

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.

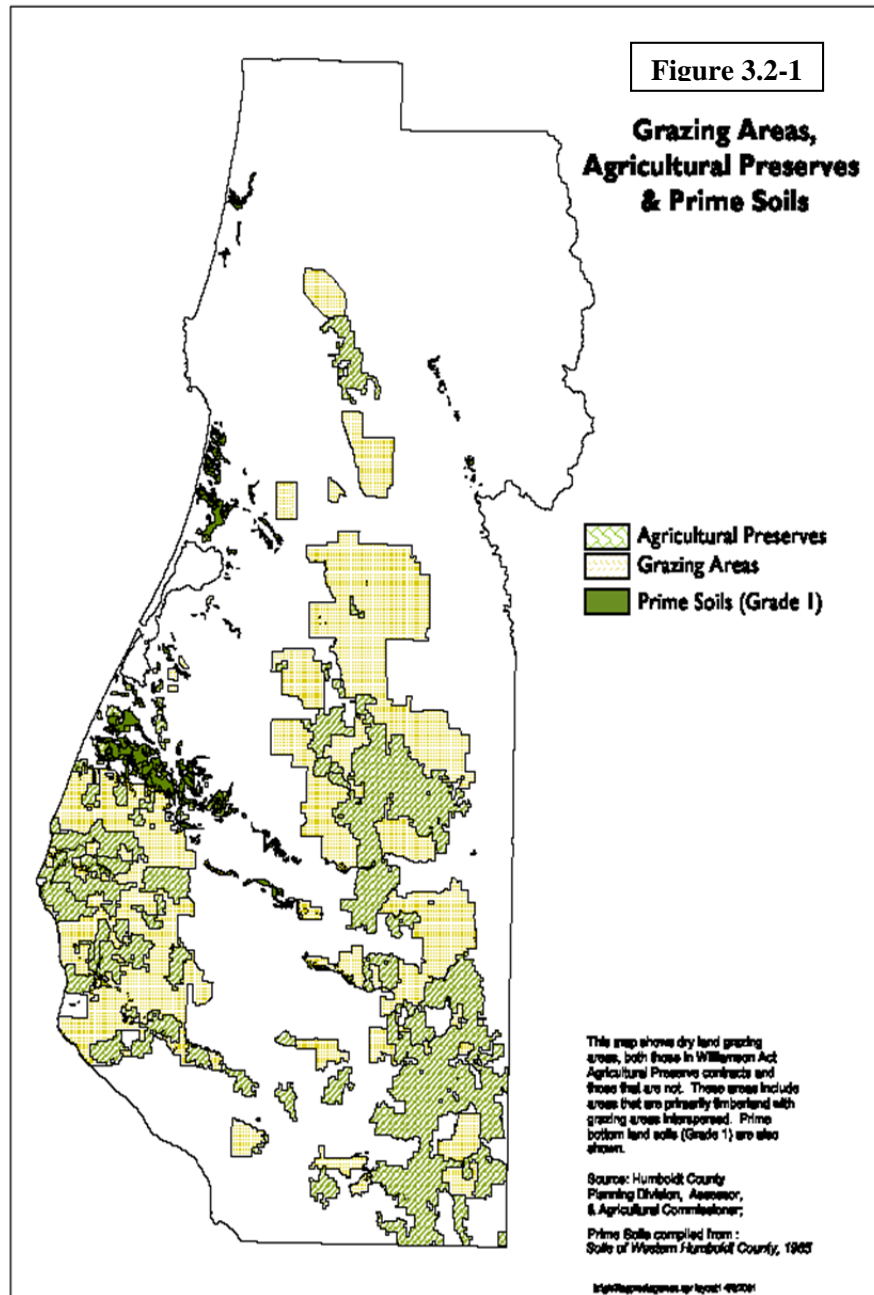
Of the approximately 345,238 acres of land identified as agricultural lands by the Humboldt County GIS mapping system, approximately 12%, or 42,000 acres are identified as prime agricultural lands, primarily based upon soils type. The highly productive soils of the Mad River, Redwood Creek, Eel River 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, Phillippsville, 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 of 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.