

Chapter 2. Project Description and Alternatives

The project consists of updating the Humboldt County General Plan (referred to as the proposed General Plan Update (GPU) for purposes of the EIR). The GPU is intended to be a comprehensive update of the County's current General Plan. This chapter provides details about the proposed project, including the project location and affected area, a discussion of the purpose and need, background on the existing plan, the general plan update process to date, and a discussion of the proposed plan and alternatives.

2.1 Project Location and Setting

The project location is identified as the unincorporated areas of Humboldt County. There are seven incorporated cities in the County which are not included in the project. According to the 2010 Census, the total county population was 134,623, an increase of 8,105 from the 2000 Census. The California Department of Finance 2011 population estimates for Humboldt County is 135,263, with about 54% of the population living in the unincorporated areas. See Figure 2.1-1.

With 3,570 square miles of land, Humboldt County is the fourteenth largest county in California. Nearly 34 percent of the county is either in public ownership or tribal lands. Incorporated cities occupy 23,000 acres, or just about one percent of the total land area. The National Forests, National Parks, and public land controlled by the Bureau of Land Management totals 571,200 acres, and the State Parks System includes 72,200 acres. The Yurok and Hoopa tribal lands total 127,500 acres, or 5.6 percent of the total land area in the county.

Historically, development in Humboldt County has concentrated around the north-south transportation corridor of U.S. Highway 101. Building Communities Report (Appendix C), Figure 4-1a shows generalized existing land use countywide, as well as Community Planning Area boundaries. Figures 4-1b and 4-1c include detailed land use within each of the Community Planning Areas (CPAs) and Coastal Zone Plan Areas.

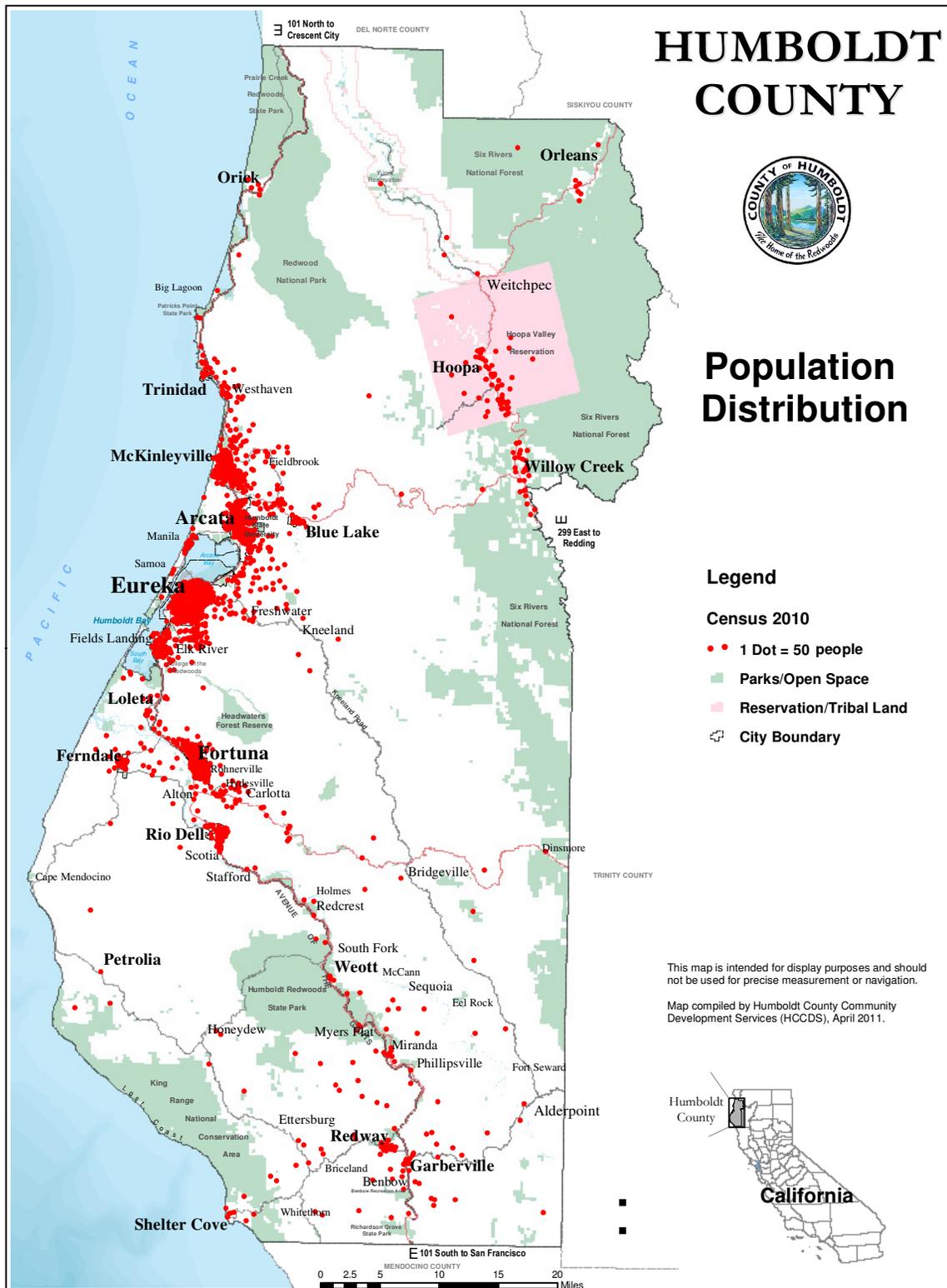
Existing land use reflects the type of development or use that currently occurs on the property, as indicated by County Assessor information.

Timberland and agriculture account for the majority (60.2 percent) of the unincorporated County's rural land uses, including approximately 1,009,000 acres of Timberland Production Zone (TPZ) and 297,000 acres in Williamson Act preserves. Open space and parks occupy nearly 582,900 acres, representing 25.7 percent, and all other uses share 14.1 percent of Humboldt County's total land area, including rural residential as a primary use on 112,500 acres in the unincorporated County.

Single-family residential lands cover 4,800 acres and an additional 600 acres are designated multi-family housing.

Additional details about the project location and setting can be found in the environmental setting sections of the other chapters of this EIR, and in the background documents referenced throughout the EIR.

Figure 2.1-1. Humboldt County Population Distribution.



2.2 Purpose, Need and Project Objectives

The proposed General Plan Update (GPU) reviews and revises the basic assumptions regarding population projections and future land use demand, and proposes land use designations and diagrams (maps), together with policies, to meet that demand in a manner consistent with State law. The GPU has a 20 year planning horizon, designating sufficient land to meet projected demands for the next 20 years without unreasonably constraining market choices. At the same time, the plan proposes focusing growth toward urban and urbanizing areas by increasing development opportunities in these areas and reducing development expectations on resource lands.

The GPU is arranged by topical chapters that address the seven mandated elements of a General Plan and several optional elements. The GPU consolidates its numerous land use maps (diagrams) into a single unified digital land use map (diagram) with supporting layers, and reduces the number of land use designations from over 100 in the current General Plan to fewer than 25 in the GPU. The GPU also consolidates most community plans into the main volume of the General Plan. The Eureka and McKinleyville Community Plans, as well as the coastal land use plans and the Housing Element, will remain as stand alone documents, but are subject to the revisions of this GPU program.

The proposed GPU will provide a more relevant and up to date planning document that meets future land demand, and is more accessible and useful to decision makers and the public. As part of the process in developing and defining the objectives for the GPU, the Board of Supervisors approved a set of Guiding Principles to guide preparation of the plan. The Guiding Principles are the direct result of the public process involved in developing this General Plan. The Planning Commission held multiple public meetings to discuss and deliberate on the Guiding Principles to be included in the Hearing Draft Plan. These principles have been used to guide the drafting of the goals and policies in each plan element, to create a desired vision for the future, and to serve as the basis for evaluating future amendments.

Guiding Principles

1. Ensure that public policy is reflective of the needs of the citizenry as expressed by the citizens themselves.
2. Preserve and enhance the character of Humboldt County and the quality of life it offers.
3. Provide sufficient developable land, encourage development of affordable housing for all income levels, and prevent housing scarcity under a range of population growth scenarios.
4. 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.
5. Support the County's economic development strategy and work to retain and create living-wage job opportunities.
6. Protect agriculture and timberland over the long term, using measures such as increased restrictions on resource land subdivisions and patent parcel development.
7. Protect natural resources, especially open space, water resources, water quality, scenic beauty, and salmonid habitat.

8. Include actionable plans for infrastructure financing and construction.
9. Adhere to a practical strategy that can be implemented.
10. Provide a clear statement of land use values and policies to provide clarity in the County's permit processing system and simplify review of projects that are consistent with the General Plan.
11. Maximize the opportunities to educate the public about the planning process, in order to have meaningful participation in the development and maintenance of the Plan.
12. Support a broad public participation program at all levels of the decision making process; including study, workshops, hearings, and plan revisions.

These guiding principles are the Project objectives.

State Requirements

State law requires each county and city to prepare and adopt a comprehensive and long-range general plan for its physical development (Government Code Section 65300). This general plan must address the seven topics (referred to as "elements") of land use, circulation, housing, open-space, conservation, safety, and noise as identified in state law (Government Code Section 65302), to the extent that the topics are locally relevant. It may also include other topics of local interest, as chosen by the County (Government Code Section 65303). The California Supreme Court has called the general plan the "constitution for future development." The general plan expresses the community's development goals and embodies public policy relative to the distribution of future land uses, both public and private.

Together, the seven mandated elements of a general plan form a comprehensive set of planning policies. The Land Use Element designates the general distribution and intensity of land uses within the planning area. The Circulation Element identifies the general location and extent of existing and proposed transportation facilities and utilities. The Housing Element, updated every five years as mandated by state law, is a comprehensive assessment of current and future housing needs for all segments of the County population, as well as a program for meeting those needs. The Open Space Element describes measures for the preservation of open space, for the protection of natural resources, for the managed production of resources, and for public health and safety. The Conservation Element addresses the conservation, development, and use of natural resources. The Safety Element establishes policies to protect the community from risks associated with natural and man-made hazards such as seismic, geologic, flooding, wildfire hazards, and air quality. The Noise Element identifies major noise sources and contains policies intended to protect the community from exposure to excessive noise levels.

In addition to the seven mandated elements, the GPU includes the following optional elements, based on public interest in these matters identified early in the planning process:

- A Community Infrastructure and Services Element, which focuses on existing infrastructure and service capacity, future demand, levels of service, timing, and funding issues.
- A Telecommunications Element, which addresses telecommunications access, reliability, and capacity, including basic telephone, wireless telephone, and broadband internet.
- An Economic Development Element, which outlines the County's economic development strategy and provide relevant supporting policies.

- A Water Resources Element, which addresses water planning issues including river and stream water quality, stormwater runoff, groundwater management, water needs of fish and wildlife, water consumption, conservation and re-use methods, and state and federal regulations.
- An Energy Element, which provides policies and programs to address energy needs, use, and conservation.
- An Air Quality Element, which describes the county's existing air quality, sources of air pollution, and strategies for improving air quality. Policies to reduce greenhouse gas emissions and mitigate climate change are also included.

Role of the General Plan

Once a general plan is adopted, its maps, diagrams, and development policies form the basis for County zoning, subdivision, and public works actions. Under California law, no specific plan, area plan/community plan, zoning, subdivision map, nor public works project may be approved unless the County finds that it is consistent with the adopted General Plan. The County may adopt a general plan in the format that best fits its unique circumstances (Government Code Section 65300.5). In doing so, the County must ensure that the general plan and its component parts comprise an integrated, internally consistent, and compatible statement of development policies.

In addition, the act of preparing, adopting, implementing, and maintaining the general plan serves to:

- Identify the community's land use, circulation, environmental, economic, and social goals and policies as they relate to land use and development.
- Provide a basis for local government decision-making, including decisions on development approvals and exactions.
- Provide citizens with opportunities to participate in the planning and decision-making processes of their communities.
- Inform citizens, developers, decision-makers, and other cities and counties of the ground rules that guide development within a particular community.

The General Plan covers the County's entire planning area and addresses the broad range of issues associated with development in the County. The County's General Plan serves several important purposes. It provides the following:

- An opportunity for conscious choices regarding the type, intensity and location of new development.
- Direction to assure that limited infrastructure investments are targeted to be consistent with growth goals.
- Clarity for property owners regarding where future development can occur and enables streamlining the permit process for applications that are consistent with the Plan.
- A comprehensive and sound database for implementation, project evaluation, administration, and monitoring.
- A basis for collaborative planning initiatives by cities, special districts, County departments and other agencies.

Role of County Government

County governments exercise land use authority over all unincorporated lands. They must do so while balancing many important statewide and regional goals and interests, such as:

- providing a variety of public safety, social and economic programs to county residents;

- preserving agricultural lands and encouraging the continued operation and expansion of agricultural businesses;
- protecting natural resources, wildlife habitat and open space;
- addressing adequate water supply issues;
- providing affordable housing;
- protecting air quality;
- providing adequate transportation; and
- ensuring efficient use of infrastructure.

This constitutionally granted authority to county government requires local elected officials to balance competing goals. County government also shares a broader perspective, and works in cooperation with the State in the role of providing services to city and County residents in the areas of health, welfare, criminal justice, and other joint state-county programs. Counties administer state-county programs to residents of both incorporated and unincorporated portions of the County. The General Plan further reflects the local government responsibility for managing development and service delivery to enhance the quality of life for both existing and future residents.

2.3 Background - Humboldt County General Plan Update

Existing General Plan

Humboldt County last comprehensively revised its General Plan in 1984. That plan, known as the 1984 Framework General Plan (or "Framework Plan"), includes goals, policies, standards and implementation measures for the seven mandated elements, and identifies 18 community plan and 6 coastal land use plan areas for specific treatment. The Framework Plan is supported by 15 map sheets (diagrams) covering the rural areas outside community planning areas.

The following community plans have been prepared based on the 1984 Framework Plan:

- Eureka Community Plan (1985)
- Freshwater Community Plan (1985)
- Fortuna Community Plan (1985)
- Willow Creek Community Plan (1986)
- McKinleyville Community Plan (2002)
- Hydesville-Carlotta Community Plan (1986)
- Garberville-Benbow-Redway-Alderpoint Community Plan (1987)
- Avenue of the Giants Community Plan (2000)
- Orick Community Plan (1985)
- Jacoby Creek Community Plan (1982)

Community plans for the Orleans, Fieldbrook-Glendale, Blue Lake, Trinidad-Westhaven, Rio Dell, Shelter Cove (inland), and Arcata community planning areas have not been adopted pursuant to the Framework Plan and continue to use land use maps prepared from 1965 to 1968.

Within the coastal zone, the County has adopted six coastal land use plans, as well as a set of coastal zoning regulations, which together form the County's Local Coastal Program (LCP). They serve as the primary general plan and implementation documents within the coastal zone, with some references to topic-specific elements such as the Housing Element. The LCP will continue to govern land use within the coastal zone unless, and until, amendments are submitted and certified by the Coastal Commission.

The County has periodically revised its Housing Element, most recently in April, 2010. The Housing Element revisions have propagated some revisions to the community plans and Framework Plan to maintain consistency. The 2010 Housing Element revisions and its EIR analyses are incorporated and considered in this document.

The General Plan Update Process

The County initiated the comprehensive General Plan Update with a multi-phased work program in 1999. Phase 1, which was completed in early 2001, focused on an extensive public outreach effort to engage the public in the General Plan effort. Through a series of public meetings, the County received public input on land use issues and policy concerns. Additional public outreach efforts included development of a web site, newsletter publication, and community survey. Phase I culminated in a compilation of public concerns and issues entitled the *Critical Choices Report* (Appendix B). The issues identified in the *Critical Choices Report* provide the direction for Phase 2, data collection and analysis.

Phase 1 - Identifying Issues and Scope of Work for the Plan Update. Phase 1 was primarily a public outreach effort to engage the public's interests, listen to major concerns, and scope out the most important policy areas. Over 40 meetings were held, with more than 700 people and organizations contacted. The Planning Division developed a web site, published a newsletter, undertook a community survey, and created a variety of activities and information pieces to elicit public input.

The input received during Phase 1 was organized into four major themes:

- Building Communities
- Moving Goods and People
- Managing Natural Resources
- Planning for Hazards

Phase 2 - Writing Background Technical Studies. In Phase 2, the County prepared technical background reports for each of these themes. Supplemental reports were prepared on Agricultural Resources and Forest Resources. These technical background reports were used for defining the environmental setting of the General Plan Update as required under CEQA. The reports also provided an opportunity for refining policy options to go along with the plan alternatives. The following reports were prepared as part of Phase 2:

Building Communities (Appendix C)
Moving Goods and People (Appendix G)
Natural Resources and Hazards (Appendix D)
Agricultural Resources Report (Appendix E)
Forest Resources Report (Appendix F)
Transportation Analysis (Appendix H)
Water Resources Technical Background Report (Appendix P)
Community Infrastructure and Public Facilities Technical Background Report (Appendix Q)
Energy Element Technical Background Report (Appendix R)

These and other reports are incorporated by reference and discussed in the environmental impact analysis that follows. They are available for review at the Planning Division public counter at 3015 H Street in Eureka or for download at <http://co.humboldt.ca.us/gpu/documentsbackground.aspx>.

Phase 3 - Selecting a Preferred Plan Alternative. Phase 3 was initiated in October of 2003 with a series of deliberative dialogue workshops and the development of several alternative development scenarios, which were described as Sketch Plans 1, 2, 3, and 4. The Sketch Plans Reports (Appendix J) discussed during this phase were then modified into plan alternatives to be considered in development of the updated general plan and the EIR analysis. An Administrative Draft Plan was prepared in 2007 and reviewed by the Planning Commission to provide guidance in the development of the preferred Plan and Plan Alternatives. Fourteen public hearings were conducted by the Planning Commission in 2007-08 on the Administrative Draft Plan. From these public meetings Plan Alternatives A, B, C, and D (see descriptions below) were developed, and the County defined Alternative B as the Proposed Project plan alternative for initial review by the Planning Commission.

Phase 4 – Draft Preliminary Plan and EIR. In this phase, the chosen alternative was used as a guide for writing preliminary drafts of each chapter of the General Plan Update. The Planning Commission held 68 meetings on the proposed Plan Alternatives from April 2009 through March 2012 and 8 meetings on the proposed Countywide mapping changes. This included a detailed review of the over 1200 distinct policy choices for the Alternatives. Through this deliberation and straw voting, the Planning Commission Approved Hearing Draft was developed. This draft reflects the “blending” of many of the policy choices found in Alternatives A, B, C and D as well as new policies crafted by the Commission after receiving public testimony and detailed public comments. This round of input guided the preparation of the consolidated public Hearing Draft Plan and drafting of the Environmental Impact Report (EIR). This Planning Commission Approved Hearing Draft is considered the General Plan Update Plan Alternative under review by this EIR.

During the public hearing process for the Planning Commission Hearing Draft, a set of guiding principles were developed, and subsequently approved by the Commission to reflect the policy direction of the plan. The Guiding Principles (see above) were the direct result of the public process involved in developing this General Plan. These principles have been used to guide the drafting of the goals and policies in each plan element, to create a desired vision for the future, and to serve as the basis for evaluating future amendments.

Phase 5 and 6 – Public Review and Adoption of Final Plan and EIR. During these phases, the Planning Commission is holding public hearings, reviewing the plan alternatives, developing recommendations for their preferred General Plan, and reviewing this EIR. The Planning Commission recommended alternative will be submitted to the Board of Supervisors for a final round of public input, modification, and decision making. The final General Plan and EIR will be adopted by the Board of Supervisors. The Planning Commission commenced hearings on the Public Hearing Draft of the General Plan Update in November, 2008. The Notice of Preparation for this EIR was circulated in January, 2007.

The record for this EIR will remain open through the Planning Commission hearings and into the Board of Supervisors hearings to allow decision-makers and the public to be informed of the environmental impacts of policy modifications. As long as these impacts fall within the range of impacts described in this draft EIR, recirculation should not be warranted.

2.4 The Proposed Plan

Key Features

The County's proposed project, the proposed General Plan Update (GPU), is also referred to as the Planning Commission Approved Draft or Alternative PC. The proposed GPU provides for modest expansion of urban areas, as currently reflected in the community plans. It also provides for a slight increase in planned urban residential densities, increasing infill opportunities and urban-serviceable development. Additional industrial and commercial lands would be made available based on historic proportion to residential land uses.

Development under the proposed GPU has the following characteristics:

- a. Focused development within existing urbanized areas serviced by water and sewer.
- b. Land use designations that support mixed-use development and other techniques to increase efficiency of land utilization, including use of alternative subdivision standards, density bonuses, second unit incentives, live-work commercial centers, etc.
- c. Reduction in existing large lot residential subdivision potential outside of community planning areas
- d. Increased resource production land protections using a range of planning tools such as: lowered planned densities, clustered development incentives, open space standards, conservation easements and regulatory reform.

The proposed General Plan Update (GPU) reviews and revises the basic assumptions regarding population projections and future land use demand, and proposes land use designations and diagrams (maps), together with policies to meet that demand in a manner consistent with State law. The GPU has a 20 year planning horizon, designating sufficient land to meet projected demands for the next 20 years without unreasonably constraining market choices. At the same time, the plan proposes focusing growth toward urban and urbanizing areas by increasing development opportunities in these areas and reducing development expectations on resource lands.

Plan Organization and Summary Description

The [General Plan Update](#) is arranged by topical chapters that address the seven mandated elements of a General Plan and several optional elements, organized in functional parts:

PART 1 – SETTING

Chapter 1. Introduction

Chapter 2. Public Guide

Chapter 3. Governance Policy

PART 2 – BUILDING COMMUNITIES

Chapter 4. Land Use Element

Chapter 5. Community Infrastructure and Services Element

Chapter 6. Telecommunications Element

Chapter 7. Circulation Element

Chapter 8. [Housing Element](#) Summary

Chapter 9. Economic Development Element

PART 3 – RESOURCE MANAGEMENT

Chapter 10. Conservation and Open Space Elements

Chapter 11. Water Resources Element

Chapter 12. Energy Element

PART 4 – PUBLIC HEALTH AND SAFETY

Chapter 13. Noise Element

Chapter 14. Safety Element

Chapter 15. Air Quality Element

PART 5 – APPENDICIES

A. Implementation Action Plan (place holder for future completion)

B. Glossary and Definitions

C. Community Plan Policy Extracts

D. Reference List

E. Coastal Plans (place holder for future completion)

F. Map Book

Land Use Element Maps

Safety Element Maps

Biological Resources Maps

Circulation Element Maps

Part 1 provides the overall setting and context of the Plan, including the Plan's intended uses and guiding principles. The purpose, form, and content of the Plan are reviewed and a reader's guide and background on the Plan's development process are provided. Chapter 3 includes policies for administering the Plan, including policies on public participation, maintenance, and amendments to the Plan and inter-governmental coordination.

Part 2 of the plan focuses on the built environment, and includes the mandated Land Use, Circulation, and Housing Elements. The Housing Element is bound separately because of its bulk and special update cycles. The Land Use Element includes sections on growth planning, urban, rural, and public lands, agricultural and forest resources, and the land use classifications. This part of the Plan also includes the optional Community Infrastructure and Services, Telecommunications, and the Economic Development Elements.

Part 3 of the General Plan focuses on the natural environment and how land use activities interact with it. Included in this part are the Conservation and Open Space Elements, two mandated elements, and optional Water Resources and Energy Elements.

Part 4 includes policies and programs to protect people, property, and the environment from risks associated with seismic, geologic, noise, flood, air quality, and wildfire hazards. This part of the Plan contains the State mandated Noise and Safety Elements, as well as the Air Quality Element.

Part 5 includes the Community Plans Policy Extract, Glossary and Definitions, Reference List, and Map Book, as well as future placeholders for an Implementation Action Plan and consolidated Coastal Plans. The GPU consolidates its numerous land use map diagrams into a single unified digital land use map diagram with supporting layers, and reduces the number of land use designations from over 100 in the current General Plan to fewer than 25 in the GPU. In hardcopy

form, these are presented in a non-attached Map Book Appendix, which includes diagrams for land use, safety, biological resources and circulation.

The GPU consolidates most community plans into the main volume of the General Plan by including policies specific to community plans in the appendix. The Eureka and McKinleyville Community Plans, as well as the coastal land use plans and the Housing Element, will remain as stand alone documents, but are subject to the revisions of this GPU program.

Chapter by Chapter Description of Proposed Plan

PART 1 – SETTING

Chapter 1. Introduction

Chapter 1 explains what a general plan is, its intended uses, and the overall setting and context of the Plan, including the Plan's background and guiding principles.

Chapter 2. Public Guide

This chapter provides a guide for reading and using the Plan. It describes the organization of the Plan, the layout of a typical chapter, and the relationship of this document to other planning documents.

Chapter 3. Governance Policy

This chapter describes the County's governance policies related to this Plan. Administrative topics include Plan implementation, Plan amendment, public participation, and inter-governmental coordination. This chapter also discusses governance issues such as combining regulations and incentives and balancing private property rights and public interests. Finally, the topics of environmental justice, sustainability, and climate change are reviewed.

PART 2 – BUILDING COMMUNITIES

Chapter 4. Land Use Element

The Land Use Element addresses the location, mix, timing, and character of land uses, and supporting infrastructure. The sections within this Element include policies specific to Growth Planning (Section 4.2), Urban and Rural Lands (Sections 4.3 and 4.4), Agriculture and Forest Resources (Sections 4.5 and 4.6) Public Lands (Section 4.7) and the Land Use Classifications (Section 4.8). The Land Use Element provides for the distribution, location and extent of uses of land for housing, business, industry, natural resources, open space, recreation, and other uses. The Element guides patterns of development for the county, providing a long-range context for decisions made regarding zoning, subdivision, and public works.

The specifics of the Land Use Element are described in more detail in this EIR in Section 3.1, Land Use Housing and Population, and in Section 3.2, Agricultural and Timber Resources. Section 2.5, Proposed Plan Buildout Potential below, summarizes the development that could be accommodated by the existing and proposed general plans.

Chapter 5. Community Infrastructure and Services Element

This Element identifies community infrastructure and service issues that affect Plan implementation. The Board of Supervisors opted to prepare this optional element because of the pivotal role that infrastructure and services will play in the growth of the County. The Element provides direct focus on existing infrastructure and service capacity, future demand, levels of service, timing, and funding issues.

The specific issues addressed by this element are discussed in more detail in this EIR in Section 3.3, Utilities and Services.

Chapter 6. Telecommunications Element

Telecommunications infrastructure and services include basic telephone, wireless telephone, and broadband internet. This optional element addresses telecommunications access, siting, reliability, and capacity.

Chapter 7. Circulation Element

This mandated element addresses the location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local transportation facilities. It includes policies, standards, and implementation measures for roads, public transportation, bicycle and pedestrian travel, airports, and marine and rail transportation. As required for circulation elements adopted after January 1, 2011, the element includes "complete streets" policies, which plan for the development of a well-balanced, connected, safe, and convenient multimodal transportation network, consisting of complete streets, which are designed and constructed to serve all users of streets, roads, and highways, regardless of their age or ability, or whether they are driving, walking, bicycling, or taking transit.

Chapter 8. Housing Element Summary

This chapter is a placeholder for a summary of the mandated Housing Element. The County adopted a revised housing element in 2010, for which a separate EIR was prepared.

Chapter 9. Economic Development Element

This optional element provides an overview of the economy, characterizing the trends, land, and infrastructure needs that will shape the future. A set of goals, policies, and implementation measures are included which reflect the County's economic development strategy to promote and sustain economic prosperity, and to coordinate such policies with the County's general plan.

PART 3 – RESOURCE MANAGEMENT

Chapter 10. Conservation and Open Space Elements

This chapter combines the Plan's required Conservation Element and Open Space Elements. The Conservation Element guides the conservation, development, and utilization of natural resources (water, forests, soils, rivers, mineral deposits, and others), while the Open Space Element guides the comprehensive and long-range preservation and conservation of open-space lands. Together, these elements present a framework of goals and policies for the use and protection of all the natural resource and open space assets of the county. Because these two elements naturally overlap, they have been combined into this single chapter, which has been organized into six related sections: Open Spaces, Biological Resources, Mineral Resources, Waste Management, Cultural Resources, and Scenic Resources.

Chapter 11. Water Resources Element

This optional element provides additional focus on water planning issues including river and stream water quality, stormwater runoff, groundwater management, water needs of fish and wildlife, water consumption, conservation and re-use methods, water export, and state and federal regulations. These and other water-related topics can be found throughout the General Plan. Water availability for development is addressed in the Land Use Element. The Conservation and Open Space elements address riparian corridors, wetlands, wildlife protection, fishery resources, other biotic resources, water-oriented recreation, and soil erosion. The Community Infrastructure and Services Element addresses public water and wastewater systems.

Chapter 12. Energy Element

The purpose of this optional element is to present policies and programs to address energy needs, use, and conservation. This chapter provides goals, policies, standards, and implementation measures that strive for sustainable renewable energy and self-sufficiency.

PART 4 – PUBLIC HEALTH AND SAFETY**Chapter 13. Noise Element**

This mandated element identifies the County's approach to managing noise levels to minimize the exposure of community residents to excessive noise. The policy approach follows the guidelines adopted by the Office of Noise Control of the California Department of Health Services.

Chapter 14. Safety Element

The purpose of the Safety Element is to reduce the risk of death, injuries, property damage, and economic and social dislocation resulting from earthquake, fire, flood, and other hazards. The components of this element include:

- Geologic/Seismic Hazards
- Flooding and Drainage
- Fire Hazards
- Airport Safety
- Industrial Hazards
- Emergency Management

This Element identifies hazards and hazard abatement provisions to guide local decisions related to zoning, subdivisions, and entitlement permits. Hazard and risk reduction policies supporting hazard mitigation implementation measures are contained in this Element.

Chapter 15. Air Quality Element

This optional element describes the county's existing air quality, sources of air pollution, and strategies for improving air quality. Policies to reduce greenhouse gas emissions and mitigate climate change are included in this element. A Climate Action Plan has been included as a companion document for the proposed project as required mitigation for the Air Quality Element plan policies.

The specific issues addressed by this element and the Climate Action Plan are discussed in more detail in this EIR in Section 3.12 – Air Quality and Greenhouse Gas Emissions.

2.5 Proposed Plan Buildout Potential

Implementation of the Proposed GPU would result in a plan and land use entitlements that could accommodate increased population, housing units, and commercial and industrial floor space within the county. The plan's buildout potential and population capacity are presented in Table 2-1. The table illustrates three land use scenarios: existing land use conditions, estimated buildout of the Proposed GPU, and maximum buildout of the Proposed GPU (referred to in subsequent sections of this EIR as the "Maximum Development Scenario"). See Chapter 4 for buildout figures for other plan alternatives.

Existing land use conditions represent on-the-ground uses in 2008 according to the Humboldt County Assessor, which coincides with the release of the notice of preparation of this EIR. This EIR uses the existing land use conditions data as a baseline from which to determine environmental impacts of the Proposed GPU and its alternatives.

The Proposed GPU estimates the density and intensity of the potential buildout of the plan based on two assumptions: (1) Future development will occur at the same densities and intensities at which current land uses have developed (expected growth); and (2) all developable property will be developed by 2030 (maximum growth).

To estimate population, dwelling units, and commercial space at buildout of the Proposed GPU, the County used the midpoint of the permitted density/intensity range for each land use category based on the estimated net acreage for that category (after subtracting for constraints). The use of the midpoint was based on an analysis of past development patterns. Development in unincorporated Humboldt County tends to be at the midpoint or less of the permitted General Plan density/intensity ranges. The values so generated are used to describe the density and intensity of the impacts of the Proposed GPU in the environmental impact analysis sections. For population projections, multiply housing units by 2.38 persons per household.

The Maximum Development Scenario represents the highest theoretical amount of development that would be possible under the Proposed GPU. In this scenario the development properties would occur at the highest density and intensity allowed by the plan. The Maximum Development Scenario estimates substantially more dwelling units and population growth than the Proposed GPU (expected growth). Although it is extremely unlikely that maximum buildout would or could occur, such a scenario must be analyzed to demonstrate the highest possible level of environmental impact that could result from the project. For this reason, the Maximum Development Scenario is also utilized in analyses contained in this EIR.

To summarize the changes countywide from the Framework Plan (existing plan) to Alternative PC (the proposed plan):

- changes to support existing Agricultural operations - either prime land, zoned AE, or used for agriculture and proposed to be Planned AE or AG (approximately 6,000 acres)
- changes of the Land Use designation to reflect existing zoning, plan policy, or existing use (approximately 700 acres)
- changes due to a database error or map corrections, (approximately 1000 acres)
- changes to reflect areas that are planned for annexation by adjacent city (250 acres)
- changes to the land use designation or density to reflect physical constraints (approximately 1,000 acres)
- clean up of the boundaries of RCC or VC land use designations to reflect precise mapping (125 acres)
- changes to reflects current parcelization and use (approximately 4,000 acres)
- changes to reflects existing mix of housing and commercial, industrial reuse, or infill opportunity (432 acres)
- changes land use designation to reflects historic use and surrounding uses (45 acres)
- changes to proposed land use designation or boundary to reflects improved constraints mapping (approximately 800 acres)
- changes to reflect public or quasi public ownership or use (6,785 acres)
- changes to land use designation to reflect surrounding residential uses and/or density (approximately 1,100 acres)

- changes to proposed density and land use designation intended to match parcel size standard of zoning classification (approximately 600 acres)
- proposed Rural Residential land use designation applied where rural land is used primarily for residential purposes and area is zoned "U" (approximately 4,200 acres)

Table 2-1. Potential Buildout: Proposed Project vs. Framework Plan.

Land Use Designation	Framework General Plan			Proposed General Plan Update		
	Acres	Units		Acres	Units	
		Expected	Max Buildout		Expected	Max Buildout
Residential						
RM	713	2,864	15,284	654	3,052	15,018
RL	10,084	6,351	32,012	9,878	7,081	37,219
RE	17,513	666	4,344	12,207	495	2,771
RR	156,289	1,916	6,960	153,845	1,716	4,806
Commercial						
CG	600	0	248	360	0	206
CS	547	0	344	516	0	343
CR	2,965	8	21	1,598	0	1,035
Mixed Use & Urban Reserve						
MU	0	0	0	263	10	456
VC	235	8	123	267	13	81
RCC	1,396	15	41	1,788	68	741
UR	49	1	0	362	4	4
Industrial						
IG or MG	2,096	0	0	1,773	0	0
IR	240	0	0	199	0	0
MC	977	0	0	934	0	0
MB	29	0	0	41	0	0
Resource Production						
T	899,717	5,283	19,876	899,222	5,475	20,301
AE	59,465	218	1,925	74,991	334	2,191
AG	409,722	2,526	18,041	377,315	2,354	17,306
Open Space						
CF	1,411	0	0	3,462	0	0
CFR	428	0	0	0	0	0
NR	9,801	0	0	9,214	0	0
OS	52	0	0	646	0	0
PF	2,594	0	0	2,878	0	0
P	544,572	0	0	566,986	0	0
PR	8,871	0	0	10,785	0	0
Other	127,458	0	0	127,663	13	81
Total	2,257,824	19,856	99,219	2,257,847	20,615	102,559

Based upon Humboldt County GIS mapping system, 2012

It should be noted that the some mapping revisions were not considered changes that warranted review by this EIR. These included:

- Changes from or to P, PF, or PR to more accurately reflect public ownership or private land that was inadvertently indicated as public are not considered changes.
- Changes from one resource designation to another (AE, AG, or T) were not considered changes.
- Boundaries between land use designations that were previously drawn along tree lines and are now proposed to follow parcels lines are not considered changes.
- Effective changes in land use may occur where land use designation boundaries between rural residential and resource land have been more precisely drawn to follow parcel lines using GIS mapping rather than hand drawn at a 1 inch = 1 mile scale. In most instances these situations are not considered changes.
- Some changes reflect corrections from rudimentary scale maps to more precisely drawn GIS mapping.
- Outlying pockets of land Zoned "U" that are surrounded by TPZ and AE are proposed to be planned RR, typically RR40.
- Rural Community Center (RCC) boundaries are refined from generalized circles to match the intended community area and follow parcel lines. Changes to RCC boundaries effect surrounding lands, primarily resource lands.
- Reductions in maximum allowable density to match existing parcel size.

2.6 Project Approvals Required and Subsequent Actions

For the proposed project (the General Plan Update) to be approved and to become the operative general plan for the County, the Planning Commission must hold a public hearing and make a recommendation to the Board of Supervisors. The Planning Commission's review of the proposed plan must include consideration of this EIR. The Planning Commission's recommendation will be submitted to the Board of Supervisors for a final round of public hearings. Because adoption of the proposed general plan is a legislative action, the Planning Commission's action on the proposed plan is advisory and adoption of the proposed plan and certification of this EIR is done by the Board of Supervisors.

As part of the Board's adoption of the plan, an Implementation Action Plan will be prepared which organizes the implementation measures listed at the end of each chapter of the plan into a work program which outlines priorities, costs, and schedules for carrying out the implementation measures. Following adoption of the plan, the Implementation Action Plan will be carried out. Key implementing actions include updating the Zoning Code and submitting amendments within the coastal zone to the California Coastal Commission for certification.