure long-term protection and sustainability of open space lands through programs such as the Williamson Act and TPZ. In addition, the General Plan Update would establish a new program, AG-IM2, Manage an Agricultural Conservation Program, to support an agricultural conservation program associated with the Williamson Act.

Regarding Timberlands and TPZ zoning, FR-P6, Tax Incentive Programs, supports the continued use of the Timber Production Zone program and other tax incentive programs that maintain or increase the economic viability of timber production, and supports tax policies that provide benefits to timberland owners for conservation easements. Policy FR-P8, Protection of High Quality Timberlands, described in 3.2.3.1 above discourages planning that would result in uses other than timber production as the primary use for timberlands that are planned and zoned for timber production.

The Forest Resources Chapter also provides policy direction that discourages uses adjacent to timber land that would conflict with timber production activities. Policy FR-P16, Planned Compatible Uses, plans land adjacent to timberlands with uses compatible with timber management, including timber harvesting.

Conclusion

The policies, programs, and implementation measures of the General Plan Update would be consistent with the Williamson Act Property Tax Incentive Program and the TPZ regulations. Therefore, potential impacts to the Williamson Act and/or TPZ program would be **less than significant**.

Mitigation

None required.