

Chapter 5.3 Forest Resources

5.3.1 Introduction

The Forest Resources section, a component of the Land Use Element, fulfills the requirement for a "land use category that provides for timber production on those parcels of real property zoned for timberland production pursuant to the California Timberland Productivity Act of 1982" (see Text Box 1). The purpose of this section is to identify the county's known timber resources, and support the conservation, development, and utilization of these resources.

The Land Use Element is most directly related to the Conservation and Open Space, Housing, and Circulation Elements. The required inventory of forest resources and open space lands is included as part of the Conservation and Open Space Element. The Safety Element identifies urban fringe and rural residential areas in the Forestland-Residential Interface (FRI) prone to wildfire hazards.

5.3.2 Background

Over 80% of Humboldt County is forested, with about 50% of this acreage in private commercial timberland. For the most part, the timber production land base has remained relatively stable, with over 600,000 acres held by industrial timber companies, in areas that have no houses and is managed for long-term production. Although there have been many changes in the timber industry over the last 20 years, Humboldt County continually leads the state in production volume.

The county's timber production base is currently at a crossroads. Increasing globalization has impacted the timber industry—as it has many other industries—resulting in fewer larger mills serving regional needs and divestitures of land holdings.

The county's timberlands are a cornerstone of the environment and economy, providing natural resource benefits as well as recreational opportunities. These lands are a critical aspect of the Land Use Element. Policies supporting the protection, conservation, and economic utilization of timber resources were put in place as part of earlier County plans, including the 1984 Framework Plan. New trends show historic patterns of ranching and timber production transitioning to residential uses on smaller parcels. Lot line adjustments

California Timberland Productivity Act of 1982.

51102. (a) The Legislature further declares that to fully realize the productive potential of the forest resources and timberlands of the state, and to provide a favorable climate for long-term investment in forest resources, it is the policy of this state to do all of the following:

- (1) Maintain the optimum amount of the limited supply of timberland to ensure its current and continued availability for the growing and harvesting of timber and compatible uses.*
- (2) Discourage premature or unnecessary conversion of timberland to urban and other uses.*
- (3) Discourage expansion of urban services into timberland.*
- (4) Encourage investment in timberlands based on reasonable expectation of harvest.*

within large ownerships create a mosaic of parcels that may not correspond with sensible land development patterns. Full buildout of the present configuration of parcels will challenge the County's ability to support infrastructure and public services, and will affect adjacent land uses and environmental quality. The cumulative effects of conversion raise additional questions concerning the long-term viability of Humboldt's timber and ranching economy and its resource-rich character. Decisions made now can help shape and better guide these changes.

Forest resource policy options were developed for this General Plan to reflect topics of community concern as raised by stakeholders and directed by the Board of Supervisors. Those topics are:

- *Timber management and state law*
- *The forest resource land base*
- *The Forestland-Residential Interface (FRI)*
- *Infrastructure and public services*

Timber Management and State Law

Throughout the General Plan update process, there has been broad support for County policies that provide for continued timber production. There is particular support for forest improvement programs for small landowners, expanding the use of non-industrial timber management plans (NTMPs), and providing policies that allow the County to address statewide policies and issues from a position that reflects its position as a leader in annual timber production.

Forest Resource Land Base

County-level planning policies are aimed at helping implement state laws that are intended to ensure a continuing, stable forest resource land base. Policies based on an incentive approach are included, which consider the driving trends in timberland conversion and the role that local general plan policies play in the long-term use of these lands.

Forestland-Residential Interface (FRI)

The FRI is located generally where houses meet or intermingle with undeveloped forestlands. This area tends to be a focal point for conflict between residential and resource land uses. It can also be a hazard area because of the risks of wildland fires.

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 FRI. FRI policy-development issues include topics regarding harvest plan dispute resolution, public notice of resource production, subdivision design, and wildfire risk reduction programs.

Infrastructure and Public Services

Planning for infrastructure and public services necessitates an understanding of the possible future configurations of land use that will be served. Infrastructure and public

service needs will differ for lands remaining in resource production (i.e., timber harvesting) versus lands that convert to residential development or other uses.

The policies included in this section were developed to address service needs for lands in resource production. Policies that address needs resulting from any increased residential development in resource lands are more specifically discussed in the Capital Improvements and Public Facilities Element of the General Plan.

5.3.3 Goals and Policies

Goals

- FR-G1. Preserve and Enhance Timberlands.** To actively protect and conserve timberlands for long-term economic utilization and to actively enhance and increase county timber production capabilities. (Framework Plan)
- FR-G2. Orderly Development of Forestlands.** Protect forestlands from fragmentation into parcel sizes that cannot economically sustain timber production as the primary use. Provide for orderly development of rural lands consistent with the need to encourage sustained resource production without land degradation; reduce public exposure to safety hazards; minimize costs of providing services; conserve energy; encourage recreational development on appropriate lands; and encourage development along existing public corridors.
- FR-G3. Incompatible Uses.** Protect forest lands from the encroachment of incompatible land uses as a strategy to prevent forestland fragmentation and conversion to residential uses.
- FR-G4. Public Services.** Support the public services necessary to maintain a viable forest products industry.

Policies

Timber Management and State Law

- FR-P1. Support State Timberland Planning Efforts.** Support the California Department of Forestry and Fire Protection's strategic planning efforts in order to create a regulatory system that encourages the continued productivity of timberlands.
- FR-P2. Timber Harvest Plan Review.** Defer to the CALFIRE on timber harvest reviews. Comment only where County land-use patterns have significantly contributed to use conflicts at issue and where the County can assist in dispute resolution.
- FR-P3. Timber Management Regulations.** Support fewer, more effective and lower-cost timber management regulations. Coordinate County policies so they are compatible with the State Forest Practice Act and State Forest Practice Rules.
- FR-P4. Broader Use of NTMP's.** Support broader use of non-industrial timber management plans (NTMPs), including increasing the maximum acreage

allowable under such plans and encouraging multiple landowner cooperative plans.

- FR-P5. Forest Improvement Programs.** Support continuance and funding of forest improvement programs.
- FR-P6. Tax Incentive Programs.** Support tax incentive programs, such as the Timber Production Zone that encourage retention of land ownership in parcels that are economical to manage.
- FR-P7. Innovative Forestland Programs.** Support development of innovative forest and rangeland programs that facilitate production and conservation goals.
- FR-P8. Unfragmented Timberland Ownership.** Support efforts to maintain large-scale unfragmented ownerships for resource-based activities. Support removal of substandard lots from timberland production zones (TPZ) when residential use becomes primary and the value is greater than the timber production value of the land.
- FR-P9. Public Utilities on TPZ Lands.** Avoid, wherever practical, the location of any federal, state, or local public improvements and any improvements of public utilities, and the acquisition of land therefore, in TPZs where the project will have a significant adverse effect on the production of timber.
- FR-P10. Carbon Sequestration.** Foster development of markets for new products and services, certification of wood and livestock products, and market mechanisms for carbon sequestration.

Forest Resource Land Base

- FR-P11. Substandard Parcels.** Recognize substandard parcels through the Determination of Status/Certificate of Compliance process, but make separate findings regarding the ability to develop with residential structures based upon the conformance with General Plan density and open space development policies.
- FR-P12. Timber Site Quality III.** Parcels in areas of Timber Site Quality III or higher should be retained for timber production or compatible uses. (FRWK)
- FR-P13. Lot Line Adjustments.** Lot line adjustments of substandard TPZ parcels may be approved in order to consolidate logical management units.
- FR-P14. Rezoning.** Support rezoning of land from TPZ when it can be found that:
- A. The original inclusion was in error or inappropriate; or
 - B. The conversion and rezoning is necessary to provide for the logical expansion of an existing adjacent community; or
 - C. The conversion and rezoning is necessary to provide for the reconfiguration of parcels in order to utilize development unit

credits for cluster housing and provide permanent protection of the remainder resource lands of the highest value.

FR-P15. Conservation Easements. Support voluntary conservation easement programs for working lands.

FR-P16. Planned Rural Development. Provide a Planned Rural Development (PRD) program that allows incentive based clustering of home sites at a density above what would otherwise be allowed when lands most suitable for timber production are retained for permanent continued production. To qualify, identified homesite parcels must be clustered to avoid increasing use conflicts and not be in conflict with any applicable Habitat Conservation Plan. Right to harvest agreements shall be secured on lands proposed for conversion to residential uses. The remaining lands most suitable for continued timber production shall be retained for permanent timber production.

CLUSTERING Incentive Options:

Tier I clustering program:

<i>Density credit</i>	Twice the existing entitlements when 90% of timberlands are protected.
<i>Protection instrument</i>	B7 zoning or other suitable instrument for remainder.
<i>Rezone homesite parcels</i>	County to follow up.
<i>JTMP</i>	Required for all parcels.

Tier II clustering program:

<i>Density credit</i>	3 times existing entitlements when 95% of timberlands are protected.
<i>Protection instrument</i>	Permanent conservation easement on remainder.
<i>Rezone homesite parcels</i>	County to follow up.
<i>JTMP</i>	Required for all parcels.

FR-P17. Road Constraints and Density. Densities should reflect road constraints. No subdivisions are allowed where deficiencies have been identified that are not feasible to correct.

FR-P18. ????????????????

FR-P19. Sensitive Habitats. Lands containing sensitive habitats should only be developed consistent with the maintenance requirements of the habitat.

FR-P20. Sensitive Watersheds. New development, not including forest practice activities regulated by the California Department of Forestry and Fire Protection (except where subject to local land use and zoning regulations pursuant to Public Resources Code Section 4516.5(f) or other provision of law), shall be regulated to protect beneficial uses of sensitive watersheds and critical water supply areas.

FR-P21. Water Withdrawal. New development, not including forest practice activities regulated by the California Department of Forestry and Fire Protection (except where subject to local land use and zoning regulations pursuant to Public Resources Code Section 4516.5(f) or other provision of law), shall be designed to avoid cumulative impacts caused by water withdrawal from surface and groundwater sources. (Note: standards will be developed in Water Resources Element.)

Forestland-Residential Interface

FR-P22. Planned Compatible Uses. Support timber production on lands planned for it. Lands adjacent to areas designated as Timberlands should be planned for uses compatible with agriculture and timber.

FR-P23. Forestland-Residential Interface. FRI zoning overlays shall be applied on all parcels contiguous to the boundary between TPZ zoned lands and lands zoned for rural residential use in those resource areas around Rural Community Centers (RCCs) and Community Planning Areas (CPAs).

FR-P24. Biomass Conversion. Support biomass to energy conversion and utilization programs for energy production that result in reduced fuel loading.

Infrastructure and Public Services

FR-P25. Maintain Public Roads. Maintain public roads and drainage facilities to address traffic safety, reduce hauling costs, allow for resource transportation, and minimize erosion and water quality degradation.

FR-P26. Revenues for Maintaining Public Roads. Secure revenues to support the costs of maintaining public roads in timberland areas.

FR-P27. Mitigation for Unrelated Uses in Forestlands. Proposed uses in forest resource lands not related to timber production shall not negatively affect timber production and harvesting nor create demand for additional county services without mitigation.

5.3.4 Standards and Land Use Designations

Standards

Timber Management and State Law

FR-S1. Legislative Priorities. The policies developed under this section are to be used by the County in formulating its legislative priorities platform and in drafting policy responses to state and federal proposals.

Forest Resource Land Base (These may ultimately be moved to a "Rural Lands" Section)

FR-S2. Subdivisions. Subdivision to the minimum parcel size may be permitted if the project meets the following criteria:

- A. The subdivision will result in significant improvements (including but not limited to stocking and conifer release) in site productivity, timber growth, and harvest through intensive management; and
- B. Adequate access, water, and geologic stability can be demonstrated for the proposed use and the land division meets all other regulatory requirements; and
- C. On each parcel, the residential site is located, to the fullest practical extent, in areas of the lowest productivity.
- D. Access to the remainder is consistent with the uses of the remaining property.
- E. A joint timber management plan (JTMP) is prepared for divisions below 160 acres. (Modified FRWK 2721.4)

FR-S3. Rural Residential Subdivisions. Subdivision of land may be approved for residential purposes, if:

- A. There is proof of adequate water for domestic use (400 gallons per day minimum) and fire suppression (See Fire Safe Standards) provided through either:
 - 1) Certified dry weather tests of individual developed water supply systems on each parcel using wells, creeks, or springs; or
 - 2) Four or fewer connections to a developed private water system, including certified dry weather testing of source, storage, and transmission facilities, with recorded easements and legal agreements; or
 - 3) Evidence of connection to a public water supply meeting the water works standards of the State of California.
 - 4) Cumulative impact of water withdrawals from surface and groundwater sources shall be assessed and found to not be detrimental to beneficial uses.
- B. There is proof that adequate sewage disposal capability will be provided through either:

- 1) Individual on-site systems approved by the Humboldt Del Norte Health Department; or
 - 2) Evidence of connection to a public waste disposal system.
- C. Building sites are identified that are not subject to health and safety hazards caused by:
- 1) Geologic instability, steep slopes, and erosion;
 - 2) Seismic activity;
 - 3) flooding; and
 - 4) Access to structural fire protection.
- D. Recorded access or other acceptable legally documented access to a publicly maintained road that is:
- 1) Adequate for ultimate development at planned densities; and
 - 2) Adequate for use by emergency vehicles.
 - 3) Not subject to adverse impacts caused by:
 - a) Geologic instability, steep slopes, and erosion;
 - b) Seismic activity;
 - c) Flooding; and
 - d) Access to structural fire protection.

- FR-S4. Exceptions to Rural Residential Subdivision Standards.** The standards of FR-S3 may be replaced for subdivisions meeting the following criteria:
- 1) All parcels created and any remainder are each in excess of 160 acres; and
 - 2) The purpose of the parcels is resource production; and
 - 3) A transfer of development rights for residential purposes is executed in favor of the County of Humboldt.

Note: Residential development rights may be reclaimed by meeting the standards in Standard FR-S3, Sections A, B, and C.

Forestland-Residential Interface (FRI)

- FR-S5. FRI Overlay Zone.** For areas mapped within the FRI overlay zone, reduce use conflicts via the following:
- a. Require subdivisions in these areas to include forested buffers and building setbacks between residential uses and adjacent timberlands.
 - b. Identify preferred and necessary log haul routes to be maintained and acknowledged by residential users.
 - c. Require recordation of "Right to Harvest" acknowledgements (and other timber management activities such as prescribed burns) in the subdivision approval process.
 - d. Support protection of residential drinking water supplies.

- e. Require demonstration of structural fire response capabilities, compliance with fire safe standards, and ongoing fire protection management programs.
- f. Support noticing via North Coast Unified Air Quality Management requirements of affected property owners for prescribed burn activities.
- g. For hilltop development, require perimeter road and open space adjacent to forestlands, with houses internal to the perimeter road, to ensure defensible space.

FR-S6. Adequate Structural Fire Response Capabilities. Develop standards and definitions for adequate structural fire response capabilities in consultation with the Humboldt County Fire Safe Council.

Infrastructure and Public Services

Note: Standards specific to infrastructure needs resulting from development in resource lands will be provided in the Infrastructure and Public Facilities Element.

Land Use Designations

Timber Production (T)

The Timber Production designation is utilized to classify land that is primarily suitable for the growing, harvesting and production of timber. The designation shall be restricted to those parcels originally zoned Timberland Production. Portions of these parcels not zoned TPZ may be developed consistent with the existing zone and in compliance with all applicable federal, state and county regulations.

Homesite Density: 40-160 acres. Conditional Use Permits are required for homesite development on parcels below 160 acres; Special Permits are required for homesite development on parcels of 160 acres and greater.

Minimum Parcel Size: 160 acres.

Primary and Compatible Uses: Primary uses include the growing and harvesting of timber and timber production facilities, including portable processing equipment. No use shall be permitted in TPZ that significantly detracts from or inhibits the growing and harvesting of timber. Compatible uses other than the direct growing, harvesting, and portable processing of timber include:

- A) Watershed management.
- B) Management for fish and wildlife habitat.

California's Timber Productivity Act

51104 (g) "Timberland production zone" or "TPZ" means an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h).

(h) "Compatible use" is any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber, and shall include, but not be limited to, any of the following, unless in a specific instance such a use would be contrary to the preceding definition of compatible use:

(6) A residence or other structure necessary for the management of land zoned as timberland production.

- C) A use integrally related to the growing, harvesting, and processing of forest products, including but not limited to roads, log landings, watercourse crossings, water drafting sites, and log storage areas (portable chippers and portable sawmills are considered a part of "processing").
- D) The erection, construction, alteration, or maintenance of gas, electricity, water, or communication transmission receiving and generating facilities consistent with Policy FR-P9.
- E) Grazing and other agricultural uses.
- F) A residence or other structure necessary for the management of land zoned for timber production.
- G) Temporary labor camps, less than one year in duration, which are accessory to timber harvesting, processing, or planting operations.
- H) Recreational uses under the control of the owner that will not significantly detract from or inhibit timber or agricultural production on the project site or adjoining lands.
- I) All prudent reforestation and restoration activities, including site preparation and reclamation.

FRI Overlay Designations

Overlay designations apply to lands where planned or existing residential uses are adjacent to forested hillside areas and use conflicts and fire safety issues are special concerns. FRI is mapped using the adjacency rule—includes every timber parcel that is adjacent to a non-resource (residential) parcel—and mapped around Rural Community Centers (RCCs) and Community Planning Areas (CPAs).¹

5.3.5 Implementation Measures

FR-IM1. Merger Ordinance Revisions. Rescind section of Merger Ordinance (Article II) pertaining to merger of substandard TPZ lands. Provide recognition of legal parcels as per the County Subdivision Ordinance and State Subdivision Map Act standards, but make separate findings regarding the ability to develop residential structures based upon conformance with General Plan density and open space development policies (Policy FR –P11). Provide an exception to the density finding when clustering is approved per the standards set forth in the Planned Rural Development Program. (Policy FR –P16)

¹ Rural community centers are small, unincorporated towns and community centers that provide a variety of community and tourist oriented goods and services, but which may not have developed identifiable commercial or residential areas.

Community planning areas are defined geographic areas for which specific community plans have been developed, providing additional policies and standards specific to the respective planning areas. These community plans comprise Volume II of the County's General Plan.

- FR-IM2. Develop Incentive Program to Encourage Timber Production.** Develop programs designed to support incentives for property owners and forestland managers (consistent with this plan) to encourage continued timber production on forestlands.
- FR-IM3. Develop Landowner Assistance Program.** Develop departmental planning assistance program and incentives based on policies to assist landowners with lot-line adjustments and density bonuses, and to encourage clustered development patterns.
- FR-IM4. Implementation of FRI Overlay.** Map FRI around Rural Community Centers (RRCs) and Community Planning Areas (CPAs) to create an Overlay Zone. Implement development standards for overlay zone. Develop a "Right to Harvest" Ordinance to be implemented as a part of the FRI Overlay.
- FR-IM5. Coordination of County and State Policies.** Coordinate County policies on rules for less than three-acre conversions and streamside management areas so they are compatible with the State Forest Practice Act and State Forest Practice Rules.
- FR-IM6. Identification of Substandard Roads.** Coordinate with the Department of Public Works and emergency service providers to identify roads that are substandard to subdivision road standards and fire safe standards that would limit future residential subdivisions. Define what the deficiency is and measures necessary to improve existing conditions to acceptable levels of service.
- FR-IM7. Review Standards and Process of Joint Timber Management Plans (JTMP).** Direct the Forestry Review Committee to review and provide recommendations to the Board of Supervisors on the standards for Joint Timber Management Plans and Guides for subdivisions of TPZ lands below 160 acres. Establish a process for review of all previously approved JTMP's every 5 years for compliance.

NOTE: the section below will fall out of the ‘final’ version found in the GP, but will be critical to the process of review

5.3.6 Staff Analysis and Alternatives

State Requirements

California Government Code Section 65302 requires that a general plan “designate in a land use category that provides for timber production for those parcels of real property zoned for timber production pursuant to the California Timberland Productivity Act of 1982.”²¹ Sections 51101 and 51102 of the California Timberland Productivity Act provides specific policy guidance in developing the land use designation associated with timberlands, at least those timberlands classified as TPZ. Also, California Government Code Section 65302(e) requires that a general plan include an open-space element, as provided in Article 10.5, commencing with Section 65560. Section 65560(b) describes open-space land as including “open space used for the managed production of resources, including but not limited to forest lands.” Planning for the conservation and preservation of open-space lands via a comprehensive open-space program and plan includes inventory of resources, conservation measures, an action program, and consistency of the open-space plan with building permits issued, subdivision maps approved, and adopted open-space zoning ordinances (California Government Code Sections 65563-65567).

The broader category of forestlands includes a subset of lands classified as timberlands. Some forestlands are reserved or not capable of meeting timberlands standards and, as such, are not classified as timberlands. All forestlands are of interest in terms of this larger planning effort, which includes open space and other land use planning considerations.

Background

Many of the key policy issues associated with timberland policy were initially identified by the Forest Review Committee (FRC) in 2000 (see text box).

The *Critical Choices Report*, issued in final form in March 2001, summarized the first phase of public input for the General Plan update process, and identified the range of policy choices that would be further pursued. Some choices were eliminated from further consideration, such as the development and implementation by the County of local timber harvest rules. Some of the key policy questions identified in the report include:

Text Box 4 FRC-Identified Timberland Policy Issues

Public Service Issues

- *Law enforcement*
- *Fire safety*
- *Recreation opportunities*

Public Improvement Issues

- *Maintenance of public roads*
- *Drainage facilities*
- *Public water systems*
- *Materials for road building*
- *Utility company policies*

Public Powers/Land Use Conflicts

- *Incompatibility between residential use and timber production*
- *Subdivision development conflicts*
- *Small TPZ lots*

- Is the current forestland base protected under existing policies?
- What are the needs of small-scale forestland managers and timber operators?
- What role should the County play in the management of forest resources?

General plan consultants Dyett & Bhatia produced a *Natural Resources and Hazards Report in September, 2002* that included background information and a discussion of the forest resource policy issues identified in the *Critical Choices Report*. The FRC found the chapter on forest resources in that document short on discussion and analysis, and recommended a more detailed treatment of forest resource and potential policy options. Following that recommendation and significant additional input from the FRC, planning staff prepared a revised draft *Forest Resources Policy Report* in October 2003, addressing forest resource policy issues in more depth.

In December 2003, the “Deliberative Dialog” meetings introduced Sketch Plan Alternatives. The Alternatives underwent public review at 24 separate meetings during 2004. The *Sketch Plan Alternatives Report* included two- and three-tier timber land-use classifications, including industrial timber and urban fringe timber designations.

In September 2004, *Sketch Plan Alternatives: Summary of Planning Commission and Board of Supervisors Recommendations* laid out policy guidance to be used in drafting the general plan and its alternatives. Included in the recommendations were:

- A set of Guiding Principles
- Policy option development recommendations
- Directives for developing a range of Plan Alternatives (Sketch Plans A, B, and C)

Ten “Guiding Principles” for developing the “proposed project” were provided as part of policy guidance developed in the September 2004 recommendations. Five guiding principles particularly relevant for forest resource land-use issues are listed below (numbers correspond to those in the list of 10 principles):

- 1) The proposed project must ensure efficient use of water and sewer services and focus development in those areas and discourage low-density residential conversion of resource lands and open space.
- 4) The proposed project must support the County’s economic development strategy and work to retain and create living wage job opportunities.
- 7) The proposed project must contain long-term agriculture and timberland protections, such as increased restrictions on resource land subdivisions and patent parcel development.
- 8) The proposed project must include unambiguous natural resource protections; especially for open space, water resources, water quality, scenic beauty, and salmonids.
- 10) Development of the proposed project and alternatives must involve stakeholders and be supported with accurate and relevant data.

Policy options have been developed based on the September 2004 recommendations. Those recommendations included:

- Additional policies to ensure adjacent uses are compatible with industrial timber operations.
- A policy statement to support long-term continued timber production.
- A policy statement to protect beneficial uses of sensitive watersheds and critical water supply areas.
- A policy to address urban interface/timber issues in urban fringe areas.

Recommendations also included directives for developing plan alternatives, with characteristics of the preferred plan alternative to include:

- Reduction in existing large-lot residential subdivision potential outside of community planning areas.
- Increased resource land protection from residential and other conversion, using a range of planning tools such as: clustered development incentives, minimum lot sizes, patent parcel development standards, conservation easements, and regulatory reform.
- An “exit strategy” plan for alternative land use on large resource production lands proven to be no longer economically viable.

The themes contained in the guiding principles, policy option recommendations, and plan alternative development direction outlined above were used in the development of a *Draft Forest Resources Land Use Element* document for timberlands and agricultural lands policies, which was presented to the Planning Commission in June 2005. During this meeting, the Planning Commission and members of the public questioned whether the resource land base was in fact threatened by putting houses on timberlands. Key issues raised at that time related to questions of reducing housing and parcel “entitlements” in resource lands.

The June 2005 Draft Land Use Element included policies that proposed an Industrial Timber (IT) land use classification. The proposed IT designation made residential uses conditionally permitted, where necessary for timber management, at a density of one unit per 600 acres maximum, and provided an “exit strategy” allowing clustered development on portions of the land that might be suitable for residential development, with the remainder retained for timber production.

In response to input received on the Draft Land Use Element, the Planning Commission subsequently directed planning staff to:

- Re-visit forestry issues with the public and the FRC, providing more opportunities for stakeholder input;
- Provide a discussion of the impacts of residential development on the resource land base; and
- Provide a broader range of alternatives for resource lands which would include an alternative that provides a greater supply of developable lands for residential development.

Subsequent meetings with stakeholders and the development of this document fulfill this Planning Commission directive. This forest resources component of the Land Use Element has been developed in response to the above inputs and direction, reflecting expressed desires for protection of resource lands, allowing some residential development, and emphasizing incentive-based programs that provide landowner assistance to achieve focused development.

Staff recommends Plan Alternative B, the “identified proposed project” under CEQA. Discussion and the comparison of Plan Alternatives presented in Table 5.3-1 below present options for Alternative A, the “environmentally superior” option under CEQA, and Alternative C, the “alternative proposed project” under CEQA. Plan Alternatives A, B, and C, with their associated policy options, provide a “menu” of Plan Alternative choices.

Discussion and Staff Recommendation

Timber Management and State Law

The County’s timberlands have long been regarded as a highly valued natural resource, providing economic, environmental, and recreational benefits. Policies supporting the protection, conservation, and economic utilization of timber resources were put in place as part of earlier county plans, including the Baruth and Yoder General Plan of 1971, the Lapman and Associates 1973 Open-space Conservation Element, and the 1984 Framework Plan currently in effect.

Throughout the General Plan update process, there has been broad support for the development of county policies that provide for continued timber production, because of the importance of the timber industry to the county’s economy. There is particular support for forest improvement programs for small landowners, expanding the use of non-industrial timber management plans (NTMPs), and creating policies that allow the County to address statewide policies and issues from a position that reflects the leading place of the county in annual timber production output in the state.

Forest Resource Land Base

One of the primary questions relating to general plan policy for forestlands raised early in the update process asked: *“Is the current forestland base protected under existing policies?”*

This question remains key for long-term planning, and continues to be a major point of debate with respect to ensuring continued timber production. A variety of stakeholder positions exist regarding forestland cover, timber-production capacity, forest ecological services, and other relevant issues. County-level planning policies, when implemented, will be part of the larger overall policy setting that affects the conservation and conversion of the forest resource land base.

Loss of the timber production land base occurs through a variety of mechanisms, including:

- 1) Formal timberland conversion under the Forest Practices Act

- 2) Acquisition of lands for parks, habitat, or open space
- 3) Fragmentation and parcelization of large landholdings
- 4) Planned community expansions
- 5) Changes in forest cover types
- 6) Encroachment of incompatible uses
- 7) Regulatory constraints and impediments

These topics are considered below, including discussion on how they may impact valuation of timberlands.

Forest resource land-base issues are complex, often involving the jurisdiction of agencies other than the County. Existing and proposed policies have been developed in recognition of the County's circumscribed role in guiding the physical development of land uses in the county, via planning, while recognizing that such planning occurs in a larger policy and planning context.

Based on California Department of Forestry and Fire Prevention (CALFIRE) data, the *formal timberland conversion process* in recent years affected less than 100 acres per year in Humboldt County. However, other conversions have occurred that are not documented by the CALFIRE conversion process. Statewide, significant acreage had been converted in earlier decades for grazing; more recently, conversion for grazing has dropped while conversion for subdivisions has risen.

Formal conversions in Humboldt County currently constitute a relatively minor portion of lands lost to timber production. However, the conversion process will eventually be applied to larger land areas currently planned for community expansion, as discussed below.

Acquisition of working lands for parks, habitat or open space constitutes a significant portion of the acreage lost to timber production. While these lands retain their inherent forest values, their "reserve" status removes them from the timber producing land base. In addition to public acquisitions, conservation easements on private working lands may prescribe management practices that have the effects of modifying timber production yields over the short and long term.

In Humboldt County, about 80,000 acres of timberland has been moved to reserve status since the inception of TPZ in 1977. Public acquisition in some instances carries corresponding mitigation—for example the compensations to local government when the federal government acquired the Headwaters Forest. Conversion decisions are often made at the state and federal levels, with little local government involvement. Coordinated regulatory environments offer opportunities for agencies with jurisdiction on adjacent lands to interact; however, success in such endeavors is variable.

Conversion of timberland from TPZ through acquisition by non-profit conservation organizations provides no direct compensation, although such transfers may preserve lands as working lands with associated open space values. The County currently funds a Recreational and Conservation Easement Support Program that uses Title III monies to help keep working lands in production. Private landowners may voluntarily decide to put

working lands under conservation easements to preserve open space or habitat values; such actions may or may not involve modification of timber harvest practices and corresponding timber tax yields. Funding criteria for assistance under the County Easement Support Program include provisions that consider whether proposed projects demonstrate public benefit and have no significant adverse effects on the County tax base.

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

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.

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).

Over 18,000 patent parcels have been issued in Humboldt County. A number of these 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. Thus, several policies have been developed here 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 gives 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.

During the development of the Merger Ordinance, which followed the adoption of the Framework Plan in 1984, the County raised concerns over 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 regarding patent parcel development on resource lands remain, and the Board and FRC have recommended that merger issues be addressed in the General Plan update process.

Patent Parcels and Open Space

Development on patent parcels and associated merger issues are key General Plan update issues. California Government Code Section 65567 requires that the County find *consistency with the local Open Space Element* before issuing a building permit. This provision can result in restrictions on building permits on legally created lots, such as patent parcels, if the issuance of the permit is contrary to General Plan policies.

State law defines open space lands to include "open space used for managed production of resources." Implementation of the Open Space Element is carried out via the General Plan, including provisions of density and compatible uses. The policy for issuing building permits on patent parcels designated as agriculture or timberlands is not clearly defined in the current Framework Plan, and will be addressed during the General Plan update process.

County staff has digitized the patent parcel information, which includes over 17,400 parcels from the masterplats. However, caution should be used when viewing this information, as many of the patent configuration patterns have changed over time due to merger and subdivision.

A preliminary statistical analysis of patent parcels was conducted. The mean was 153 acres/patent overall (including non-TPZ lands). The mean drops to approximately 129 acres/patent when non-TPZ lands are removed from the analysis. However, the wide range of patent sizes (ranging from 1/10th of an acre to 11,000 acres) limits the meaningfulness of these numbers.

Policy issues regarding patent parcels and property rights include those having to do with the merger ordinance as well as with other development-related issues, including:

- The recognition of substandard patent parcels as legal parcels for sale or transfer only, versus recognition of substandard patent parcels as developable parcels in resource lands.
- The issuance of building permits on substandard resource lands vis-à-vis state laws regarding open space and findings of General Plan consistency.
- Applying development credits for patent parcels for cluster development in resource lands as an incentive for resource protection.
- Allowance for unrestricted residential development of patent parcels.

When planning for community expansion, locating new development adjacent to existing development allows for more efficient provision of infrastructure and public services. Due to the proximity of forested lands in areas adjacent to communities with services, land use conversions that removed land from TPZ by rezoning have occurred as part of the community planning process. Over the last 25 years, approximately 1,000 acres have been rezoned out of TPZ in Humboldt County, of which 910 acres were part of the County's Eureka Community Plan in 1995. Currently these 910 acres are eligible for conversion, but they have yet to be converted under the TPZ conversion process.

Changes in cover type are a result of forest management decisions made in the past that manifest to create conditions of today's forest land base. Such forest management decisions are not directly under the purview of the county; however, they may result in adverse effects on forest productivity of the county forest resource land base. Management decisions may have impacts on fire regimes, soil productivity, ecosystem functions and fisheries health, as well as on forest species cover type mix. Cover-type changes in Humboldt County and the North Coast region often result in the:

[Replacement of] coast redwoods and other conifer species with hardwoods, altering species composition, habitat types and the availability of high-quality softwood timber supplies. Over cut forestlands are also among those which are most likely to be sold-off, subdivided, and actively developed for non-forest usesⁱⁱⁱ.

Encouraging the use of forest improvement programs is a County-level policy designed to prevent and mitigate forest cover conversions.

Timberland conversion to residential use, which may be considered *an encroachment of an incompatible use*, can occur as a result of general plan amendments and new subdivisions, as well as through the certificate of compliance process. New residents in former forest resource lands often hold expectations that differ from the ways in which neighboring forests are managed; these owners may consider timber harvest practices a nuisance. A recent study of private forestlands in the Pacific Northwest concluded that population growth and urban expansion is correlated with reduced forest management and investment. In other studies, increasing human population densities are negatively correlated with the likelihood that forest owners harvest timber and with the likelihood that forests are managed for commercial timber production.

The pressure to convert resource lands occurs when the market value of land for resource production is lower than the market value for residential use.

State law provides some guidance relative to the residential use issue. TPZ law (California Government Code Section 1104(h)), lists compatible uses in TPZ, including:

“(6) a residence or other structure necessary for the management of land zoned as timber production.”

Section 51115 of the Timberland Productivity Act of 1982 specifies: “Parcels zoned as timberland production shall be zoned so as to restrict their use to growing and harvesting timber and to compatible uses.”

TPZ parcels are taxed based on the growing and harvesting of timber as the highest and best use. When other uses, namely residential development, are considered, concerns are raised as to how to create incentives for maintaining forestlands in production. Concerns are also raised regarding potential loss in valuation that might come with restricting residential development on timberland. Techniques available to address concerns regarding potential loss in valuation include:

- Two-tiered density
- Clustering
- Transfer of Development Rights (TDR) programs
- Select conversion
- Planned Rural Development (PRD) incentive programs

Two-tiered density would identify timberlands adjacent to community planning areas and other residential development as “transitional timberland” or “urban fringe timber” areas. These areas would provide higher density allowances for residential development than the adjacent timberland classification. The concept is to provide a buffer between the heartland timberlands (designated either “T” for Timber or “IT” for Industrial Timber) and the adjacent residential areas, which would be designated as an Urban Fringe Timber (UT) general plan land use designation. These designations were proposed during the original review of the Sketch Plan Alternatives in 2004. Current configurations of Land Use designations in the different Plan Alternatives do not include an UT designation, but propose to identify urban, “water and sewer” and estate lot, and “water-only” residential expansion areas.

The two-tiered density approach was a key concept contained in the above-referenced Draft Forest Resources Land Use Element policy paper released in June 2005. The concept was strenuously criticized by timber companies and the forestry community, and the IT designation is not included in the preferred plan alternative (it is, however, included for Plan Alternative A). The dilemma remains as to how to ensure the compatibility of uses without reducing the financial expectations of land holders.

Clustering is a technique that transfers an otherwise uniform residential density standard (e.g., 1 unit/160 acres) to areas adjacent to services or areas that could more easily accommodate residential development. This technique allows key timberland areas to remain intact and contiguous, and helps avoid checkerboard residential development that otherwise might adversely affect timber production operations.

Transfer of Development Rights (TDR) is a mechanism similar to clustering, but where the development potential is transferred off-site to properties owned by other parties. In this scheme, the off-site perspective owners buy the development rights of timberland to be retained as timberland in trade for gaining development credits on lands suitable for residential development. This typically happens as an increase in allowed density on the targeted residential area.

Select conversion allows for planned exit for some lands classified as timberland to be planned for other uses at a time where the landowner determines that timber production was not economically viable. This would trigger a general plan amendment in selected areas to recoup development and investment potential within areas that could accommodate other planned uses.

A *Planned Rural Development (PRD)* incentive program would allow incentive based clustering of home sites at a density above what would otherwise be allowed where lands most suitable for timber production are retained for permanent continued protection and identified home site parcels meet specific criteria.

A study sponsored by the California Institute for the Study of Specialty Crops and The Forest Foundation concluded that an increase number of forest practice regulations, especially resulting from rule amendments in the early 1990s, have resulted in significant cost increases to the forest products industry. This study cited both the increased costs of timber harvest plans and the increases to logging operations costs necessitated by the Forest Practices Act. The study surmised that when landowners face uncompetitive returns from managing land for timber resource values, they are increasingly inclined to sell lands for higher returns, noting that "in California this frequently means conversion to housing, a far more environmentally degrading land use."^{iv}

In the context of the General Plan update, regulatory constraint issues involve harvesting and other regulations that the County defers to the CALFIRE and other agencies on. Therefore, frustrations regarding specific regulations are best addressed by the agency that administers those regulations. County policies designed to mitigate effects of regulatory constraints must take into account that there may be a decreased desire on the part of owners to invest in timber production in an atmosphere of regulatory uncertainty and perceived excessive restriction.

Forestland-Residential Interface (FRI)

The FRI is located generally where houses meet or intermingle with undeveloped forestlands. This area tends to be a focal point for conflict between residential and resource land uses. It can also be a hazard area because of the risks of wildland fires.

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 FRI. As described below, policy development addressing FRI issues includes topics

regarding harvest plan dispute resolution, public notice of resource production, subdivision design, and wildfire risk reduction programs.

Harvest Plan Dispute Resolution. During the Critical Choice phase of the General Plan update process, the County determined that it would not be exploring the policy options of locally administered timber harvest plan (THP) regulations. One policy arena that was left open to possible future County involvement was whether there might be an appropriate role for the County in THP review and dispute resolution in areas where residential and timber uses might conflict (for example, Jacoby Creek, Freshwater, and Elk River).

Right to Harvest Notice. As an approach to avoiding conflicts in FRI between forestland management and prospective residents, policies could be established that would standardize the delivery of due notice of right to harvest to residents or prospective residents adjacent to timber operations within FRIs.

Subdivision Design. FRI policies could provide additional guidance or requirements for fire management, residential set-back buffers, and road design.

Policies could be implemented in specific areas via the designation of an FRI overlay zone. The extent and location of the overlay zone would be based on policy. The final mapped boundaries of the overlay zone would be consistent with the chosen plan alternative.

Infrastructure and Public Services

Planning for infrastructure and public service needs necessitates an understanding of the possible future configurations of land use that will be served. Infrastructure and public service needs will differ for lands remaining in resource production (i.e., timber harvesting), as contrasted with lands that convert to residential development or other uses. The policies included in this section were developed to address service needs for lands in resource production. Policies that address needs resulting from any increased residential development in resource lands will be more specifically discussed in the Infrastructure and Public Services Element of the General Plan. However, some discussion on issues related to those needs is presented here.

Development conversions create new needs for services. For example, residential development on forestland significantly increases the risk of wildfire and the cost of fire control. Planning for the provision of local services is constrained by local government's limited ability to raise funds under current systems of public finance. Due to existing California tax and revenue structures, Development Impact Fees (DIF) and other financial mitigation approaches are increasingly being used by local governments and districts to support the costs of development.

The primary infrastructure service that the County provides to the timber industry is maintenance of a roadway system that facilitates the delivery of products to market. The County maintains over 1,200 miles of roads and 172 bridges; much of this system is rural. In 1980 the County Public Works Department prepared a report for the Board of Supervisors documenting maintenance problems on existing county roads. To date, the County

continues to address maintenance problems, and is faced with increasing costs and decreasing revenues for road maintenance. County staff estimates that the current level of deferred maintenance on County roads is between \$150 and \$200 million.

In the face of inadequate funding for road development, the County prioritizes the spending of funds in ways that often favor the repair and rehabilitation of urban roads at the expense of non-urban roads, since the former have much higher traffic volumes. The County does not currently accept responsibility for new roads in the absence of financial support for development and maintenance.

Infrastructure and public service issues related to timber production include:

- Public roads need to be improved to reduce hauling costs and address traffic safety.
- Public roads need to be improved to minimize erosion and water quality problems.
- Costs of maintaining public roads in timberland areas should be apportioned based on use.
- Drainage facilities need to be maintained on public and private roads to protect roads and water quality.
- Materials for road building from quarries and surface mining need to remain available in adequate quantities to keep construction costs down.
- Development of public water systems should incorporate designs to minimize water withdrawals from sensitive habitats and land-use conflicts between timber producers and residential users.
- Presence or lack of support by utility companies for timber production on adjacent timberlands should be addressed.
- Law enforcement responsibilities need to address public safety, vandalism, trespass, theft, toxic dumping, and public and private costs associated with protests in timberland areas.
- Compatibility of recreation opportunities on timberlands needs to be reviewed for compatibility with timber production.

Accompanying any development of rural resource lands for residential use is a need for the provision of public services and infrastructure to the new development. As noted earlier, once residential land-use designations and zoning are in place, expectations are created that lands can be developed and used for the purposes allowed within the zone, and that governmental services will be provided to support such development.

For purposes of the General Plan update, policy option development needs to occur in a setting that recognizes constraints on providing services. Summarizing the existing condition and Level of Service (LOS) of public roads, public safety, fire protection, and emergency medical services in resource areas is a necessary precursor for the timing of development alternatives. In addition to the abovementioned infrastructure and services, the adequacy and availability of water to development areas and consideration of sewer options must inform land use policy.

During the ongoing General Plan update process, the focus on infrastructure has been directed to existing conditions and needed improvements within the Urban Study Areas. Board direction regarding the development of the proposed project discourages conversion of resource lands, and the development of plan alternatives and this document follows that direction. Residential development on resource lands that may occur will necessitate that the following issues be addressed:

- *Maintenance of rural roads.* The Humboldt County Public Works Department is responsible for servicing approximately 1,200 miles of County roads and estimates that the current level of deferred maintenance on these roads is between \$150–200 million. The County is not currently assuming responsibility for new roads.
- *Public safety protection.* The County Sheriff estimates that an addition of 5,000 residences in resource lands would realistically cost the County an additional \$2 million to service (assuming current levels of service of one deputy per thousand people and additional support costs).
- *Fire protection.* While wildland fire protection is generally the responsibility of federal and state agencies, structural fire protection is provided by local government agencies as well as volunteer fire companies without government affiliations. Over 40% of the County's land area is not currently served by a fire department. Fire Safe standards are in place and may be updated as part of the General Plan update process.
- *Water Resources.* Any development of resource lands in areas not served by water and sewer does not, under current policies, require a watershed-level assessment, focusing on the impacts of withdrawals to the overall water budget. Standards regarding the prevention of impairments to beneficial uses of water resources can be created to mitigate the impacts of water withdrawals from surface and groundwater sources, as well as the impacts of sewage disposal.

Cost of Community Service (COCS) studies performed across the country for rural communities consistently demonstrate a gap between revenues generated from and expenditures associated with rural residential development. Even though the overall costs of infrastructure and public services for lands maintained in resource production may be less than lands converted for development, there are also ongoing costs associated with providing infrastructure and public services to lands in resource production use.

The expense of maintaining road access and providing fire, emergency, and police services to residences in rural areas can exceed property tax revenues. TPZ tax benefits that serve to encourage resource production reduce the amount of revenue available to support residential development. The Board of Supervisors has directed staff to prepare an Infrastructure and Public Services Element that will address these issues and provide policy directives.

Alternatives

Policy options have been developed for Plan Alternatives A, B and C to reflect a range of approaches to the protection of, and residential development in, resource lands. In general, policy options for Plan Alternative A are the most environmentally protective and most restrictive of development in resource lands. Options for Plan Alternative C are the least restrictive of development and the least environmentally protective. Plan Alternative B is designed to balance protections with regulations, using incentive approaches and program assistance to landowners.

Plan Alternative A is intended as the “environmentally superior” option—as required by the California Environmental Quality Act (CEQA)—with more limitations on resource land development than Plan Alternative B. Key characteristics of Plan Alternative A include:

- Housing needs are met solely through infill of areas currently served by existing water and sewer lines.
- Resource land protections and significant limitations on large lot residential development.

Besides the goals recommended for the Proposed Plan Alternative, an additional goal is included in Alternative A that provides direction to the County regarding forestlands and their impact on climate change (FR-G5). Additional policies are proposed that would limit incompatible development and provide the highest level of protection from conversion of timberlands (FR-P1a and FR-P12a). A policy calling for the implementation of the Merger Ordinance for substandard TPZ parcels with a proactive noticing program is recommended for Alternative A (FR-P11a). Rezoning out of TPZ would only be recommended in those cases where the original inclusion was in error or inappropriate, effectively limiting premature conversion of timberlands (FR-P14a). An Industrial Timber (IT) classification would be added for additional protection of the industrially managed timberlands. The minimum parcel size is proposed to be 160 acres with a homesite density of zero for all lands planned for timber production. All residential development would require a conditional use permit and be allowed only where necessary for the management of timber. Mapping for the FRI Overlay Zone would be proposed for all areas in the county that are planned for rural residential uses that abut timberlands.

Alternatives Goal–

- Goal FR-G5.** Protect, maintain, and enhance Humboldt County’s forestlands to ensure a positive impact on global climate conditions. **[A] in addition to FR-G1**

Alternative Policies –

- FR-P1a.** Timberlands shall be retained for timber production, harvesting, and compatible uses. (Modified FRWK 2514.1) **[A]**
- FR-P11a.** Support implementation of existing Merger Ordinance with a proactive comprehensive noticing effort. **[A]**

- FR-P12a** Parcels in areas of Timber Site Quality III or higher shall be retained for timber production or compatible uses. **[A]**
- FR-P14a.** Support rezoning of land from the Timberland Production Zone, when it can be found that the original inclusion was in error or inappropriate. (Modified FRWK 2514.7) **[A]**
- FR-P16a.** Provide a Planned Rural Development (PRD) program that allows incentive based clustering of homesites at a density above what would otherwise be allowed when lands most suitable for timber production are retained for permanent continued production and identified home site parcels are:
- a) Located on the portion of the property with the lowest timber producing capability;
 - b) Adjacent to or have direct legal access to a public roadway;
 - c) Located within a fire protection district that delivers structural fire protection in compliance with fire safe standards;
 - d) Clustered to avoid increasing use conflicts; and
 - e) Not be in conflict with any applicable Habitat Conservation Plan.

Right to harvest agreements shall be secured on lands proposed for conversion to residential uses. The remaining lands most suitable for continued timber production shall be retained for permanent timber production.

CLUSTERING:

[A] The remaining lands most suitable for continued timber production shall be retained for permanent timber production.

Tier 1 clustering program:

Density credit: 1/160 acres
Protection instrument: B7 zoning for remainder
Rezone of homesite parcels: County to follow up
JTMP: Required

- FR-S5.** **For areas mapped within the FRI Overlay Zone, reduce use conflicts via the following:**
- b. Identify preferred and necessary log-haul routes to be maintained and acknowledged by residential users. *Helicopter logging shall only occur Monday through Friday during the hours of 7:00 am to 7:00 pm.*

- FR-P42a.** FRI zoning overlay shall be applied on all parcels contiguous to the boundary between TPZ zoned lands and lands zoned for rural residential use. **[A]**

Alternative Land Use Designation –

Industrial Timber (IT)

This designation applies to lands that are industrially managed for timber production, primarily outside CPA's, and where presence of additional homesites would likely contribute to conflict with such timber management; most of these lands are managed through a habitat conservation plan. Minor amounts of non-industrially managed land may be included to avoid fragmenting cohesive units. Residential use may be allowed as a conditionally permitted use where necessary for caretaking purposes, or for compatible recreational use, does not exceed a density of one unit per 600 acres, and records a right to harvest agreement for the subject property.

Homesite Density: 0; **Minimum Parcel Size:** 160 acres

Plan Alternative C. Policy options for Plan Alternative C are the least restrictive of development, and the least environmentally protective. Key characteristics of Plan Alternative C include:

- Accommodates the demand for approximately 18,000 new dwelling units (approximately three times the fair-share housing needs).
- Existing entitlements for large-lot residential development would remain but would not be increased.

Besides the goals recommended for the Proposed Plan Alternative, an additional goal is included in Alternative C that provides a mechanism for converting timberlands for increased residential uses if found to be in the public interest (FR-G6). A policy calling for the rescission of the Merger Ordinance for substandard TPZ parcels is recommended for Alternative C (FR-P11b) without any additional recommended policies for conformance of building permits with general plan densities or open space policies. Allowance for second residences on TPZ is provided similar to the Framework Plan (FR-P18). The density and minimum parcel size are also proposed to be similar to the existing Framework Plan. Added density would be allowed for clustering of homesites with permanent protection. Mapping for the FRI Overlay Zone would be the least of all three plans, only proposed for resource lands abutting residentially planned lands next to Community Planning Areas.

Alternative Goal –

- **Goal FR-G6.** Support conversion of forest resource lands to non-timber producing uses when it is determined that such conversion would be in the public interest. **[C] instead of FR-G2**

Alternative Policies -

- **FR-P11b.** Rescind Merger Ordinance section pertaining to merger of substandard sized TPZ lands (Article II of the Merger Ordinance). **[C]**
- **FR-P18.** No more than two single-family dwelling units and normal accessory uses and structures for owner and caretaker on timberlands. The second dwelling unit shall require a use permit and shall be conditioned

so as to not constitute a subdivision of the parcel. Minor conversion of timberland for residential use is limited to an area 5% of the total parcel, or a maximum area of three acres for a homesite and appurtenant uses. The total area need not be a contiguous unit.

FR-23b. FRI zoning overlay shall be applied on all parcels contiguous to the boundary between TPZ zoned lands and lands zoned for rural residential use in those resource areas around current community planning areas that abut residential uses. **[C]**

Land Use Designations

Timber Production (T)

Homesite Density:	Densities should reflect road constraints: <ul style="list-style-type: none">a. 1du/20 acres; ¼ mile from public roadb. 1du/40 acres; ½ mile from public roadc. 1du/160 acres; greater than ½ mile from public road
Minimum Parcel Size:	20160 acres (C)

Plan Alternative D is the no project alternative and would result in continuation of the policies, standards, and implementation measures of the current framework plan. The following policies, standards and implementation measures from the existing framework plan are included in Alternatives C and D and were either deleted as redundant, or modified to a standard rather than a policy, or replaced with other policies in Alternative B:

While staff recommendations provide a range of policy options and associated standards and implementations suggested for Plan Alternatives A, B, and C, policies may be modified, retained as recommended, or deleted to effect resource protection and meet housing needs as appropriate.

Preliminary Environmental Impact Analysis

The Land Use Element frames the policies that will govern the use and intensity of development for lands located in the unincorporated area. These policies impact a broad spectrum of uses and development ranging from creation of new residential, commercial and industrial lots, the construction or remodel of structures on existing lots, as well as minor projects such as accessory structures. The policies also cover forest lands.

The Framework Plan, each of the individual community plans, coastal plans, the Natural Resources and Hazards Report and the Forest Resources Report contain a complete discussion of forest resources within the County. A brief summary of these resources is included below. The General Plan Update (GPU) continues to use many of the policies

that currently govern forest lands in Humboldt County. The land use impacts of changed or new policies that are added through this GPU are discussed in this section. Impacts identified in this section are limited to those related to land use issues (e.g., potential conflicts with existing or proposed land uses, conflicts with adopted land use policies, loss or conversion of resource land).

The standards for significance of land use are related to State Government Code Sections 65561-65570 regarding preservation of open space and managed production of resources. This code stipulates that:

"preservation of open-space land is necessary not only for the maintenance of the economy of the state, but also for the assurance of the continued availability of land for the production of food and fiber, for the enjoyment of scenic beauty, for recreation and for the use of natural resources.... Discouraging premature and unnecessary conversion of open-space land to urban uses is a matter of public interest and a benefit to urban dwellers because it discourages noncontiguous development patterns that unnecessarily increase the costs of community services to community residents.... The anticipated increase in the population of the state demands that cities, counties, and the state at the earliest possible date make definite plans for the preservation of valuable open-space land and take positive action to carry out such plans by the adoption and strict administration of laws, ordinances, rules and regulations."

The following discussion of land use impacts must, therefore, be viewed within the context of these planning requirements. The need for housing and the protection of resource lands can be difficult to reconcile since additional housing development may require use and loss of productive undeveloped open lands. As stated previously, the General Plan Update has been crafted to achieve a balance between accommodating the County's housing needs both now and in the future, and preserving agriculture, timberlands and open space. This is primarily achieved through focusing growth toward existing urban areas or areas adjacent to them.

Another standard of significance deals with the need for the land use plan to be fashioned to avoid and minimize conflicts between different land uses located nearby. An example of a negative impact might be placement of a residential subdivision adjacent to an active timber harvesting area. This standard is a primary basis for land use planning. It goes to the foundation and basic requirements of land use planning.

Most of the future development in rural areas will occur as in-fill or as the extension of existing developed areas. Conversion of timberlands, agricultural land, and other natural resources to rural residential, commercial, and other urban type uses will be limited and there is a conscious and concerted attempt to preserve valuable resource lands.

The Plan policies promote the retention of agricultural and timberlands in large parcel sizes that are supportive of resource production uses. Among the most significant potential impacts stemming from the change of land uses are those when land use activities in one area disturb or deteriorate the value of adjacent land use activities. The most relevant example of this impact will occur where residential areas expand toward active timberlands and adversely affect the productivity of timber operations.

By focusing residential development via in-fill strategies, the General Plan will result in a smaller percentage of the County's population being located in agricultural or timberland areas. Most of the rural population increase will be concentrated near existing communities and in existing remote areas which have already been subdivided. A higher percentage of existing parcels will be occupied because of restraints on new parcel creation. Because of this less, new parcels will be created, and fewer acres subdivided, thus lessening the geographic extent of impacts on forests, fish, wildlife, vegetation, water resources, soils and other resources.

The Plan includes a variety of mitigation measures aimed at maintaining resource production lands in use. These mitigation measures will not completely eliminate the non-resource dependent development of the County's resource production lands, but they will substantially reduce it. On balance (after mitigation and policy implementation), the environmental effects of General Plan policies on timberlands are not significant. The continued availability of these lands is insured by the mitigating policies incorporated into the General Plan.

Setting

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. National and State Wildlife Areas cover 2,600 and 2,000 acres. County 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 (also including reserves, parks, and other holdings) total over 490,000 acres or 26 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 and good soils are very conducive to timber production. Of the 1,900,000 acres of forestland in Humboldt County, 1,700,000 are considered suitable for production (*Humboldt County Natural Resources and Hazards Report, 2002*). About 900,000 acres are part of the Timber Production Zone (TPZ). This acreage is equal to 45 percent of the total land acreage in the county.

Trees are generally classified as hardwood (including all oaks, alders, and other deciduous or broadleaf species) or softwood (including fir, spruce, pine, redwoods 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, are categorized by the dominant species or mix in that region.^v

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 redwoods, 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.

- Montane hardwood forest is found largely in steep canyon slopes and ridgetops, dominated by the canyon live oak, with other oaks, pines, madrone, and laurel at lower elevations.
- Redwood forest grows primarily along the coast and in nearby lowland areas, with redwoods interspersed with a variety of other conifers and red alder.
- Montane hardwoods conifer forest occurs farther inland, above rainier areas, and includes black oak, white oak, live oak, along with white firs and Douglas-firs.
- Montane riparian forest, which is generally not productive, is marked by bigleaf maple, California bay, and Fremont cottonwood.

Humboldt County has the largest harvest of any county in the state of California. From an annual level of 23.4 million board feet (MMbf) in 1947, timber production in Humboldt County rose to 305.7 MMbf in 1955 and, with annual fluctuations, reached 350.9 MMbf in 1964. More recently the County timber production has been in the range of 350 to 500 MMbf. The increased value of harvested timber in recent years has led to a dramatic increase in overall agricultural value.

The timber industry has economic implications for many components of the local economy. Lumber mills, trucking and shipping of wood products, professional services, and a variety of other industries benefit from the leading role of timber harvesting in the County. In terms of land use, timber production represents 14.1% of the land use in the Unincorporated Coastal Zone portions of the County and 46.5% of the land use in the remainder of the County Unincorporated areas (*Building Communities*, Dyett and Bhatia, 2002). Clearly timber production is a key component of the County's economic well being.

According to the report *Prosperity: the North Coast Strategy for the New Economy*:

"Lumber-based manufacturing generates about 75 percent of the total County manufacturing income. Twenty seven percent of the timber produced in the State of California comes from Humboldt County. Though timber plays an extremely important role in the local economy, it once played a much greater role. However, technological innovation reducing the labor necessary, conversion from a virgin to second growth manufacturing and regulatory issues reducing the amount of local timber harvested, has severely curtailed the employment in this industry. Presently, local mills are spending approximately 2 million dollars per month to purchase logs from other states and foreign countries.

There are economic opportunities that can be expanded upon. The Forest and Lumber Products Cluster meeting identified additional opportunities to use local lumber in value added products. The cluster also provides opportunities to link with the tourism industry in many ways."

The five largest timberland owners in Humboldt County are industrial lumber companies. Industrial timberland is land owned by companies that either operate a sawmill or manage at least 5,000 acres of productive timberland. Non-commercial owners are not considered industrial. Industrial timberland owners own a combined area of 657,098 acres, two-thirds of timberland in Humboldt County.

Small timber landowners can be characterized as follows: residential forest owners (typically 1-9 acre parcels); small to medium forest owners (40 to 160 acre parcels); and large forest owners (over 160 acre parcels). Nationwide, small and medium forest owners represent a size category that is experiencing the greatest growth in numbers of owners and acres represented (*Humboldt County Forest Resources Report, 2003*). Though often fragmented in nature, these forest properties can still provide many major forest values. They can be managed for periodic timber or other forest-based revenue though major harvesting typically occurs only once or twice in an owner lifetime. This size ownership is often responsible for contributing more acres to the class through increasing subdivisions, lot line adjustments, certificates of compliance, determinations of status, thus swelling the numbers of small forest landowners in the last twenty years.

Potential Impacts

A number of policies and programs in the Plan may indirectly result in a loss of some forest lands to residential uses. The greatest potential for indirectly reducing timberlands are policies and programs directed at meeting the projected housing needs by encouraging housing development in the Urban Study Areas. Specifically, the Plan targets the production of new homes to meet its entire share of the projected population, as required by the state Housing and Community Development Department.

The incompatibility of timberlands and residential uses has not resulted in many serious nuisance complaints historically primarily because of the relatively low number of residential uses located near harvesting operations. The lands owned by industrial timber companies are virtually free of housing. However, as increased residential uses encroach into timberlands, the possibility of nuisance complaints increases. Conflict with residential neighbors may arise with noise, dust, odors and environmental issues. These conflicts may result in trespass, vandalism theft, and can threaten the viability of timber operations.

One of the major goals of the Framework Plan is to protect forest resources and timber operations. Numerous policies contained in the Framework Plan, community plans and coastal plans protect forest lands. This theme is carried through the General Plan Update in continuation of existing policies and standards as well as proposed plan policies. These are described more fully under "Mitigation Measures" below.

As stated previously, the General Plan Update has been crafted to achieve a balance between accommodating the County's housing needs both now and in the future, and preserving agriculture, timberlands and open space. This is primarily achieved through focusing growth toward existing urban areas or areas adjacent to them.

Another requirement when preparing the land use element is to minimize conflicts between different adjacent or nearby land uses. An example of a negative impact might be placement of a residential subdivision adjacent to an active timber operation. This standard is a primary basis for land use planning. It goes to the foundation and basic requirements of land use planning.

Most of the future development in the unincorporated areas will occur as in-fill or as the extension of existing developed areas. Conversion of timberlands and other natural

resources to rural residential, commercial, and other urban type uses will be limited and there is a conscious and concerted attempt to preserve valuable resource lands.

The Plan policies promote the retention of agricultural and timberlands in large parcel sizes that are supportive of resource production uses. Among the most significant potential impacts stemming from the change of land uses are those when land use activities in one area disturb or deteriorate the value of adjacent land use activities. The most relevant example of this impact will occur where residential areas expand toward existing agricultural areas or active timberlands and adversely affect the productivity of these operations.

By focusing residential development via in-fill strategies, the General Plan will result in a smaller percentage of the County's population being located in agricultural or timberland areas. Most of the rural population increase will be concentrated near existing communities and in existing remote areas which have already been subdivided. A higher percentage of existing parcels will be occupied because of restraints on new parcel creation. Because of this less, new parcels will be created, and fewer acres subdivided, thus lessening the geographic extent of impacts on forest resources.

The Plan includes a variety of mitigation measures aimed at maintaining resource production lands in use. These mitigation measures will not completely eliminate the non-resource dependent development of the County's resource production lands, but they will substantially reduce it. On balance (after mitigation and policy implementation), the environmental effects of General Plan policies on forest lands are not significant. The continued availability of these lands is insured by the mitigating policies incorporated into the General Plan.

Summary of Impacts

The new Plan encourages the construction of new residential, commercial and industrial development, which may affect land conserved for managed production of natural resources, and land protected as open space. If the plan concept of community centered growth, compact development boundaries, and increased protections for resource production lands are followed, impacts will be minimal. If not, they will be significant.

Mitigation

Proposed policies, standards and implementation measures will help reduce the impacts to forest lands resulting from this project to less than significant levels. By focusing residential growth to the Urban Study Areas and infill, the loss of timberlands will be minimized. Existing policies and standards protecting forest resources are proposed to be continued or expanded (FR-P1, FR-P12, FR-P14, FR-P17, FR-P22, FR-S2, S3 and S4) along with new policies including incentives for cluster development in exchange for additional protection of core forest lands (FR-P16). Limiting development on substandard forest lands is also proposed that will add increased protection of timber resources (FR-P11) along with protection of sensitive habitats and water resources (FR-P19, FR-P20 and FR-P21). The introduction of Forestland-Residential Interface Zone (FR-P23 and FR-S5) proposes to reduce potential conflicts that can occur during timber operations near communities. A "Right to Harvest" ordinance is also proposed that helps to put surrounding property

owners on notice of timber activities in order to minimize these potential conflicts and provide some assurances to the timber operators of the County's support for continued resource extraction in the future.

Implementation measures (FR-IM2 and IM3) are proposed to provide incentive programs that encourage long term timber production. Also, the Plan proposes to coordinate County policies so that they are compatible with state forestland policies (FR-IM5).

Conclusions

If the policies and programs proposed for Alternatives A or B are followed, the impacts to agricultural resources will be minimal. If Alternative C is selected, the impacts to agricultural resources could be significant.

ⁱ TPZ law

ⁱⁱ "Parcelization" is used by the Forest Legacy Program to refer to subdivisions that occur without additional, immediate non-forest development. The CALFIRE 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 Protection, Fire and Resource Assessment Program, 2003. *The Changing California: Forest and Range 2003 Assessment*. <http://frap.cdf.ca.gov/assessment2003>)

ⁱⁱⁱ California Department of Forestry and Fire Protection, 1995. *California Forest Legacy Program Assessment of Need*. (second draft, p. 27).

^{iv} Thompson, R., et al., 2005. *The Impact of California's Changing Environmental Regulations on Timber Harvest Planning Costs*. <http://www.ciissc.calpoly.edu/research/THPCostStudy.pdf>

^v California Forest Legacy Program, *Amendment to the Assessment of Need*, Sept 2000, pp 32-39, 193.