



Figure 1. Plumas County Line Sierra Valley.
Photo Credit: Coleen Shade

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List of Acronyms and Abbreviations

AAQS	Ambient Air Quality Standards
ACOE	United States Army Corps of Engineers
ADT	Average Daily Traffic
ALUCP	Airport Land Use Commission
ALUCP	Airport Land Use Compatibility Plans
ATV	All Terrain Vehicle
AUM	Animal Unit Month
BFE	Base Flood Elevation
BNSF	Burlington Northern Santa Fe
BOS	Plumas County Board of Supervisors
CAL EPA	California Environmental Protection Agency
CAP	Climate Action Plan
CARB	California Air Resources Board
CCWPP	County Community Wildfire Protection Plan
CDFG	California Department of Fish and Game
CDP	Census Designated Place
CEQA	California Environmental Quality Act
CH ₄	methane
CIR	Circulation
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CO ₂	carbon dioxide
CO ₂	Carbon Dioxide
dB	decibels
dba	A-weighted decibels
EHD	Environmental Health Division
EIR	environmental impact report
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
GHG	greenhouse gases
GHGRP	GHG Reduction Plan
GIS	Geographic Information System
HFC	hydro fluorocarbons
Hz	hertz
kV	kilovolts
kW	kilowatts
L _{dn}	Day/Night Noise Level
L _{eq}	Equivalent Noise Level
LOS	Level of Service
LU	Land Use

MCAB	Mountain Counties Air Basin
MOA	Military Operations Areas
MRZ	Mineral Resource Zones
MTR	Military Training Route
MW	megawatts
MWhs	megawatt hours
N ₂ O	nitrous oxide
NDDDB	Natural Diversity Database
NIMS	National Incident Management System
NoRTEC	Northern Rural Training Employment Consortium
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
NSAQMD	Northern Sierra Air Quality Management District
OES	Office of Emergency Services
PCTC	Plumas County Transportation Commission
PFC	per fluorocarbons
PG&E	Pacific Gas and Electric
PM ₁₀	Particulate Matter 10 Micrometer
PM _{2.5}	Particulate Matter 2.5 Micrometer
PUC	Public Utilities Commission
ROG	Reactive Organic Gas
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SDWA	Safe Drinking Water Act
SEMS	Standardized Emergency Management System
SF ₆	sulfur hexafluoride
SMARA	Surface Mining and Reclamation Act
SR	State Route
SWP	State Water Project
TDR	Transfer of Development Rights
TIF	Traffic Impact Fees
TMDL	Total Maximum Daily Loads
TPZ	Timber Production Zone
UFRIRWMP	Upper Feather River Integrated Regional Water Management Plan
USFWS	U.S. Fish and Wildlife Service

INTRODUCTION

Overview & Setting

Plumas County is rich in natural resources and open space. The following is a list of important statistics that define Plumas County.

- The land area of Plumas County is approximately 2,613 square miles or 1,672,119 acres.
- The Upper Feather River Watershed has a land area of 3,500 sq miles.
- Plumas County is located almost entirely within the watershed and makes up approximately 72% of the watershed's land area.
- Plumas County elevation ranges from 1,800 feet to 8,376 feet.
- 65% of the County's land area is public lands managed by the United States Forest Service, the majority of which falls within the Plumas National Forest and other areas within the Lassen, Toiyabe and Tahoe National Forests. In addition, the County contains a portion of the Lassen Volcanic National Park and is home to the Plumas Eureka State Park.
- An area constituting 6% of the County's land area is owned and managed by other public agencies, including the County and the State.
- Approximately 29% of the County's land area, or 482,908 acres, are privately owned lands.
- Of the privately owned lands 33.4% are located within County planning areas.
- Based on the 2010 U.S. Census, Plumas County is one of California's most rural counties with 7.8 people per square mile for a total of 20,007 residents (2010 U.S. Census).
- Also based on the 2010 U.S. Census, Plumas County is one of three California Counties to have experienced a loss in population (Sierra and Alpine Counties are the other two).



Figure 2. Sugarloaf Mountain.
Photo Credit: Kristi Jamason

Uniquely situated geographically, Plumas County is located at the northern terminus of the granitic Sierra Nevada where the range intersects with the volcanic Cascade Range. It is this geology that has laid the foundation for the diverse mineral resources, forestlands that are second only to the North Coast forests in production, the largest high elevation valley-meadow complex in California, flora and fauna that is shared between both mountain ranges, and landscapes that have been shaped by the network of streams and rivers that are all part of the greater Feather River Watershed. The Feather River Watershed, the largest watershed in the Sierra Nevada, includes almost all of Plumas County and contributes to the water supply of over 25 million Californians (60% of California's population).

History

As glaciers receded from the Sierra Nevada and the Cascades, humans migrated into the foothills and higher elevations' protected valleys. Humans have been utilizing the Sierra and Cascade ranges for thousands of years, and have been an integral part of its ecology for 2,000 to 5,000 years. This is particularly apparent through documented use

of fire to facilitate propagation and gathering of plant species preferred for foodstuffs, basketry medicinal uses, and other needs. Harvesting extraction and processing of stone, acorn, pine nut, basketry fiber, and other resources by native peoples resulted in alterations to the land resources in many locations across Plumas County.

The Mountain Maidu is the tribal group whose people were present in Plumas County when European migrants started to settle. Depending on what source is relied upon, the Mountain Maidu people have lived in various locations in Plumas County from hundreds to thousands of years and still do today. Other tribes, such as the Washoe and the Paiute, most likely utilized the area while not settling permanently. When weather permitted, the Maidu maintained permanent villages along the timbered edges of glacial valleys. From early Spring to late Fall, smaller groups traveled to the upper Sierra ridge tops and valleys, setting up open air brush shelters. Villages were occupied during winter months and relied mostly on stored and preserved food. The Mountain Maidu people most likely existed in small, scattered, familial groups in the valleys of Plumas County.

Their existence was suddenly disturbed in the spring of 1850 when a flood of gold-seeking miners poured into the canyons and valleys of the region in search of a fabled "Gold" Lake. Overnight, mining camps sprang to life. Rivers diverted and ditches were dug to bring water from distant sources to the diggings.

A sizable Chinese population took up residence here and remained until the early 1900s when, with the decline in mining, most left the area.

The North, Middle and South forks of the Feather River were named in 1821 by Captain Luis Arguello as the Rio de las Plumas ("River of Feathers") after the Spanish explorer saw what looked like bird feathers floating in the water. "Plumas", the Spanish word for "feathers", later became the name for the county. The river and its forks were the primary sites of early mining activity, with many smaller camps located on their tributaries. Over the next five decades gold mining remained the main industry of the county.

In 1850, the famous mountain man James P. Beckwourth, discovered the lowest pass across the Sierra Nevada and the following year navigated a wagon trail for California-bound emigrants from western Nevada, through Plumas County, to the Sacramento Valley.

Several years later, in March of 1854, Plumas County was formed from the eastern and largest portion of Butte County with the town of Quincy chosen as the county seat after a heated election. In 1864, a large part of northern Plumas County was carved off to form present day Lassen County. Following this, Plumas County annexed a small portion of Sierra County, which included the town of La Porte.

A favorite winter activity of miners was competitive skiing on 12 to 14 foot "longboards" or "snowshoes," the name first given to skis. Beginning around the gold towns of Johnsville, La Porte and Onion Valley, these activities are now documented as the first competitive downhill skiing events in the world.

Approximately 1862, Greenville came into existence as a mining and farming community at the head of Indian Valley; Chester, near Lake Almanor, was born as a result of damming Big Meadows and the lumber potential from the timber stands blanketing the area. Soon after the turn of the century, and with the construction of the Western Pacific Railroad in 1910, Portola came into existence.

With the railroad for transportation, the timber industry began to emerge as the primary economic force in the county. Until that time lumber was milled strictly for local use. Finished lumber could now be shipped nationwide from Plumas forests. Realizing the importance of the area's forests, President Theodore Roosevelt established the Plumas National Forest in March 1905, with boundaries that roughly encompassed the branches of the Feather River. The national forests produced significant timber for the nation from around World War II up to the 1980s. The private timber industry contributed enormously to the growth and prosperity of Plumas County and continues to do so to this day.

Along with the railroad's construction up the Feather River Canyon came some of the earliest tourists to the county. Resorts and lodges popped up at intervals along the "Feather River Route" to accommodate fishermen, hikers and sightseers. The last passenger train ran in 1970, and the line is now devoted to freight traffic only. In 1937, the Feather River Highway, touted as an "all weather route", was completed through the Feather River Canyon from Oroville to Quincy, linking Plumas County year-round to the Sacramento Valley.



Figure 3. Family Ranching Heritage.
Photo Credit: Carol Dobbas

Figure 5. Map of California with Plumas County Highlighted



Figure 6. Google Map of California with Plumas County Highlighted

Vision & Planning Goals

Promote a healthy physical and aesthetic environment, a vital economy, and a supportive social climate that can accommodate the expected growth and change over the next 20 years. (Plumas Vision 2020)

A large amount of ground work has preceded the development of the Plumas County General Plan Update. Public workshops, visioning sessions and surveys have included full-time and part-time residents. The purpose of these efforts has been to solicit feedback and, based on that feedback, define what is important to residents, determine if there a common vision for Plumas County, and what should be emphasized through Goals and Policies in the updated County General Plan.

In 2002 the Plumas Vision 2020 report was published. Funded by a grant and undertaken prior to the current General Plan update, the report summarized a public process that included more than thirty community meetings and surveys distributed around the county and mailed to part-time residents. More than 1000 surveys were completed and returned. Based on the feedback, seven topic areas were identified and, with additional public input, the following seven vision goals were developed:

- To preserve and promote a rich environment of arts, culture and heritage in Plumas County into the 21st century
- To create and retain jobs, and reinvest wealth through our economy, community and natural resources
- To increase the communications and technology capability of Plumas County to function successfully in the 21st century
- To promote a future for Plumas County citizens in which land use decisions balance social, economic, and natural resource health
- To improve the health and well-being of all Plumas County residents
- To provide a range of facilities, programs and activities for the health and enjoyment of residents and visitors
- To recognize the well-being of local youth as fundamental to the health of the community as a whole

The Plumas County Board of Supervisors reinstated the Planning Commission in March of 2005 in order to update the General Plan. In 2006 and 2007 a round of surveys now associated with the General Plan update were administered by the Planning Commission across Plumas County with the intent to inform and solicit a broad perspective on the concerns and opinions of the public. The results confirmed the previous process outcomes and identified common community issues of importance. Both full-time and seasonal residents identified preserving open space, addressing water quality and erosion control, and managing growth as their top three issues of importance to be addressed in the General Plan update.

This General Plan Update process was restarted in 2009 at a strategic kick-off public meeting of the Planning Commission. At that meeting and at several following sessions the Planning Commission, with input from the public, developed a set of planning goals to guide the General Plan update process. The planning goals were reviewed and discussed by the Board of Supervisors who then unanimously approved the following:

General Plan Update Planning Goals

The Document

- The General Plan Update is legally defensible
- The General Plan Update is easily read and interpreted by the public

- The General Plan Update represents the voice of the people of Plumas County

The Process

- The General Plan Update document was completed in two years and within budget
- Each General Plan element was developed with the appropriate focus and energy

Environment

- The General Plan Update preserves and protects Plumas County's natural beauty
- The General Plan Update protects natural habitats
- The General Plan Update meets and sustains the basic needs of clean and available water
- The General Plan Update meets and sustains the basic needs of clean air

Economy

- The General Plan Update promotes economic development in harmony with surroundings
- The General Plan Update through its land-use and other policies sustains agriculture and forest industries
- The General Plan Update promotes the economics of pure water resources (quality and quantity) development
- The General Plan Update considers policies that address energy production and utilization

Agriculture and Forestry

- The General Plan Update protects and sustains agricultural and forest lands and encourages best management practices
- The General Plan Update defines agricultural and forest lands with the intent of meeting the needs of the ranching and farming families

Community

- The General Plan Update preserves and protects cultural, historical and archaeological resources
- The General Plan Update maintains Plumas County's status as a premier recreation area
- The General Plan Update promotes both full time and part time residential opportunities in safe and livable housing
- The General Plan Update protects community character throughout Plumas County
- The General Plan Update protects and sustains existing communities
- The General Plan Update supports sustainable development
- The General Plan Update directs policies that compliment and support the County's education needs
- The General Plan Update promotes policies that are consistent with public health and safety best management practices

Purpose and Scope

The purpose of this effort is to review and update the 1981 Plumas County General Plan so that it reflects the current and future needs of the people and resources over the next 20 years. The Plumas County General Plan is a comprehensive document that provides policies, guidelines and implementation measures for achievement of the future sustainability of Plumas County. The General Plan is a reflection of the words and shared visions expressed by the residents of Plumas County.

The General Plan serves as a planning roadmap for elected County decision makers, appointed County officials, County staff, staff of other agencies that operate within the County, residents, permit applicants, and the public at large. The General Plan serves as the foundation for other planning documents including: the County Zoning Ordinance; the County Regional Transportation Plan; community plans; master plans;

and other County planning documents. All subsequent planning documents are required to be consistent with and to support implementation of the General Plan.

Legal Basis and Requirements

A comprehensive General Plan is required by the State of California of every county and incorporated city for the “physical development of the county or city, and any land outside its boundaries which bears relation to its planning.” (California Code Section 65300) Called the “constitution for future development” by the California Supreme Court, the General Plan is a guideline for growth and policy decisions. It is a comprehensive and long term document that sets policy for a 10 to 20 year planning horizon. This update of Plumas County’s 1981 General Plan sets planning policy for the next 20 years.

The State of California requires that general plan goals, policies and strategies or measure for implementation are at least consistent with all state and federal regulations and laws. A county or city general plan is required to be at least equal to state and federal governing laws. It is the county or municipalities prerogative to develop a general plan that exceeds state and federal requirements. As an example, implementation of the Plumas County General Plan assumes compliance with all California Environmental Quality Act (CEQA) requirements. The Plumas County General Plan will be evaluated for its compliance with CEQA through an Environmental Impact Report (EIR). Before this general plan can be adopted, the Plumas County Board of Supervisors are required to certify the EIR based on CEQA findings. The State of California’s Office of Planning and Research (OPR) is also responsible for reviewing the document and will provide Plumas County with comments to the adequacy of the general plan and the EIR. The development of the goals and policy language in this general plan assume compliance with all state and federal regulations and laws.

State law requires that General Plans be comprehensive in covering the entire planning area of the County or City’s jurisdiction and comprehensive in covering a broad range of issues that are or are likely to be associated with physical growth and development within its jurisdiction. Specific planning topics known as “elements” are required by law and must be included in every General Plan. These required elements are: land use, circulation, housing, conservation, open space, noise and safety. The State of California allows for flexibility in how these elements are arranged, combined and for the opportunity to include optional elements that address specific issues that are of importance to the jurisdiction. All of the elements, whether required or optional, must have equal legal status. This means that no one element is superior to another and all elements are consistent with each other.

General Plan Elements

Element 1 - Land Use

The broadest section of the General Plan is the Land Use Element. The Land Use Element designates the type, intensity, and general distribution of uses of land for housing, business, industry, open space, education, public buildings and grounds, waste disposal facilities, and other categories of public and private uses. It is the guide to the physical form of the County. The Land Use Map is supported by descriptions of allowed uses and development densities for each land use designation. For Plumas County, the Land Use map also identifies areas for potential future expansion or growth. The Land Use Element also guides coordination and planning with other jurisdictions,

such as the City of Portola, the United States Forest Service and the United States Military to avoid incompatible uses.

Element 2 – Housing

The Housing Element is a comprehensive assessment of current and projected housing needs for all economic segments of the County. In addition, it embodies policies for providing adequate housing and includes action programs for that purpose. Mandated by the State of California, the Housing Element is required to be updated at least every five years and must be approved by the State Department of Housing and Community Development. Plumas County's Housing Element was updated and approved in 2009. The Housing Element includes a section on the Summary of Needs and Constraints, a Housing Program with goals and policies, and a background report highlighting demographics, resources, and a review of the accomplishments in implementing the previous Housing Element. Plumas County's Housing Element was completed in a separate process from the rest of the General Plan update.

Element 3 – Noise

The Noise Element identifies and appraises noise problems within the County and forms the basis for land use distribution. The Noise Element addresses potential noise-related issues within the County, as well as methods of limiting noise exposure to communities and natural resource areas. Programs and policies developed in the General Plan include protection of noise-sensitive land uses, consideration of noise impacted areas, and noise associated with airports.

Element 4 - Circulation

The Circulation Element is correlated with the Land Use Element and identifies the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals and other local public utilities and facilities. The Circulation Element provides a plan to guide the County's efforts relating to the movement of people, goods, energy, and other commodities. Topics of discussion include roads and highways, public transit, non-motorized transit including bicycles and pedestrians, rail, air, and movement of goods.

Element 5 – Economics

The Economic Element, which is the first optional General Plan element, provides policy guidelines for the economic stability and development of the County. Topics of discussion included in this element are policies that support economic development programs, construction of infrastructure, communication and energy facilities, agriculture, forest industries, recreation and tourism.

Element 6 - Public Health and Safety

The primary purpose of the Public Health and Safety Element is to establish policies and programs to protect the County from risks associated with seismic, geologic, flood and wildfire hazards. It is the intent of this section to craft programs and policies that reduce the risk of death, injury, property damage, and the economic and social dislocation related to the above hazards. This element has also included policies that address the goal of sustaining healthy communities.

Element 7 - Conservation and Open Space

The Conservation Element addresses the conservation, development, and use of natural resources, including water, forests, soils, rivers and mineral deposits. The Open Space Element details plans and measures for the long-range preservation and conservation of open space lands, including open space for the preservation of natural resources, the managed production of resources, outdoor recreation, and public health and safety.

As is allowed under State law, the Conservation and Open Space elements are combined to produce element seven. Issues such as agriculture, forestry, and water are typically addressed in Conservation and/or Open Space. Plumas County has elected to address these issues in separate element sections. The Conservation and Open Space Element provides guidance for the conservation, development, and utilization of natural resources and open space land within the County. Specifically included in this section are policies pertaining to biological resources, mineral and soil resources, cultural and historic resources, scenic resources, parks and recreation, trails and bikeways, air quality, climate change, energy conservation and open space resources in general.

Element 8 - Agriculture and Forestry

In addition to the Open Space and Conservation Element, and due to the importance of agricultural and forestlands in Plumas County, an Agriculture and Forestry Element has been prepared to discuss in more detail these two important resources. This element is the second optional element of the Plan. The topics of discussion within the policies include productive use of resource lands, conversion of agriculture and forest lands, promotion of healthy competitive farm, ranch and forestry economies and sustainable food systems, water quality and quantity for agriculture, education and awareness of the importance of agriculture and forestry, support of infrastructure creation and management of greenhouse gas (GHG) emissions.

Element 9 – Water

The third optional element contained in the Plumas County General Plan Update is the Water Element. Plumas County is almost entirely contained within the Feather River Watershed and makes up approximately 72% of the land area of the watershed. The value that good policy and management practices bring to the rest of California through ecosystem services cannot be underestimated. Protecting water quality and quantity for local economic sustainability is also important. The topics discussed in this element include water quality and quantity, watershed management, climate change, public water supplies, agriculture and forestry, recreation, hydropower generation and wastewater and storm water management.

Plan Navigation

The nine elements of the Plumas County General Plan are presented as separate sections in the document following the introduction. Each element section contains a discussion on setting and existing conditions, values and issues, legal basis and requirements, relationship to the other elements, definitions, goals and policies, and an implementation measures table. The implementation measures table consolidates all measures associated with the policies identified in that specific element, identifies the associated goal and policy, identifies the responsible party for implementation, and identifies a time frame for implementation. In this update of the Plumas County General

Plan the following terms and the illustrated hierarchy are important concepts to understand.

Goals

A broad statement describing a desired future condition or achievement reflecting a community's values and ideal future vision.

Policies

- A general rule for action focused on a specific issue, derived from more general goals.
- A specific statement of principle or of guiding actions that implies a clear commitment.
- A general direction that a governmental agency sets to follow in order to meet its goals.

Implementation Measures

An action, program, or procedure that carries out a General Plan policy. Implementation measures are specific actions that may be easily tracked and quantified.

Implementing the General Plan

The importance of maintaining a General Plan that reflects current conditions and current policies has been demonstrated often in the last decade. Counties and Cities throughout the State have found themselves with general plans that do not reflect existing conditions nor arm their elected officials and staffs with the tools to meet future demands in a comprehensive manner. Revisiting the General Plan's policies and implementation measures at regular intervals will equip the jurisdiction with the strategies to deal with dynamic population numbers, demographics, and environments, while at the same time assisting with maintenance of the planning roadmap that keeps the Plan on track with the stated vision and goals.

The State Government Code has recently initiated the requirement that the jurisdiction's Planning Commission file an annual report with both the Board of Supervisors and the State Office of Planning and Research on the status of the Plan, the progress of its implementation, and its compliance with General Plan guidelines among other things. Evaluation of the policies and standards in the Plumas County General Plan text will continue after adoption, as a natural part of the day-to-day interpretation and application of its provisions by staff and decision-makers. It is likely that changing conditions and experience in policy implementation will uncover a number of adopted policies and land use designations requiring modification and the need for written policies on additional subjects. Because the provisions of the General Plan are designed for application to the development of the entire County, text amendments require careful consideration by the Planning Commission and Board of Supervisors of possible broader implications.

The County will consider all suggestions for needed changes in the General Plan and will initiate formal approval proceedings on proposals it deems worthy of further consideration. The annual report required by Government Code Section 65400 shall be prepared by staff and submitted to the Planning Commission and Board of Supervisors for consideration. In addition to the minimum statutory requirements, each annual report submitted to the Planning Commission and Board of Supervisors shall be accompanied by information reflecting the County's growth rate, based upon the number of building permits issued for the preceding year. Based upon this information, the Board of Supervisors should consider whether the projected growth rates identified in the Environmental Impact Report for this General Plan have been met or exceeded, and should take whatever action the Board deems appropriate, consistent with this General

Plan, to ensure that growth occurs as contemplated in the General Plan. The annual report should be a public process open to everyone. All groups and agencies should be encouraged to participate, as should individual property owners and residents. Provisions shall be construed to reflect the County's desire to accommodate a reasonable amount of growth, consistent with the other goals, policies, and implementation measures of this General Plan.

County policy established by the Board of Supervisors allows revisions to the General Plan to be proposed by the County by Resolution of Intention or by private parties two times per year in the Winter and in the Summer. The Winter General Plan Amendment contains an annual review of one of the "Planning Areas" each year in a five-year rotation, thereby reviewing the entire County every five years, in the following order: 1) American Valley-Middle Fork-Canyon, 2) Mohawk, 3) Sierra Valley-Last Chance, 4) Indian Valley and 5) Almanor. This annual review is designed to incorporate changes in the "Planning Area" due to new information received.

Special General Plan amendments may be processed outside of this schedule at the discretion of the Board of Supervisors. The existing Government Code somewhat restricts the revision process by permitting the actual adoption of amendments to any mandatory element to no more than four times per calendar year. However, the Board of Supervisors is free to accumulate numerous amendments in each such revision.

The County's zoning ordinance is the primary implementation tool of the General Plan. A zoning ordinance regulates land use in a jurisdiction by dividing the community into specific districts or "zones". These districts specify the uses that are permitted, conditionally permitted, or prohibited within each zone. Consistency requirements between the General Plan and zoning ordinance are important and can be broken down into three components:

A. Uses and Standards

Land use classifications in the General Plan are not as specific as zoning ordinance classifications.

Multiple zoning districts may be consistent with a single General Plan land use classification, as long as the densities and unit types allowed within each zoning district are also permitted in the relevant General Plan category.

B. Spatial Patterns

The Zoning Map should reflect the general pattern of land use depicted on the General Plan Diagram. However, the two need not be identical. The boundaries of land use classifications represented on the Land Use Map are generalized; boundaries on the Zoning Map are usually more precise and parcel-specific.

C. Timing

California State law allows a "reasonable amount of time" for reconciling any inconsistencies between the Zoning Ordinance and the General Plan (See Government Code Section 65860).

Climate Change and the General Plan

Climate change may be one of the greatest challenges facing the Sierra Nevada region in the coming decades. The potential changes will pose challenges to the environment, economies and communities. These challenges have become an increasing concern in

California, the nation, and the world. Climate change is presently thought to be both naturally occurring and induced by increases in the amounts of carbon dioxide (CO₂) and other GHGs in the earth's atmosphere attributable to the burning of fossil fuels. Evidence has been steadily growing that human activities have helped speed and magnify changes in the global climate. The burning of fossil fuels, mostly coal and oil, is the primary manmade cause of GHGs, a fact that has led to calls for increased energy efficiency and use of renewable sources of energy. Since 2005, there have been a number of legislative changes that cover GHG impacts from land use planning decisions.

- Governor Schwarzenegger issued Executive Order **S-3-05** in June 2005, setting GHG emission targets for the State to meet, starting with a reduction to 2000 GHG emission levels by 2010, 10% below 1990 levels by 2020 and concluding with a reduction to 80% below 1990 numbers by 2050. This order directed the California Environmental Protection Agency (CAL EPA), Business, Transportation and Housing Agency, California Air Resources Board (CARB), the California Energy Commission, and the Public Utilities Commission (PUC) to work together to develop a Climate Action Plan and report back on progress on meeting the Statewide targets.
- In 2006, Governor Schwarzenegger signed **AB 32**, which established the first set of limits on GHG emissions for the state of California and put into place the regulatory framework needed to reach those targets. AB 32 set the 10% below 1990 GHG emissions level as a target to be achieved by 2020. In order to meet this goal, the California Air Resources Board has developed GHG emissions reporting procedures.
- In 2008, Governor Schwarzenegger signed **SB 375**, which sets out planning concepts intended to reduce vehicle travel by promoting more compact development; ideas which are incorporated in this General Plan. A goal of SB 375 is to help curb GHG emissions. Taken together, both S-3-05 and AB 32 set the emission targets that Plumas County will eventually be required to attain. While explicit thresholds and requirements have yet to be developed, various state agencies have begun to examine proposed land use plans and specific projects for their potential GHG impacts. Three important steps in helping to reduce potential climate change impacts are the creation of an inventory of existing GHGs and a plan to reduce these emissions.

Step 1: GHG Inventory

A GHG inventory will provide the County with the tools to better understand the level of GHGs that are currently being emitted, where these emissions come from, and how they are projected to increase over time. To calculate the level of GHGs a community emits within a given year, data on source production is collected and converted into an equivalent of CO₂. This provides a baseline against which the County can track its progress on lowering GHG emissions. Additionally, by taking into account population and job growth rates, an agency can predict what its GHG emissions will be in the future.

Step 2: GHG Reduction Plan

A GHG Reduction Plan (GHGRP) or Climate Action Plan (CAP) identifies ways in which a city, county, or community can reduce GHG emissions and addresses adaptation to the inevitable effects of climate change. A typical target for a Climate Action Plan is a 15% reduction below 2005 levels by 2020. A Climate Action Plan outlines transportation, land use, energy use, and waste production measures to achieve its target and proposes a timeline for implementation. Climate Action Plans are becoming increasingly popular as a way to spread awareness of climate change, to reduce an area's impact on the environment, and to save money on energy bills. Additionally,

when referenced in General Plans and environmental documents, Climate Action Plans signify a public agency's efforts to combat climate change.

Step 3: Develop a Strategy for Carbon Sequestration.

Beyond reducing emissions of GHGs, Plumas County's extensive forests will play a role in combating climate change by sequestering carbon—the CO₂ created by the burning of fossil fuels is turned into the structure of the trees themselves and removed from the atmosphere. A report by the United States Department of Agriculture says of forests:

“Sustainable forestry practices can increase the ability of forests to sequester atmospheric carbon while enhancing other ecosystem services, such as improved soil and water quality. Planting new trees and improving forest health through thinning and prescribed burning are some of the ways to increase forest carbon in the long run. Harvesting and regenerating forests can also result in net carbon sequestration in wood products and new forest growth.”

Directing new growth into established towns and communities where opportunities for increasing bike, pedestrian and transit systems where they are more appropriate and realistic, will help lower transportation related GHG emissions. Improving building energy efficiency standards and promoting the use of renewable sources including wind, solar, hydropower, and geothermal will lower emissions as well as consumption of fossil fuels in the County as a whole.

Planning for climate change provides strategies that can also address other issues that affect community livability and sustainability. With rising energy and fuel costs, plans that direct more compact patterns of development which encourages and facilitates the placement of employment in close proximity to housing can significantly reduce miles traveled to work, reducing personal transportation costs and public infrastructure costs. A plan that supports and facilitates locally grown and processed meats and produce can provide less expensive and healthier food options that don't carry the typical associated transportation costs.

Plumas County's General Plan Update has integrated goals and policies that address Plumas County planning needs with strategies that address or mitigate climate change. Specific goals in the goals and policies listed in each Element section have been “tagged” with this symbol:



This symbol denotes the specific goals and the policies that follow, when consolidated, can serve as Plumas County's Climate Action Plan.

The Update Process

The process can be described in three parts; comprehensive planning efforts to update the General Plan, transparent and inclusive public engagement efforts that inform the update process and products, and the environmental analysis efforts to disclose and mitigate potential impacts. The planning efforts include development of the General Plan vision and goals, review and identification of general plan best practices, development of the General Plan format and scope, and drafting of the General Plan document. The public engagement effort included the formation of five Supervisor District working groups, public workshops, and public presentations and hearings before the Planning Commission and Board of Supervisors. The Plumas County website was used on a regular basis to provide schedules, meeting agendas and summaries,

workshop materials, presentations, maps and other pertinent materials to keep the public, stakeholders and other agencies up to date on the process and outcomes.

Goal development sessions were conducted at the Planning Commission's meetings during the months of July, August and September of 2009 to initiate the update process. The Planning Commission was asked to identify goals that would provide guidance and direct measurable outcomes for the update process. The Planning Commission's goals were presented and, with a few minor changes, approved by the Board of Supervisors on October 13, 2009. Goals were identified for the development of the document, the update process, the environment, the economy, the community and agriculture/forestry.

Board of Supervisors

The Board of Supervisors strategically restarted the public engagement process with a work session that included the Planning Commission, the working groups, County staff, and general members of the public. The purpose of the session was to educate the participants about the uses of a general plan, the purpose of the general plan, and a description of the typical update process. From time to time the Supervisors' meetings were used as a venue to provide the public with a process update and to facilitate answering questions from the public.

Planning Commission

The Planning Commission played an important facilitation role during the development of the General Plan. In addition to developing the planning goals for the process, they provided a venue for various topic discussions during their meetings that served to determine the issues to be considered in the General Plan. Topics included climate change, agriculture, water, legal adequacy of a General Plan, food security, economic development, the Housing Element, the Regional Transportation Plan, and Fire Safe Communities. They also coordinated and facilitated a number of joint meetings with others such as the working groups, the City of Portola's Planning Commission and the County Board of Supervisors.

Working Groups

The Board of Supervisors emphasized the importance of an inclusive and transparent public engagement process. A number of strategies were employed to engage residents across the County. One such strategy was to create resident working groups to assist in the development of the General Plan. Residents were solicited by Supervisorial District to represent the different geographic areas of the County as well as the different interests and issues. Staff of the United States Forest Service offered participation by district as well. Each County Supervisor reviewed the applications submitted from their District and selected the representatives based on their ability to represent the district and the issues in a fair and open manner. A total of 74 individuals from all corners of the County were selected. The working groups met for half or for all day sessions eight separate times; two of the eight sessions were joint sessions with the Planning Commission.

Public Workshops

Two rounds of public workshops were held at five locations in the County. The objectives of the first round of workshops was to inform the public of the process and planning goals, to confirm community visions and to solicit feedback from the participants on the draft goals and policies that had been circulated and posted on the

County's website. The second round of workshops' objectives included identifying major concerns with the draft general plan and developing suggestions for alternatives to be evaluated in the environmental document.

Other Outreach Efforts

In addition to the efforts described above, Plumas County Planning Department and working group members staffed a booth at the County fair. The booth provided an opportunity for the general public to get information about the General Plan update process, find out how and when to get involved, and provide any feedback that could help inform the Update.

Consultation with other Jurisdictions and Native American Groups

Native American Consultation

In recognition of the importance of direct consultation between sovereign governments, California's Senate Bill 18 (2004) established minimum requirements for formal consultation with California Native American tribes when updating a county General Plan. Plumas County is ensuring the minimum consultation requirements are addressed in the course of its General Plan Update. Plumas County has also supported Pacific Gas and Electric's (PG&E's) divestment and return of traditional Maidu lands through the processes of the Pacific Forest and Watershed Lands Stewardship Council, and the updated General Plan may provide for the redesignation of those lands to achieve consistency with anticipated uses.

Building on the informal input that has been provided to date, this draft of the General Plan is intended to provide the basis for initiating formal review and consultation with California Native American tribes.

The objectives of consultation with California Native American tribes include:

- Recognizing that cultural places are essential elements in tribal culture, traditions, heritages and identities.
- Establishing meaningful dialogue between local and tribal governments in order to identify cultural places and consider cultural places in local land use planning.
- Avoiding potential conflicts over the preservation of Native American cultural places by ensuring local and tribal governments have information available early in the land use planning process.
- Encouraging the preservation and protection of Native American cultural places in the land use process by placing them in open space.
- Developing proper treatment and management plans in order to preserve cultural places.
- Enabling tribes to manage and act as caretakers of their cultural places.

Statutory requirements for consultation, review, and notice include the following:

1. Prior to the amendment of a general plan, a local government must notify the appropriate tribes, on the contact list maintained by the Native American Heritage Commission, of the opportunity to conduct consultations for the purpose of preserving, or mitigating impacts to, cultural places located on land within the local government's jurisdiction that is affected by the proposed plan amendment. Tribes have 90 days from the date on which they receive notification to request consultation, unless a shorter timeframe has been agreed to by the tribe (Government Code Section 65352.3)
2. Local governments must consult with tribes that have requested consultation in accordance with Government Code Section 65352.3. The purpose of this consultation is to preserve, or mitigate impacts to, cultural places that may be affected by a general plan or specific plan

amendment or adoption. Consultation may continue through Planning Commission and Board of Supervisors deliberation on the General Plan.

3. Local governments must consult with tribes before designating open space, if the affected land contains a cultural place and if the affected tribe has requested public notice under Government Code Section 65092. The purpose of this consultation is to protect the identity of the cultural place and to develop treatment with appropriate dignity of the cultural place in any corresponding management plan (Government Code Section 65562.5).
4. Prior to the amendment of a general plan, a local government must refer the proposed action to those tribes that are on the Native American Heritage Commission contact list and have traditional lands located within the city or county's jurisdiction. The referral must allow a 45 day comment period (Government Code Section 65352). Notice must be sent regardless of whether prior consultation has taken place. Such notice does not initiate a new consultation process.
5. Local governments must send notice of a public hearing, at least 10 days prior to the hearing, to tribes who have filed a written request for such notice (Government Code Section 65092).

Consultation was initiated for the current General Plan revision on November 30, 2010 as per Senate Bill 18 (commencing with Government Code Section 65350). The following is the consultation list of tribes with traditional lands or cultural places located within Plumas County. The list was obtained from the Native American Heritage Commission and the tribes were sent letters inviting consultation.

- Greenville Rancheria of Maidu Indians
- Enterprise Rancheria of Maidu Indians
- Maidu Nation
- Susanville Indian Rancheria
- T'Si-akim Maidu
- Washoe Tribe of Nevada and California

The Greenville Rancheria replied indicating a wish to participate in the General Plan Update. The Enterprise Rancheria replied that they would assist if requested by the Greenville Rancheria.

Coordination with the United States Forest Service and other Federal and State Agencies

In 2008, the Plumas County Board of Supervisors adopted Resolution 08-7514, implementing Coordinated Agency Status and notifying federal and state agencies of Plumas County's expectation that other agencies coordinate their plans and projects with the County as required by various federal and state laws. With such a large portion of Plumas County occupied by the United States Forest Service, it is particularly important that the County engage the Forest Service to carry out the coordination requirements of the National Forest Management Act. The goals, policies, and implementation measures set forth in this General Plan are intended to be one resource to help the Forest Service and other federal and state agencies understand Plumas County's policies and priorities, which will facilitate the development of consistent plans by those other agencies. For the Forest Service, in particular, coordination with Plumas County will promote a comprehensive, "all lands" approach to the management of our forests and watersheds.

LAND USE ELEMENT (1)

Introduction

Plumas County is committed to protecting its communities in a manner that also addresses climate change. As part of the “Goals” section of this element, policies and implementation measures related to climate change are denoted with the symbol:



Figure 7. Main Street, Quincy, CA.
Photo Credit: Coleen Shade

Setting / Existing Condition

The predominate land use within Plumas County consists of open space use with a majority of land, approximately 94% of the total County area, dedicated to timberland or other managed resource uses. Consequently, many of these lands are managed for a combination of resource values, including but not limited to recreation, mining, timber production, agriculture production and cultural and historic resources. That leaves approximately 6% of the land area for uses such as residential, commercial, industrial, and public service.

Resources, history, and people have all had a significant role in defining Plumas County. Communities originally developed and evolved on the landscape based on proximity to the resources that provided a livelihood. The Mountain Maidu established villages in the valleys of the County where there was shelter from winter storms and access to good hunting and plant gathering sites. Upon arrival and settlement of Europeans in the mid 1800s, towns first grew up around mining activities, then log mills and later around transportation such as stagecoach and railroad.

The land use pattern across the County today reflects the historical approach to settlement in a time before the automobile. Today many counties and cities across California and the United States are trying to institute smart growth, transit-oriented design, form-based development and to re-focus their communities into walkable places. Plumas County has, with a few exceptions, maintained its rural character with its compact and walkable communities.

Values and Issues

Plumas County’s land use element of the General Plan will lead, direct, manage and guide development over the next twenty years. Based on public input, there is need to establish policies that direct future growth and land use patterns in a manner that:

- supports existing towns and communities;
- maintains the character and promotes walkable towns and communities;
- creates and maintains efficiencies for infrastructure;
- provides for a development pattern that supports strategic and economical emergency services coverage such as fire, police protection and emergency medical services;
- manages growth patterns that conserves open space and protects historic, cultural, scenic, and natural resources; and
- supports management strategies for agriculture and timber lands that address long term economical and environmental sustainability.

The Land Use Element of the Plumas County General Plan defines the goals, policies and implementation measures that will facilitate appropriate growth and development. During the intervening period between the adoption of the previous General Plan in 1981 and the adoption of this 2012 General Plan Update, Plumas County had experienced a 13% increase in population. However, between 2000 and 2010 Plumas County has experienced a 4% decline in population from 20,824 persons to 20,007. The California Department of Finance prediction for Plumas County's population growth is just shy of 1.0% per decade between 2010 and 2050. Although very slow growth is anticipated, Plumas County's blueprint for the future of land use in the County is an important tool that will facilitate recreation, community or business opportunities on private land in areas best served by infrastructure, in existing communities and consistent with county residents' values in relation to open space, landscape character, and resource protection on lands adjacent to National Forest lands.

**Summary of Residential Build-Out Analysis
of Recorded Subdivisions (as of 2009) in Plumas County**

The analysis does not take into account the various landuse regulations and environmentally constrained lands within those subdivisions and removes from consideration the land unavailable for development (e.g. water designated areas, right-of-ways).

Parcels identified as owned by Federal, State, County, City, Special District areas, utility easement lands, and common areas within the subdivisions were classified as "developed" and therefore are not considered as lands available for development. The table is based on the County's Geographic Information System's parcel and subdivision coverage analysis that combines the 2010 Assessor tax parcel data. Flood plains and wetlands were not accounted in this analysis.

SUBDIVISION LAND	EXISTING	DEVELOPED	UNDEVELOPED	% BUILD-OUT
Total Number of Subdivisions within Plumas County	448			
Total Combined Subdivision Acres <i>(Includes all right-of-ways, water designated areas, etc.)</i>	18,056			
Total Subdivision Development Acres <i>(Excludes right-of-ways and water designated areas)</i>	16,644			
Total Acres with Development valued over \$10,000 <i>(Total Acres includes those lands owned by Federal, State, County, City, Special District areas, utility easement lands, and the common areas within the subdivisions)</i>		9,698		58%
Total Acres Undeveloped			6,945	42%

Subdivision Build-Out Analysis Breakdown by Supervisorial District

SUPERVISOR DISTRICT	SUBDIVISION ACRES	DEVELOPED	UNDEVELOPED	% BUILD-OUT
District 1	4,485	2,229	1,936	50%
District 2	2,481	1,263	1,042	51%
District 3	3,711	2,220	1,045	60%
District 4	1,890	1,172	600	62%
District 5	5,489	2,814	2,322	51%

**Figure 8. Summary of Residential Build-Out Analysis.
Plumas County GIS, 2011**

Legal Basis and Requirements

The Land Use Element is one of seven required elements mandated by State Law. These are Land Use, Circulation, Housing, Conservation, Open Space, Noise and Safety.

Government Code Section 65302(a) requires that the General Plan include:

"...a land use element which designates the proposed general distribution and general location and extent of all uses of the land including land for housing, business, industry, open space, agriculture, natural resources, recreation and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid disposal facilities, and other

categories of private and public use of land. The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan. The land use element shall identify areas covered by the plan which are subject to flooding and shall be reviewed annually with respect to those areas. The land use element shall designate in a land use category that provides for timber productions, those parcels of real property zoned for timberland production pursuant to the California Timberland Production Act of 1982.”

The land use element provides the intent “what is to be achieved and why?” and direction for subsequent zoning, subdivision and public works decisions. The goals, policies and implementation measures listed in the Land Use Element provide the high level, long range context for more detailed, short-range and or site-specific actions.

Relationship to Other Elements

The land use element has the broadest scope of the seven mandatory elements. It integrates all land use issues into goals, policies and implementation measures of which many relate directly to the other elements. The land use element is the most visible and most often used in the General Plan. Although all General Plan Elements carry equal weight, the land use element is often perceived as being the most representative or comprehensive element of the General Plan.

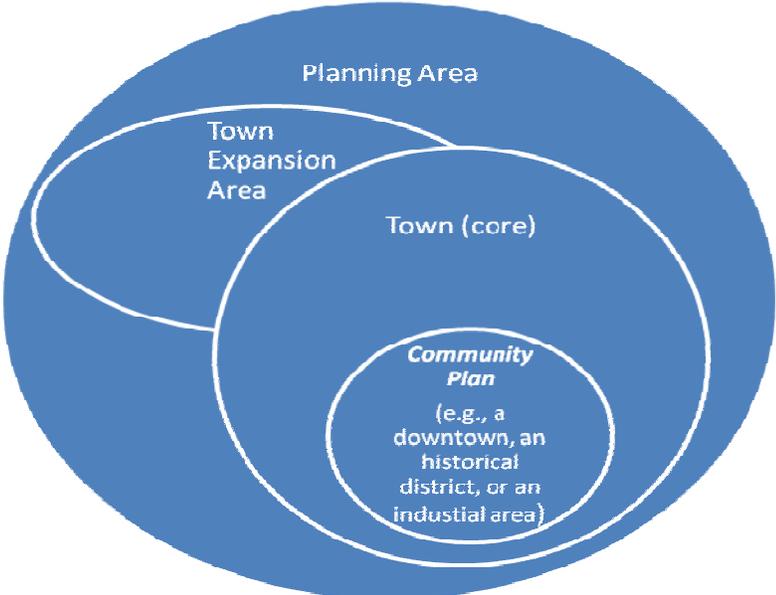
The County’s Land Use Element addresses the general concept of land use and provides specific guidance related to the issues of compatibility and sustainability as they relate to existing and future development patterns across the landscape. State planning law provides a detailed description of land use and the topics that must be addressed in this Element. These topics and the specific location where these topics are addressed in the County’s updated General Plan are identified below in **Table 1-1**.

TABLE 1-1. LAND USE POLICY SUMMARY

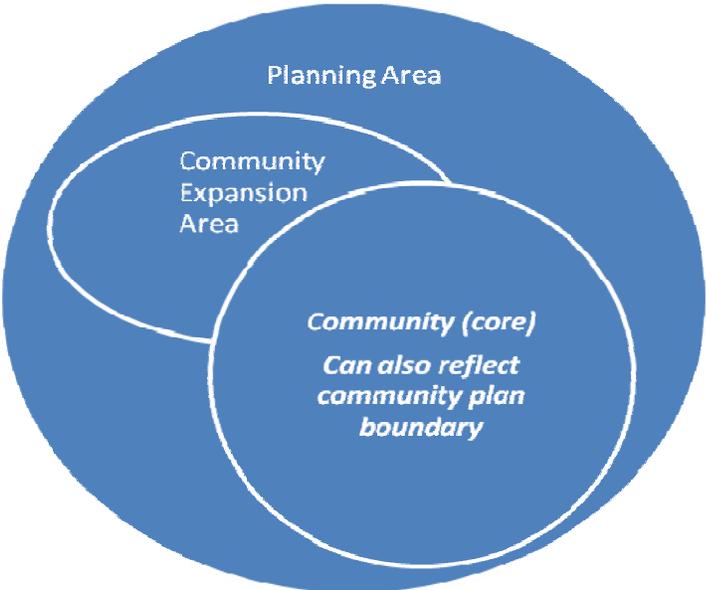
Policy Direction	General Plan Elements – Location Addressed
Distribution of housing, business and industry: lands required for the economic sustainability and meeting job/housing balance based upon projections of future population and economic conditions.	<ul style="list-style-type: none"> • Land Use Element (Section 1.1) • Housing Element (Section 2.1) • Economic Element (Section 5.1) • Circulation Element (Section 4.1) • Public Health & Safety (Section 6.3)
Distribution of open space including agricultural land: lands of economic importance for the production of food or fiber; areas that are required for recharge of ground water basins.	<ul style="list-style-type: none"> • Land Use Element (Section 1.1) • Conservation & Open Space Element (Section 7.2) • Agriculture and Forestry Element (Section 8.1) • Water Resources Element (Section 9.1)
Identification of existing Timber Resource lands: Describe the location, type, amount, and ownership of land and timber resources subject to Timber Resource designation.	<ul style="list-style-type: none"> • Land Use Element (Section 1.10) • Agriculture and Forestry Element (Section 8.8) • Conservation Element (Section 7.1) • Economic Element (Section 5.1)
Distribution of recreation facilities and opportunities: Identify lands of outstanding scenic, historical, and cultural values; areas suited for park and recreational purposes (for example: access to lake shores, beaches, rivers, and streams); and areas that serve as links between major recreation and open-space reservations such as highway corridors, trails, and utility easements.	<ul style="list-style-type: none"> • Land Use Element (Section 1.1) • Open Space Element (Section 10.1 – General Open Space Policies and Section 10.2 Parks and Recreation) • Conservation Element (Section 7.4 Cultural and Historic Resources and Section 7.5 Scenic Resources) • Transportation and Circulation Element (Section 4.1)
Identification of areas subject to flooding: areas that require special management or regulation due to potential inundation by a 100-year flood, are within a floodway of flood channel, the area is subject to inundation as a result of a dam failure, and areas that are potentially subject to seiche or flash flooding.	<ul style="list-style-type: none"> • Land Use Element • Open Space Element (Section 10.1 – General Open Space Policies) • Public Health and Safety Element (Section 6.2 Geologic and Seismic Hazards, and Section 6.4 Flood and Dam Inundation Hazards) • Water Resources Element
Distribution of mineral resources and provisions for their continued availability: identify the type, location, quality, and extent of mineral resources. Inventory the location of significant mineral resource areas classified and designated by the State Mining and Geology Board.	<ul style="list-style-type: none"> • Land Use Element (Section 1.10) • Economic Element (Section 5.1) • Conservation and Open Space (Section 7.4)
Location of educational facilities and public buildings and grounds: Inventory of schools and school facilities. If appropriate base on projected numbers, assess adequacy and need for additional facilities and identify suitable locations.	<ul style="list-style-type: none"> • Land Use Element (Section 1.1) • Public Health and Safety Element • Housing Element • Noise Element • Transportation and Circulation Element • Economics Element
Location of future solid and liquid waste facilities: Inventory existing disposal facilities, correlated with the County Integrated Waste Management Plan and the County Hazardous Waste Management Plan. Assess the need for additional facilities. Inventory proposed solid and liquid waste disposal and transformation sites. Identify land uses near existing solid and liquid waste facilities, waste-to-energy plants, and sites reserved for future facilities. Specifically identify over-concentrated waste facilities near residential uses and schools.	<ul style="list-style-type: none"> • Land Use Element • Transportation and Circulation Element • Noise Element • Public Health and Safety Element • Water Element
Public buildings and grounds: inventory public buildings and grounds, assess their distribution and if applicable identify underserved areas. Assess need for additional facilities. Inventory public and private historical landmarks. Inventory existing public surplus land and disposition.	<ul style="list-style-type: none"> • Land Use Element • Conservation and Open Space Element (Section 7.1 – General Policies, Section 7.4 Cultural and Historic Resources) • Economics Element
Other natural resources: Identify areas available for management or utilization of natural resources such as wind energy generation, hydroelectric, geothermal, biomass energy production, and large-scale solar power. Identify lands that are designated under Habitat Conservation Plans, Natural Community Conservation Planning programs and Coordinated Resource Management Plans.	<ul style="list-style-type: none"> • Land Use Element • Housing Element • Transportation and Circulation • Economics Element • Agriculture and Forestry Element • Conservation and Open Space

Planning Area Diagrams

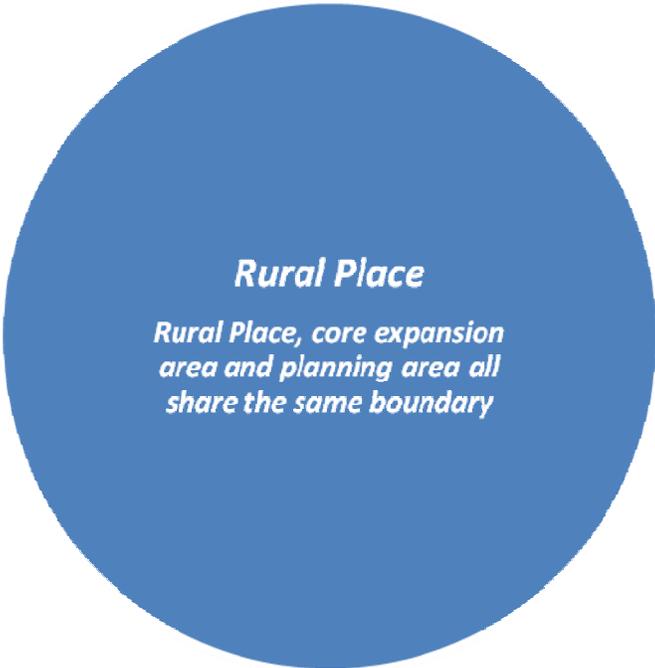
The following key terms are used throughout this element to describe Land Use goals, policies, implementation and issues:



Town: Representative areas include Chester, Lake Almanor Peninsula/Hamilton Branch, Greenville, East Quincy, Quincy, Graeagle, Delleker, and the City of Portola. Towns are places where the highest complement of public infrastructure and services are available or can be made available. Such services consist of community water service, community sewer service, maintained year-round roads, fire, police and emergency medical services. In addition, towns serve as both the commercial and public services hubs for both local residents as well as surrounding communities.



Community: Representative areas include Crescent Mills, Taylorsville, Clio, Beckwourth, Vinton/Chilcoot and La Porte. Communities are places where some public infrastructure and services are available. Few commercial services are present and these services generally are of the type, size and scale that serve local residents.



Rural Place

Rural Place, core expansion area and planning area all share the same boundary

Rural Place: Representative areas include Prattville, East Shore of Lake Almanor, Canyon Dam, Indian Falls, Keddie, Meadow Valley, Spanish Ranch, Tollgate, Bucks Lake, Twain, Belden, Tobin, Greenhorn Ranch, Sloat/Cromberg, Blairsden, C-Road, Mohawk Vista, Lake Davis and Little Grass Valley. Rural Places are defined as having little to no public infrastructure and services. If commercial services are present they tend to be small and often seasonal. Rural places may also consist of a grouping of homes. Planning area and rural place boundaries may be one in the same. There is little or no identified expansion area.

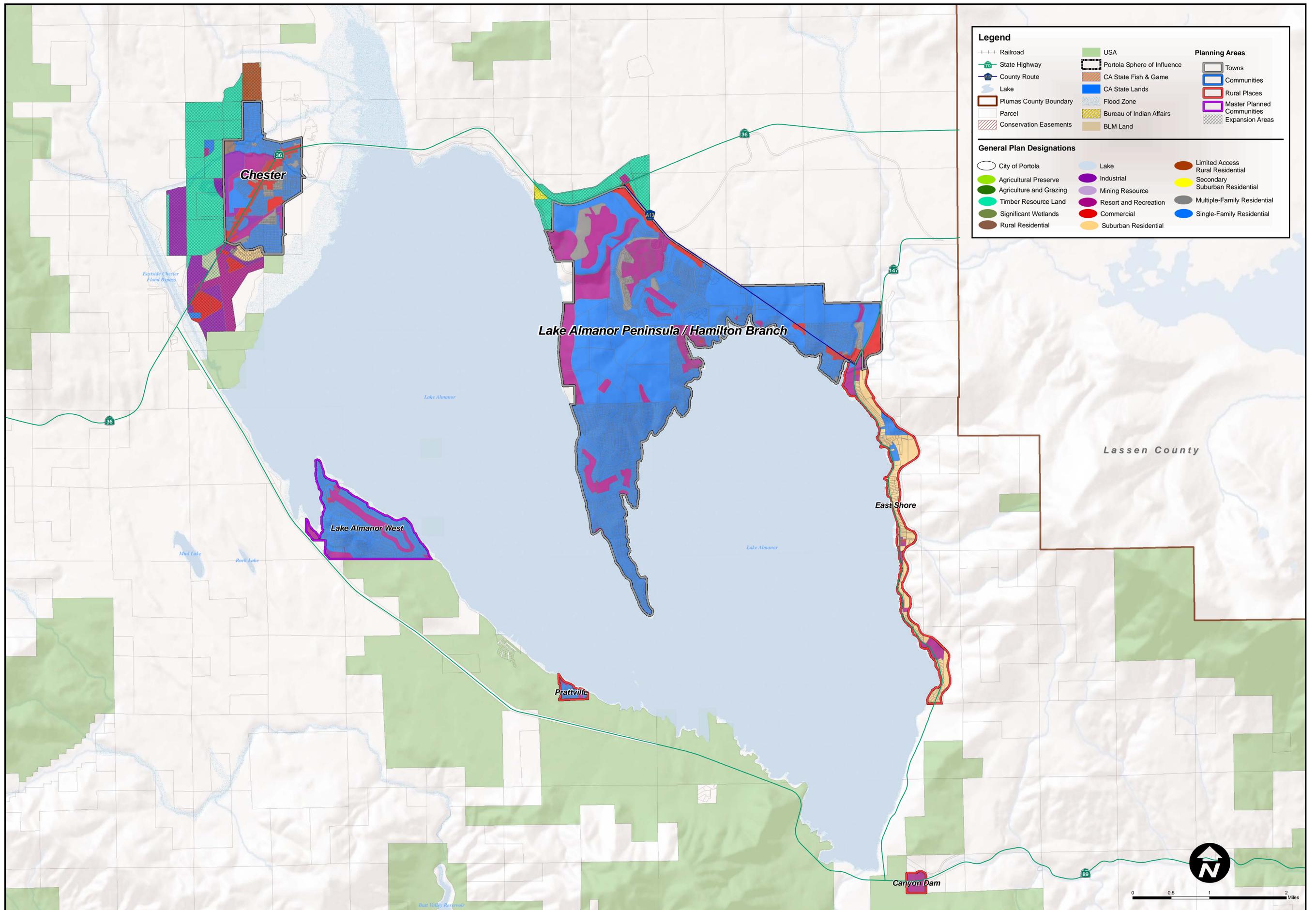


Master Planned Community

Master Planned Community boundary, expansion area and planning area all share the same boundary

Master Planned Community: Representative areas include Lake Almanor West, Gold Mountain, Valley Ranch, Grizzly Ranch and Whitehawk Ranch. Master Planned Community's boundaries have been described or prescribed through their approvals and/or environmental documentation. Planning area and master planned community boundary are one in the same. There is no identified expansion area, as development potential has been specifically defined.

Figure 9. GP Communities Map –Almanor. Plumas County GIS, 2011



Map produced by the Plumas County GIS Division
 Mapper: Becky Osborn
 Date: 10/17/2011
 Source : GP_Communities_10_2011_(Almanor).mxd
 Projection : California State Plane, Zone 1, NAD 1983

PLUMAS COUNTY PLANNING AREAS

(SHOWING GENERAL PLAN DESIGNATIONS WITHIN THOSE AREAS)

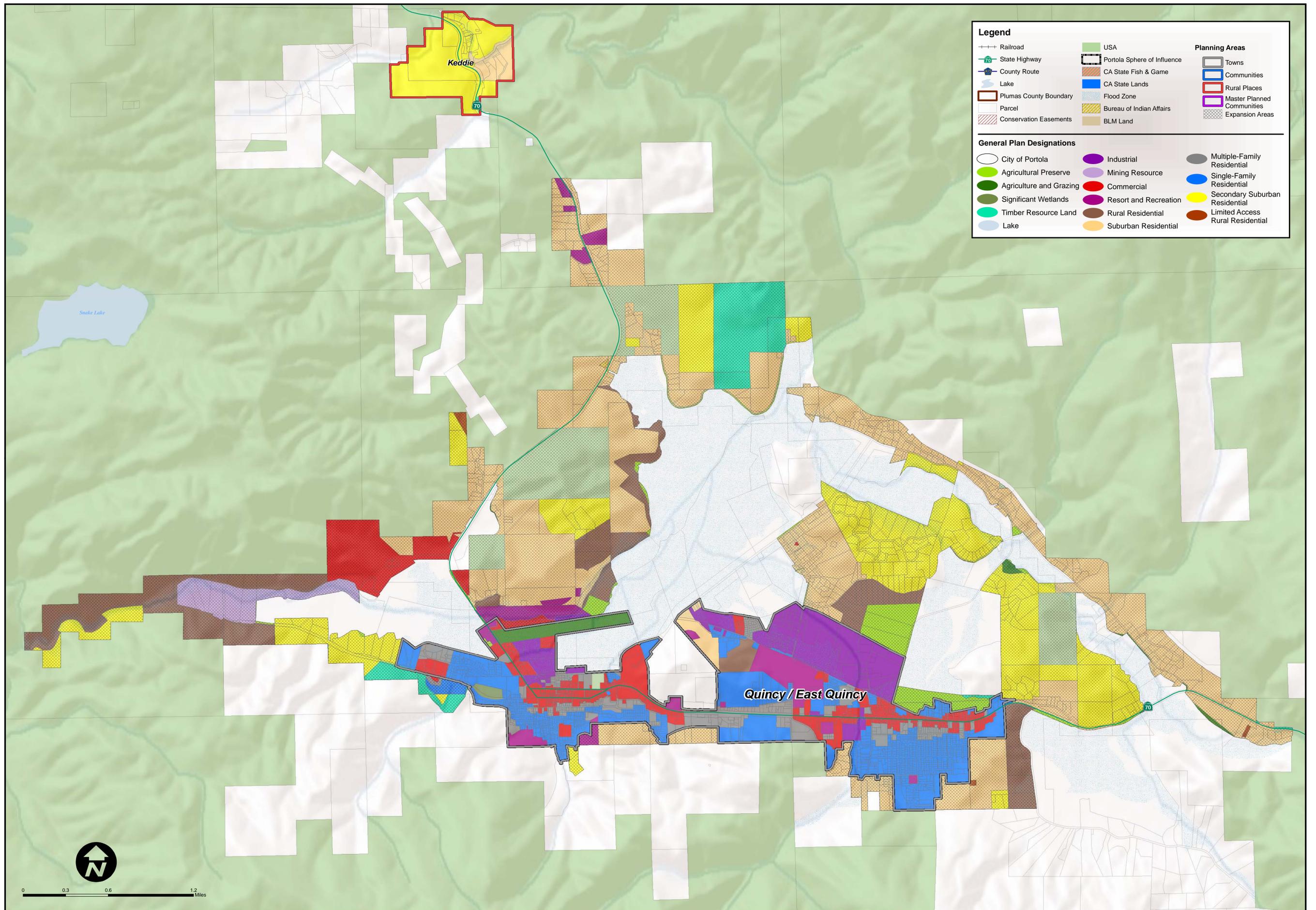
- ALMANOR -

Disclaimer

Although a great deal of effort was made by Plumas County GIS to gather the mapping elements presented in this document, it does not constitute a complete and accurate representation of actual physical elements on the ground. Plumas County GIS data is deemed reliable; however, a degree of error is inherent in all maps, and this map book may contain omissions and errors in scale, resolution, rectification, positional accuracy, development methodology, interpretation of source data, and other circumstances. As additional data becomes available to Plumas County GIS, and as verification of source data continues, this map may be reinterpreted or updated by Plumas County GIS. This map is date specific and is intended for use only at the published scale. These digitally compiled maps do not represent a legal survey of the land and have been created for graphical purposes only. Use of this data should be with acknowledgement of the limitations of the data including the fact that the data is dynamic and is in a constant state of maintenance, correction, and update. This map is distributed "as is" without warranty of any kind.

Figure 10. GP Communities Map –American Valley. Plumas County GIS, 2011



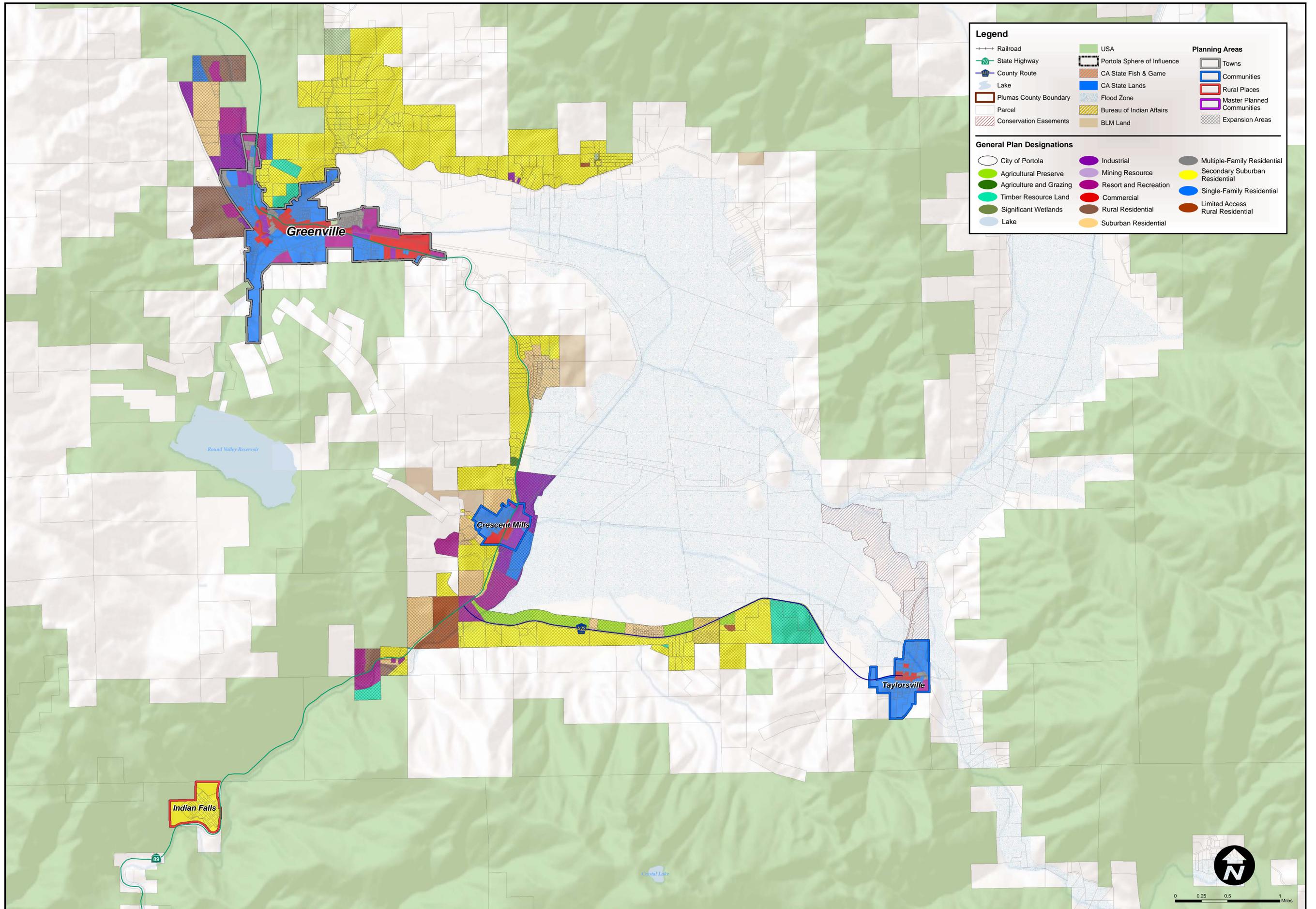


Map produced by the Plumas County GIS Division
 Mapper: Becky Osborn
 Date: 01/17/2011
 Source : GP_Communities_10_2011_(American_Valley).mxd
 Projection : California State Plane, Zone 1, NAD 1983

PLUMAS COUNTY PLANNING AREAS
(SHOWING GENERAL PLAN DESIGNATIONS WITHIN THOSE AREAS)
- AMERICAN VALLEY -

Disclaimer
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Figure 11. GP Communities Map –Indian Valley. Plumas County GIS, 2011



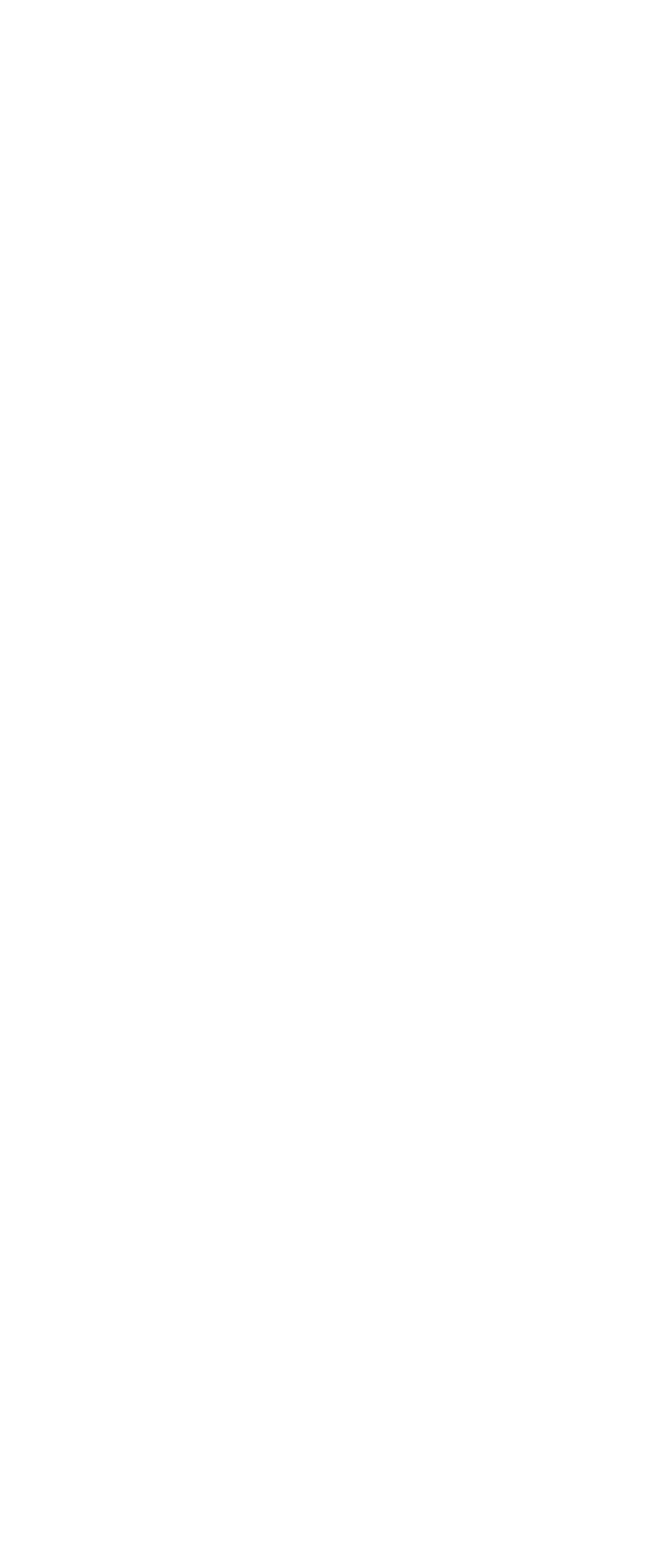
Map produced by the Plumas County GIS Division
 Mapper: Becky Osborn
 Date: 10/17/2011
 Source : GP_Communities_10_2011_(Indian_Valley).mxd
 Projection : California State Plane, Zone 1, NAD 1983

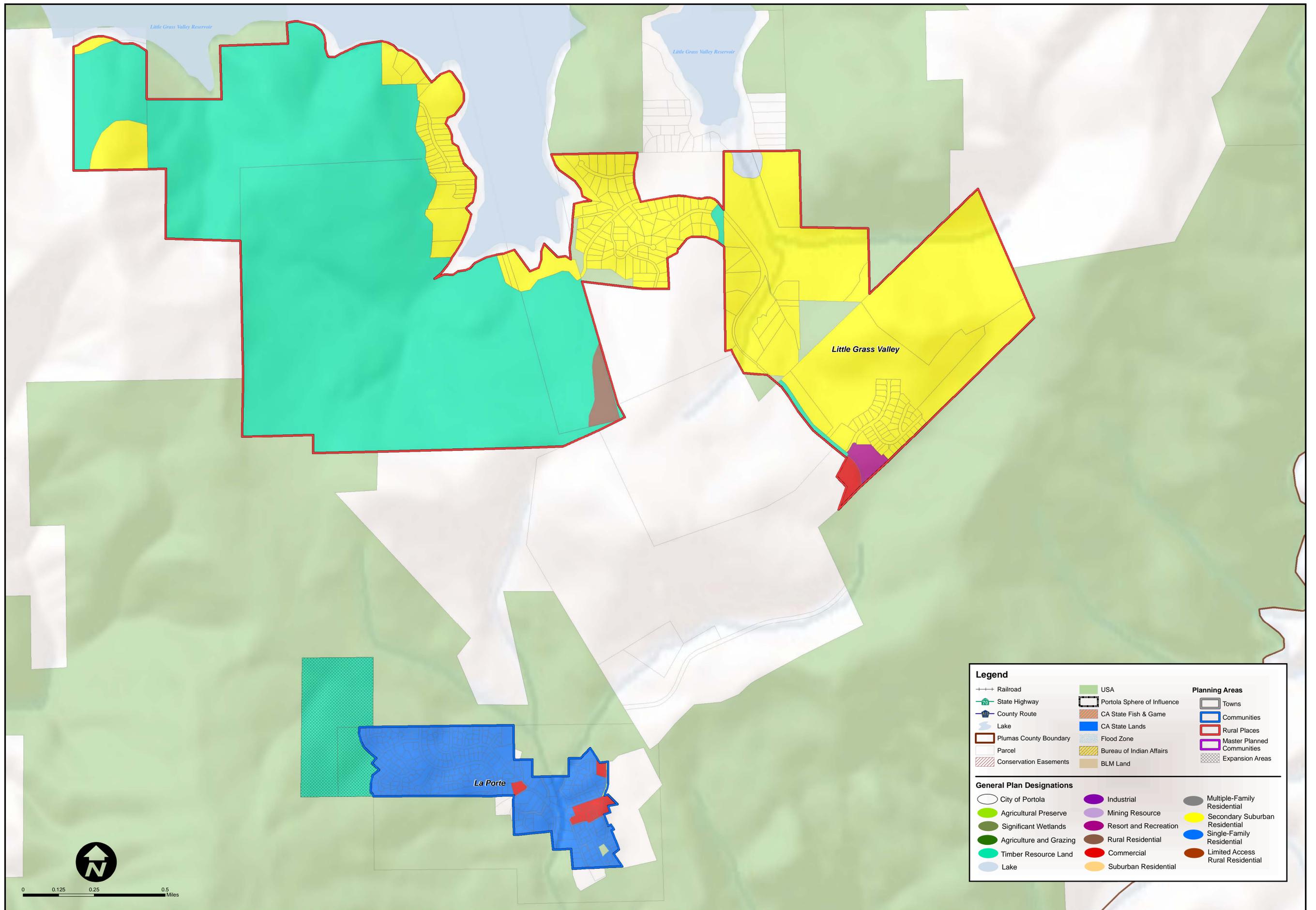
PLUMAS COUNTY PLANNING AREAS (SHOWING GENERAL PLAN DESIGNATIONS WITHIN THOSE AREAS) - INDIAN VALLEY -

Disclaimer

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Figure 12. GP Communities Map –La Porte. Plumas County GIS, 2011





Legend		
++ Railroad	USA	Planning Areas
70 State Highway	Portola Sphere of Influence	Towns
County Route	CA State Fish & Game	Communities
Lake	CA State Lands	Rural Places
Plumas County Boundary	Flood Zone	Master Planned Communities
Parcel	Bureau of Indian Affairs	Expansion Areas
Conservation Easements	BLM Land	
General Plan Designations		
City of Portola	Industrial	Multiple-Family Residential
Agricultural Preserve	Mining Resource	Secondary Suburban Residential
Significant Wetlands	Resort and Recreation	Single-Family Residential
Agriculture and Grazing	Rural Residential	Limited Access Rural Residential
Timber Resource Land	Commercial	
Lake	Suburban Residential	


 Map produced by the Plumas County GIS Division
 Mapper: Becky Osborn
 Date: 10/17/2011
 Source : GP_Communities_10_2011_(LaPorte).mxd
 Projection : California State Plane, Zone 1, NAD 1983

PLUMAS COUNTY PLANNING AREAS
(SHOWING GENERAL PLAN DESIGNATIONS WITHIN THOSE AREAS)
- LA PORTE -

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Figure 13. GP Communities Map –Meadow Valley-Canyon. Plumas County GIS, 2011

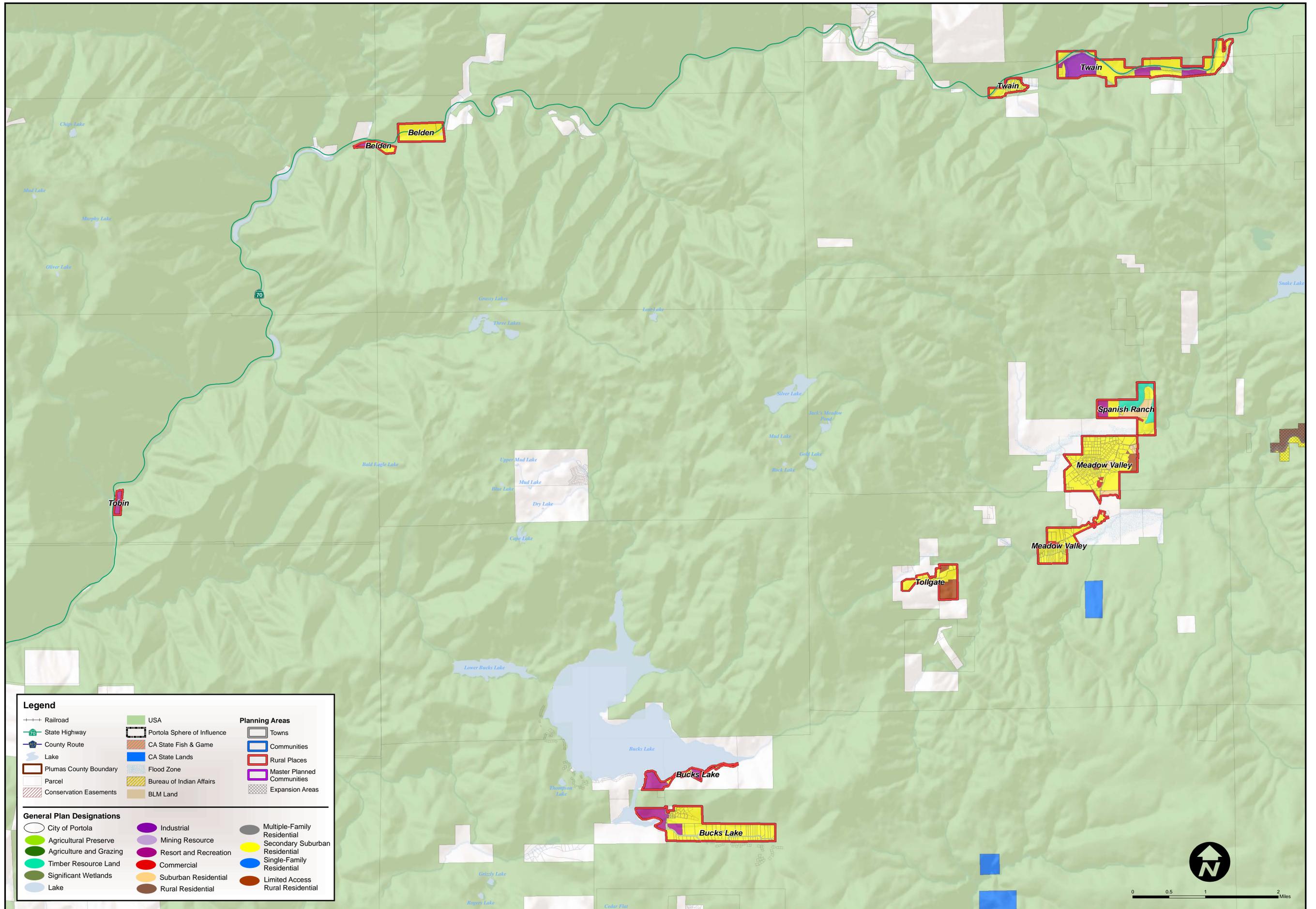
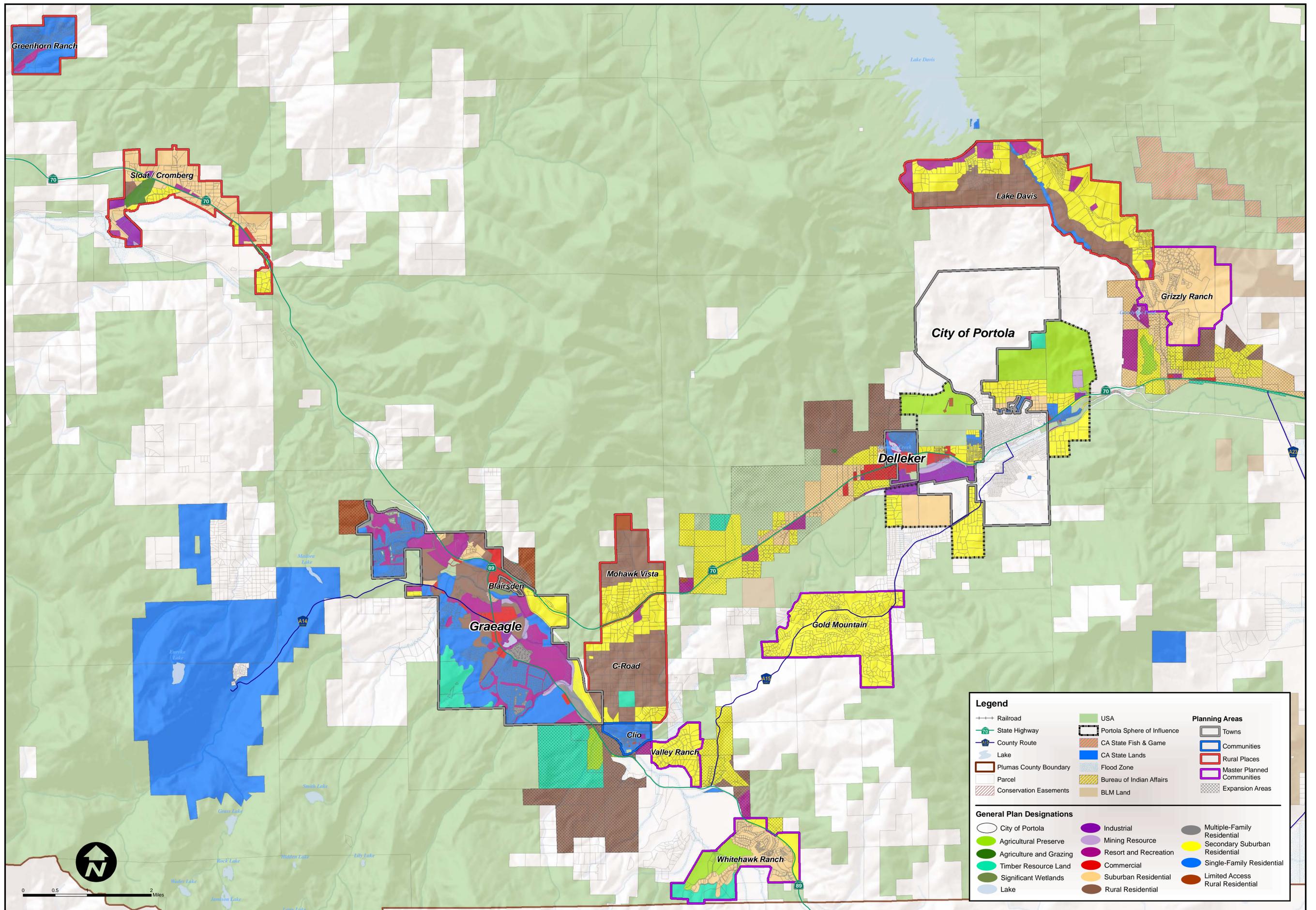


Figure 14. GP Communities Map –Mohawk. Plumas County GIS, 2011





Map produced by the Plumas County GIS Division
 Mapper: Becky Osborn
 Date: 10/18/2011
 Source : GP_Communities_10_2011_(Mohawk).mxd
 Projection : California State Plane, Zone 1, NAD 1983

PLUMAS COUNTY PLANNING AREAS

(SHOWING GENERAL PLAN DESIGNATIONS WITHIN THOSE AREAS)

- MOHAWK -

Disclaimer

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Figure 15. GP Communities Map –Sierra Valley. Plumas County GIS, 2011

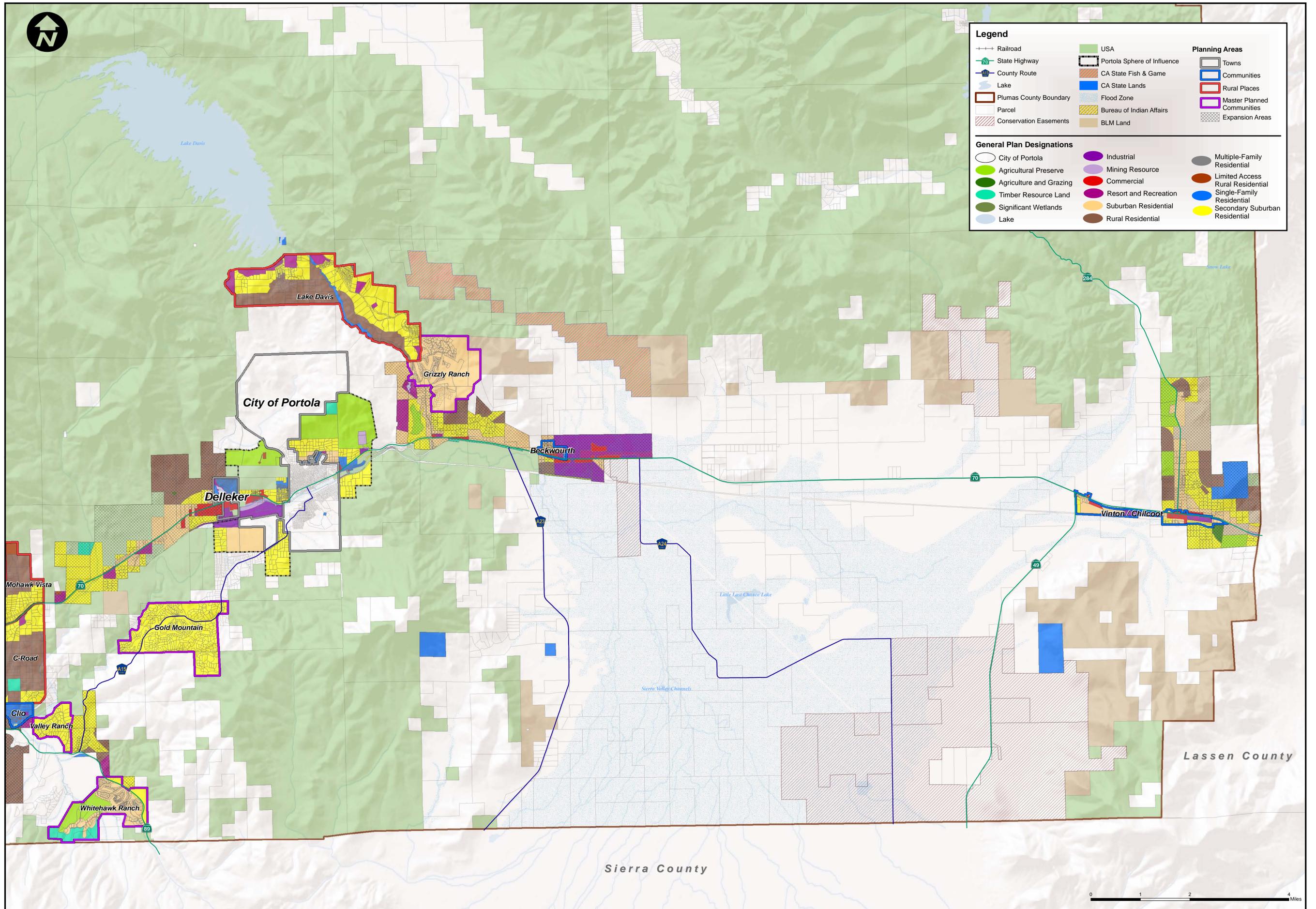


Legend

--- Railroad	USA	Planning Areas
70 State Highway	Portola Sphere of Influence	Towns
County Route	CA State Fish & Game	Communities
Lake	CA State Lands	Rural Places
Plumas County Boundary	Flood Zone	Master Planned Communities
Parcel	Bureau of Indian Affairs	Expansion Areas
Conservation Easements	BLM Land	

General Plan Designations

City of Portola	Industrial	Multiple-Family Residential
Agricultural Preserve	Mining Resource	Limited Access Rural Residential
Agriculture and Grazing	Commercial	Single-Family Residential
Timber Resource Land	Resort and Recreation	Secondary Suburban Residential
Significant Wetlands	Suburban Residential	
Lake	Rural Residential	



Map produced by the Plumas County GIS Division
 Mapper: Becky Osborn
 Date: 10/18/2011
 Source : GP_Communities_10_2011_(Sierra_Valley).mxd
 Projection : California State Plane, Zone 1, NAD 1983

PLUMAS COUNTY PLANNING AREAS
(SHOWING GENERAL PLAN DESIGNATIONS WITHIN THOSE AREAS)
- SIERRA VALLEY -

Disclaimer
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TABLE 1-2. GENERAL PLAN LAND USE DESIGNATIONS

	Town	Communities	Rural Places	Master Planned Communities	Portola Sphere	Expansion Areas
Acres within Designated Land Use Polygons by Planning Area						
Significant Wetlands	38.07	n/a	3.56	n/a	n/a	0.77
Agricultural Preserve	3.42	11.78	13.38	217.43	949.34	786.98
Agriculture and Grazing	56.95	2.46	71.96	0.00068	n/a	65.77
Timber Resource Land	239.30	0.02	1,174.87	152.09	40.30	3,288.07
Mining Resource	53.36	n/a	4.78	n/a	76.46	128.05
Single-Family Residential	6,752.41	467.01	539.94	482.93	119.77	66.22
Multiple-Family Residential	677.61	3.97	0.00000022	n/a	2.10	7.93
Rural Residential	609.40	0.73	2,100.22	n/a	283.65	3,568.14
Suburban Residential	104.45	197.13	1,194.66	1,457.75	317.82	4,192.20
Secondary Suburban Residential	292.29	56.99	4,383.74	1,692.84	922.10	5,953.03
Limited Access Rural Residential	0.79	n/a	115.71	0.47	7.22	430.29
Commercial	1,018.66	128.69	44.10	0.67	51.41	525.26
Industrial	523.99	128.36	177.34	5.05	179.36	1,237.92
Resort and Recreation	2,172.28	41.95	713.26	126.94	15.27	908.64
Lake	0.06	n/a	14.08	0.02	n/a	n/a
City of Portola	3,490.13	n/a	n/a	n/a	0.0038	n/a
Total Acres	16,033.19	1,039.07	10,551.60	4,136.17	2,964.80	21,159.27
				Grand Total of all acres within Planning Areas:		55,884.09

Source: Plumas County GIS, 2011

Definitions

Agricultural Uses: A land use classification that permits the raising, harvesting, selling of crops, feeding/grazing, breeding, managing, selling or producing of livestock, poultry, fur-bearing animals or honeybees, or dairying and sale of dairy products, and any other horticulture, floriculture, and viticulture. The use also includes stabling or training of horses, including but not limited to providing riding lessons, training clinics, and shows.

Administrative Review: A complete review of a ministerial project undertaken by a county official or designated staff member to determine consistency with General Plan, zoning or other related county ordinances or policies.

Agriculture Preserves: Land designated for agriculture or conservation; all lands that qualify for inclusion in Williamson Act Contracts.

Airport Land Use Compatibility Plans (ALUCP): The Airport Land Use Compatibility Plan’s purpose is to provide for the orderly development of each public use airport in Plumas County and the areas surrounding these airports. This plan assists local agencies in ensuring compatible land uses in the vicinity of the airports to the extent that the land in the vicinity is not already devoted to incompatible uses, and at the same time protects public health, safety and welfare.

Area of Concern: An Area of Concern is a geographic area beyond the Sphere of Influence in which land use decisions or other governmental actions of on local agency (“the Acting Agency”) impact directly or indirectly upon another local agency (“the Concerned Agency”).

California Environmental Quality Act (CEQA): A state law requiring state and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for a significant adverse environmental impact, an environmental impact report (EIR) must be prepared and certified as to its adequacy before taking action on the proposed project.

City: City shall mean an incorporated city.

Commercial Uses: A land use classification that permits facilities for the buying and selling of commodities and services. Commercial uses include businesses or activities at a scale greater than home business involving retail or wholesale marketing of goods and services.

Compatibles Uses: Uses that are capable of existing together without conflict. In terms of the California Timberland Productivity Act of 1982, a compatible use is defined as any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber.

Community: Representative areas include Taylorsville, Crescent Mills, Cromberg, Sloat, Beckworth, Chilcoot, and La Porte. Communities are places where some public infrastructure and services are available. Few commercial services are present and these services generally are of the type, size and scale that serve local residents.

Community Plan: In order to be responsive to the needs and opportunities of various areas within the County, specific Community Plans may be developed for designated commercial, residential, industrial or recreational areas within a Town, Community or Rural Place boundary. A Community Plan will develop standards that are equal to or superior to those of the County and, at a minimum, will address the following:

- Design Standards

- Circulation and Parking
- Density
- Public Spaces
- Infrastructure
- Land Uses

Density: The maximum number of dwelling units permitted outright by a particular land-use classification.

Density Bonus: The allocation of development rights to allow a parcel to accommodate additional square footage or additional residential units beyond the maximum for which the parcel is zoned, usually in exchange for the provision or preservation of an amenity at the same site or at another location.

Density Transfer: A way of retaining open space by concentrating densities, usually in compact areas adjacent to existing development and infrastructure, while leaving unchanged historic, environmentally sensitive or potentially hazardous areas.

Development: The term “development” in the General Plan means lot creation, condominium projects, or utilization of commercial, multi-family residential or industrial parcels.

Dunning Timber Site Classification System: A site classification system for mixed conifer forests of the Sierra Nevada. The system is based on the production capacity (height-age relationship measurement) of a site. Dunning uses a numerical classification system that ranges from Class O (non-Forest) through Class V with Class I being the most productive and Class V being the least productive.

Dwelling Unit: A building or a portion of a building which provides for sleeping, cooking, eating and sanitation for one family and may include any additional quarters and guest house

Expansion Area (Town or Community): Area delineated within the General Plan Land Use Map that identifies potential future expansion of a Town or Community Boundary to accommodate additional growth, based upon such factors as the ability to provide services to the area.

Home Business: Any nonresidential use which is permitted in a commercial zone, except for lodging facility, conducted by a resident of a dwelling unit and subject to additional restrictions as determined by the County zoning code.

Home Industry: Any use permitted in an industrial zone and conducted by a resident of a dwelling unit on the parcel and subject to a review for compatibility with the neighborhood in which it is located.

Industrial Uses: A land use classification that permits facilities for the manufacture, fabrication, processing, reduction, or destruction of any article, substance or commodity of any other treatment thereof in such a manner as to change the form, character, or appearance.

Infill: Any vacant lot or parcel within a Town or Community boundary that is designated for development and where water, sewage disposal, streets, and emergency services have already been developed and provided.

Legally Existing Dwelling: A dwelling that was built in compliance with all applicable laws in effect at the time of construction.

Master Planned Community: Representative areas include Whitehawk Ranch, Valley Ranch, Grizzly Ranch, Walker Ranch, Lake Almanor West and Gold Mountain. Master

Planned Community's boundaries have been described or prescribed through their approvals and/or environmental documentation. Planning area and master planned community boundary are one in the same. There is no identified expansion area, as development potential has been specifically defined.

Military Operations Area (MOA): A three dimensional airspace designated for military training and transport activities that have a defined floor (minimum altitude) and ceiling (maximum altitude) . MOA boundaries and minimum altitudes are identified in the Military Review Area. All new development that could penetrate the defined floor elevation Above Ground Level (AGL) within an MOA shall require a special use permit and be reviewed for hazards to aircraft and ground uses and users including but not limited to:

- -Uses that release into the air any substance such as steam, dust and smoke which would impair pilot visibility;
- -Uses that produce light emissions, glare or distracting lights which could interfere with pilot vision or be mistaken for airfield lighting;
- -Uses that physically obstruct any portion of the MOA due to relative height AGL; and
- -Sources of electrical emissions which would interfere with aircraft communications or navigation.

Military Training Route (MTR): An airspace of defined dimensions established for the conduct of military aircraft training flights. Military Training Routes are similar to complex systems of interrelated and interdependent highways in the sky that connect military installations and training ranges. They are used by the Department of Defense to conduct low altitude navigation and tactical training at airspeeds in excess of 250 knots and at altitudes as low as 100 feet above Above Ground Level (AGL). These low-level, high-speed routes allow pilots to develop the skills necessary to avoid detection by enemy radar. All new development that could penetrate the defined floor elevation Above Ground Level (AGL) within a MTR shall require a special use permit and be reviewed for hazards to aircraft and ground uses and users including but not limited to:

- -Uses that release into the air any substance such as steam, dust and smoke which would impair pilot visibility;
- -Uses that produce light emissions, glare or distracting lights which could interfere with pilot vision or be mistaken for airfield lighting;
- -Uses that physically obstruct any portion of the MOA due to relative height AGL; and
- -Sources of electrical emissions which would interfere with aircraft communications or navigation.

Mineral Resource: Land on which known deposits of commercially viable mineral or aggregate deposits exist.

Mining Resource Production Areas: Those areas where accessibility, surrounding land uses, and environmental setting will permit extraction of materials without major and long term adverse environmental impacts. Prime mining resource production areas include geothermal resources.

Planning Area: The Planning Area constitutes the “urban” growth boundary for each Town, Community, Rural Place, or Master Planned Community in the County. A Planning Area boundary encompasses the existing developed land area (the core), potential land area (expansion area) available for future growth of a Town or a Community. For Rural Places and Master Planned Communities, the Planning Area boundary is also the core boundary because there is no identified and mapped

expansion area for these two community types. The Planning Area boundary and the expansion area boundary may be the same boundary in some cases.

Recreation Uses: A land use classification that permits facilities for athletics, exercise, play, amusement, or relaxation. Recreation Uses can include facilities or locations that are public or private, indoor or outdoor, developed or dispersed, active or passive.

Residential Uses: A land use classification that permits structures containing dwelling units or rooming units, including single-family or two-family houses, multiple dwellings, multi-person dwelling units such as a dormitory, or apartments.

Resource Production Areas: Resource Production Areas include agricultural production areas, timber resource areas, mining resource production areas, hydraulic forces of water and resource transportation.

Rural Place: Representative areas include Johnsville, Blairsden, Twain, and Greenhorn Ranch. Rural Places are defined as having little to no public infrastructure and services. If commercial services are present they tend to be small and often seasonal. Rural places may also consist of a grouping of homes. Planning area and rural place boundaries may be one in the same. There is little or no identified expansion area.

Services and Infrastructure: Facilities and services needed to sustain industrial, residential, commercial and all other land use activities, including potable water, wastewater disposal systems, solid waste disposal sites or retention areas, electrical and other utilities, streets and roads, communications, fire and police protection, and emergency medical assistance.

Special Management Area: An area of special concern as identified by citizens of the area and adopted by the Board of Supervisors. Identification of a Special Management Area allows development of more specific goals and policies for the area that better reflects the values of the community or area.

Specific Plan: A tool authorized by Government Code Section 65450, et seq., for the systematic implementation of the general plan for a defined portion of a community's planning area. A specific plan must specify in detail the land uses, public and private facilities needed to support the land uses, phasing of development, standards for the conservation, development, and use of natural resources, and a program of implementation measures, including financing measures.

Sphere of Influence: A plan for the probable physical boundaries and service area of a local agency, as determined by the Local Agency Formation Commission.

Timber Production Zone (TPZ): The California Forest Taxation Reform Act placed values on bare land that are related to its ability to grow trees, and it substituted a percent tax on the value of timber at the time of harvest (a "yield" tax) for the annual property tax on the trees. In exchange for this tax benefit, landowners are required to dedicate their timberland to timber growing and compatible uses for a time period of at least ten years. Unless terminated by the county or landowner, the ten year time period renews each year, thus creating a rolling minimum or self-perpetuating ten-year commitment. Lands zoned in this manner are called Timberland Production Zones (TPZ). The total acreage of lands zoned Timberland Production Zone indicate land that is committed to timber growing and compatible uses, thus forming the long term productive base of the State's privately owned timberlands.

Town: Representative areas include Chester, Greenville, Quincy and East Quincy. Towns are places where the highest complement of public infrastructure and services are available or can be made available. Such services consist of community water

service, community sewer service, maintained year-round roads, fire, police and emergency medical services. In addition, towns serve as both the commercial and public services hubs for both local residents as well as surrounding communities.

Transfer of Development Rights (TDR): Transfer of Development Rights, or TDR, is a program that can relocate potential development from areas where proposed land use or environmental impacts are considered undesirable (the “donor” site) to another (“receiver”) site chosen on the basis of its ability to accommodate additional units of development beyond that for which it was zoned, with minimal environmental, social, and aesthetic impacts. The parcel from which the rights are transferred is then permanently restricted as to future development, and the purchaser of the rights may assign them to a different parcel to gain additional density—for example, more residential units or more commercial floor area than would be allowed without the transferred rights. Usually, TDR programs designate sending areas from which rights may be transferred, and receiving areas to which the rights may be sent.

Zoning: The division of a county by legislative regulations into areas, or zones, that specify allowable uses for real property and size restrictions for buildings within those areas; a program that implements policies of the general plan.

Williamson Act: The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. The Williamson Act contract is an enforceable restriction on land and is binding on successors to both the landowner and the County. The minimum term for a contract is ten years, and the contract is automatically renewed annually, unless either party gives advance notice of nonrenewal. Contracts may also be cancelled immediately, terminating the restriction to agricultural uses, only if the Board of Supervisors finds that it would be consistent with the Act and in the public interest.

Plans and Planning

The following local and regional plans, programs, and organizations are among those that affect or can contribute to the implementation of the Land Use Element:

- Airport Land Use Compatibility Plans (2008)
- Regional Transportation Plan (2009)
- Greenville Streetscape and Revitalization Plan (2008)
- Chester Main Street Design Plan (2009)
- Chester Design Review Guidelines (1996)
- Quincy Design Review Guidelines (1992)
- Johnsville Historic Area Guidelines
- La Porte Historic Area Guidelines
- Genesse Valley Special Management Area (1993)
- Plumas County Bicycle Transportation Plan (updated 2001_
- Plumas County Trails Master Plan (under development)
- Feather River Coordinated Resource Management Group
- Feather River Watershed Management Strategy.
- Integrated Regional Water Management Plan (2005)
- Plumas County Emergency Operations Plan (2011)
- Herger-Feinstein Quincy Library Group Forest Recovery Act

- Multi-Hazard Mitigation Plan
- Plumas County Fire Safe Council Community Wildfire Protection Plan
- Sierra Valley Groundwater Management District
- Almanor Basin Watershed Advisory Committee

Goals



GOAL 1.1 General Land Use

LU 1.1	<p>Development within the County is planned in a manner which will provide opportunities for current and future residents to enjoy rural, community-oriented living environments that are similar to those currently found in the County. Encourage higher densities in Town and Community defined areas and their identified expansion areas where appropriate, and promote in-fill development to discourage agricultural and forest lands conversion demands.</p>
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Policies

LU

1.1.1 *Future Development*

The County shall require future residential, commercial and industrial development to be located adjacent to or within existing Planning Areas; areas identified on Plumas County's General Plan Land Use Maps as Towns, Communities, Rural Areas or Master Planned Communities (insert reference to maps here) in order to maintain Plumas County's rural character with compact and walkable communities. Future development may also be approved within areas for which Community Plans or Specific Plans have been prepared. Small, isolated housing tracts in outlying areas shall be discouraged as they disrupt surrounding rural and productive agricultural lands, forests, and ranches and are difficult and costly to provide with services. Land division may be allowed outside of Planning Areas only when the resulting development complies with all applicable General Plan Policies and County Codes.

LU

1.1.2 *Infill Development*

The County shall plan to concentrate new growth both within and contiguous to existing Towns and Communities and require expansion of existing infrastructure as needed to efficiently and safely serve the new growth.

LU

1.1.3 *Increased Housing Density*

The County shall allow for and promote increased housing densities within existing developed areas where adequate public services are available and community character can be maintained.

LU

1.1.4 *Land Divisions*

The County shall ensure that zoning and subdivision regulations protect agricultural and ranching lands, open space, and natural resources which

include: grazing, forests, and wildlife habitat lands, by not allowing land divisions that convert the primary land use to residential to be developed in areas which are not specifically designated as residential in the General Plan, for which appropriate long-term planning has not been completed as outlined within the General Plan. The County shall require the following findings for land divisions outside of Planning areas:

- The resulting development will have structural fire protection; Land division does not result in any conflict with zoning and density standards, and
- Any clustering of parcels does not convert the primary land use to residential and is part of an overall integrated plan for resource protection.

LU

1.1.5 *Community Plans*

In order to be responsive to the needs and opportunities of various areas within the County, specific Community Plans may be developed for designated commercial, residential, industrial or recreational areas within a Town, Community or Rural Place boundary. A Community Plan will develop standards that are equal to or superior to those of the County and, at a minimum, will address the following:

- Design Standards
- Circulation and Parking
- Density
- Public Spaces
- Infrastructure
- Land Uses
- Public Health and Safety

GOAL 1.2 Range of Land Uses



LU 1.2

Recognize and allow for a range of land uses that preserve the qualities of existing communities and rural areas, as well as resource production areas in the County. Provide an appropriate range of land use designations to serve the needs of the residents of the County with an adequate amount of land in each designation to provide a balanced pattern of development.

Policies

LU

1.2.1 *Land Use Designations*

To provide for an appropriate range of land use types and densities within the County, the following General Plan land use designations are established:

- Single-Family Residential
- Multiple-Family Residential
- Suburban Residential
- Secondary Suburban Residential
- Rural Residential
- Limited Access Rural Residential
- Commercial
- Resort and Recreation*
- Industrial
- Agriculture and Grazing
- Agricultural Preserve
- Mining Resource
- Timber Resource Lands
- Lake
- Open Space-Significant Wetlands

- Scenic Area
- Scenic Road
- Historic Area
- Historic Building

- Historic Road
- Public Facilities

TABLE 1.3 Land Use Designations and Permissible Densities

Land Use	Density	Additional Detail	Maximum Land Coverage
Land Use – Residential Uses	Density	Additional Detail	Maximum Land Coverage
Single Family Residential	1 dwelling unit/existing parcel with provisions for a guest house and additional quarters	A legally existing parcel is allowed one dwelling unit, if zoning and building standards can be met	50%
	2 dwelling units allowed on any parcel at least twice the minimum parcel size	There are provisions for a guest house and additional quarters	
	7 dwelling units/acres for new subdivisions of land	For new subdivisions, and/or subject to Planned Development Permits, a maximum of 7 dwelling units per acre is permissible based on the Zoning Ordinance and consistency with all policies of the General Plan.	
Multiple-Family Residential	21.8 dwelling units/acre	A maximum density of 21.8 units/acre is permissible based on the Zoning Ordinance and consistency with all policies of the	50%

Suburban Residential

1 dwelling unit/existing parcel

A legally existing parcel is allowed one dwelling unit, if zoning and building standards can be met.

1 dwelling unit/
1 to 3 acres

2 dwelling units allowed on any parcel at least twice the minimum parcel size with provisions for a guest house and additional quarters

Secondary Suburban Residential

1 dwelling unit/existing parcel

A legally existing parcel is allowed one dwelling unit, if zoning and building standards can be met.

1 dwelling unit/3 to 10 acres

2 dwelling units allowed on any parcel at least twice the minimum parcel size with provisions for a guest house and additional quarters

Rural Residential

1 dwelling unit/existing parcel

A legally existing parcel is allowed one dwelling unit, if zoning and building

1 dwelling unit/10 to 20

Limited Access Rural Residential	acres	standards can be met.
	2 dwelling units allowed on any parcel at least twice the minimum parcel size with provisions for a guest house and additional quarters	
	1 dwelling unit/existing parcel	A legally existing parcel is allowed one dwelling unit, if zoning and building standards can be met.
	1 dwelling unit/20 acres	
	2 dwelling units allowed on any parcel at least twice the minimum parcel size with provisions for a guest house and additional quarters	

Land Use – Agriculture Lands	Density	Additional Detail
Agriculture Preserve	1 dwelling unit/existing parcel	A legally existing parcel is allowed one dwelling unit if zoning and building standards can be met.
	1 dwelling unit/80 acres for new subdivisions	Additional employee housing is permitted. For new

	of land 1 dwelling unit/parcel for clustered development	divisions of land the minimum parcel size is 80 acres. Property may be subdivided into parcels less than 80 acres in order to cluster development to protect agriculture and other resource values as long as the overall dwelling unit density does not exceed the base density permissible on the original parcel. Example: 800 acre parcel has 10 units of density. It is permissible to subdivide a 100 acre portion into 10, 10 acre parcels, transfer a unit of density to each 10 acre parcel and preserve the remaining 700 acres for agricultural uses.
Agriculture & Grazing	1 dwelling unit/existing parcel	A legally existing parcel is allowed one dwelling unit if zoning and building standards can be met.
	1 dwelling unit/40 acres for new subdivisions of land	For new divisions of land the minimum parcel size is 40

1 dwelling unit/parcel for clustered development

acres.

Property may be subdivided into parcels less than 40 acres in order to cluster development and protect agriculture and other resource values as long as the overall dwelling unit density does not exceed the base density permissible on the original parcel.
Example: 400 acre parcel has 10 units of density. It is permissible to subdivide a 100 acre portion into 10, 10 acre parcels, transfer a unit of density to each 10 acre parcel and preserve the remaining 300 acres for agricultural uses.

Land Use - Commercial	Density	Additional Detail
Commercial	1 dwelling unit/existing parcel in conjunction with a Commercial use.	A legally existing parcel is allowed one dwelling unit, if zoning and building standards can be met.
		Mixed-use

See Residential Density for mixed use consistency

development involving a residential land use shall be consistent with the Residential density requirements.

Land Use - Industrial	Density	Additional Detail
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Industrial

1 dwelling unit/existing parcel in conjunction with an Industrial use.

A legally existing parcel is allowed one dwelling unit, if zoning and building standards can be met.

Land Use – Mining Resource	Density	Additional Detail
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Mining Resource Lands

1 dwelling unit/existing parcel

1 unit/10 acres for new subdivisions of land

A legally existing parcel is allowed one dwelling unit, if zoning and building standards can be met.

For new divisions of land the minimum parcel size is 10 acres.

Land Use – Timber Resource Lands	Density	Additional Detail
----------------------------------	---------	-------------------

General Forest

1 dwelling unit/existing parcel

A legally existing parcel is allowed one dwelling unit, if

	1 additional dwelling unit on any parcel of 80 acres or more	zoning and building standards can be met.
	1 dwelling unit/40 acre parcel minimums	For new divisions of land the minimum parcel size is 40 acres based on zoning code.
Timberland Production Zone	1 dwelling unit/160 acres	Parcels of 160 acres or greater are permitted one dwelling unit.

Land Use – Resort and Recreation	Density	Additional Detail
Resort and Recreation Lands	1 dwelling unit/existing parcel	A legally existing parcel is allowed one dwelling unit, if zoning and building standards can be met.



The location and extent of each of the land use designations is shown on the General Plan Land Use Map(s). Boundary lines for the various land use designations, shown on the General Plan Land Use Maps, are intended to portray the relative location and extent of land use areas, generally following known physical features such as watercourses, roads, and parcel lines.

LU

1.2.2 *Land Use Compatibility*

The General Plan Land Use Designations shall be implemented through adoption and application of compatible zoning districts of the County Zoning Regulations consistent with the following Land Use Designation Compatibility Matrix and through the adoption of zoning district maps consistent with the land use designations.

TABLE 1-4. LAND USE DESIGNATION MATRIX (1 OF 2)

ZONING DISTRICTS

Land Use Designation	2-R	3-R	7-R	M-R	S-1	S-3	R-10	R-20	C-1	C-2	C-3	R-C	Rec-P	Rec-1	Rec-3	Rec-10	Rec-20	Rec-OS
Single-Family Residential	x	x	x		x	x												
Multiple-Family Residential				x														
Suburban Residential					x													
Secondary Suburban Residential						x												
Rural Residential							x											
Limited Access Residential								x										
Commercial									x	x	x	x						
Resort and Recreation												x	x	x	x	x	x	
Industrial																		
Agriculture and Grazing						x	x	x										
Agricultural Preserve																		
Mining Resource																		
Timber Resource Lands																		
Lake																		
Open-Space-Significant Wetlands																		
Scenic Area	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Scenic Road																		
Historic Area	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Historic Building	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Historic Road																		
Public Facilities	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x

Source: Plumas County GIS, 2011

TABLE 1-4. LAND USE DESIGNATION MATRIX (2 OF 2)

ZONING DISTRICTS

Land Use Designation	I-1	I-2	OS	L	AP	GA	TPZ	GF	Mining	SP-ScA	SP-ScR	SP-HA	SP-HB	SP-HR?	PF?
Single-Family Residential															
Multiple-Family Residential															
Suburban Residential															
Secondary Suburban Residential															
Rural Residential															
Limited Access Residential															
Commercial															
Resort and Recreation															
Industrial	x	x													
Agriculture and Grazing						x									
Agricultural Preserve					x										
Mining Resource									x						
Timber Resource Lands							x	x							
Lake				x											
Open-Space-Significant Wetlands			x												
Scenic Area	x	x	x	x	x	x	x	x	x	x					
Scenic Road											x				
Historic Area	x	x	x	x	x	x	x	x	x			x			
Historic Building	x	x	x	x	x	x	x	x	x				x		
Historic Road														x	
Public Facilities	x	x	x	x	x	x	x	x	x						x

Source: Plumas County GIS, 2011

LU

1.2.3 *Home Business*

The County strongly supports home businesses as a means of providing convenient employment opportunities and decreasing dependence on the auto. To ensure home businesses are in keeping with residential or rural character or the neighborhood or area, home businesses shall be subject to an administrative review or other permit processes as may be lawfully established in the zoning ordinance.

LU

1.2.4 *Mixed Use*

The County shall allow on-site residential development as an integral part of the primary building or development site for all commercial and industrial development.

LU

1.2.5 *Lot Line Adjustments*

Notwithstanding other policies, lot line adjustments may be allowed for existing substandard size parcels.

LU

1.2.6 *Parceling and Condominiums*

Land divisions may be allowed at parcel sizes smaller than the minimum requirements for the respective General Plan Land Use and Zoning Designations where the primary purpose of the division is to allow for the location of legally existing dwellings on one parcel while creating no new building sites. A legally existing dwelling shall be defined as dwelling built in compliance with all applicable laws in effect at the time of construction.

GOAL 1.3 Coordination with City of Portola

LU 1.3

Coordinate with the City of Portola in land use planning and development within their sphere of influence and joint planning areas. Plan towards compatibility and coordination of land use designations.

Policies

LU

1.3.1 *Working with the City of Portola*

The County shall work closely with the City of Portola concerning planning and development of land within the City's adopted sphere of influence. In addition to the City's sphere of influence there may be other areas under the County's jurisdiction that are of planning interest for the City.

LU

1.3.2 County and City of Portola’s General Plan Consistency

While recognizing its own responsibilities and obligations, the County will cooperate, to the extent feasible, in the development and/or revision of the City of Portola’s General Plan. The County may amend its General Plan within the City of Portola’s sphere of influence to reflect said updates and/or revisions, unless there is a compelling land use conflict.

LU

1.3.3 Development and Design in City of Portola’s Sphere of Influence

Within the City of Portola’s sphere of influence, discretionary projects will coordinate design, development standards and funding programs.

LU

1.3.4 Annexation Revenues

Provide for a comprehensive and equitable distribution of revenues for all annexations. The County may amend master tax agreements to share annexation revenues seeking revenue neutrality for costs of providing County and City services with the City of Portola based upon the cost of providing facilities and services to the annexation area.

GOAL 1.4 Coordination with the Military

LU 1.4	To protect the interests and priorities of the County, create a process to identify, coordinate and assist in resolving land use conflicts within the Military Operations Areas (MOAs) and Military Training Routes (MTRs) in all areas of the County.
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Policies

LU

1.4.1 Working with the Military

Ensure early notification to the military of proposed discretionary development projects within Military Operations Areas (MOAs) and Military Training Routes (MTRs) and facilitate the exchange of project-related information pertinent to military operations within those areas.

LU

1.4.2 Evaluation of Renewable Energy Projects

Evaluate renewable energy projects proposed within Military Operations Areas (MOAs) and Military Training Routes (MTRs) to ensure that all priorities are given due consideration, including safety, generation and transmission of alternative energy and review comments received by the military.

GOAL 1.5 Maximize Existing Infrastructure

**LU
1.5**

To promote a development pattern that maximizes the use of existing infrastructure prior to the construction of new infrastructure. Develop a land use pattern to facilitate the delivery of community services in the most cost-effective manner possible for infrastructure construction and maintenance, fire protection, emergency medical and police.

Policies

LU

1.5.1 Use of Existing Infrastructure

The County shall require the use of existing infrastructure for new development whenever feasible

LU

1.5.2 Cost Effective Land Use Pattern

The County shall develop a land use pattern that, to the maximum extent feasible, will facilitate the delivery of community services in the most cost-effective manner for water, sewer, flood control, public safety services, and road construction and maintenance.

LU

1.5.3 Provision for Fire and Life Safety Services

The County shall require development to be located adjacent to, or within, areas where fire and life safety services exist, or can be efficiently and economically provided.

GOAL 1.6 Commercial and Industrial Development

**LU
1.6**

To designate lands for commercial and industrial development appropriate for these uses and facilitate business and industrial opportunities. Encourage compact development contiguous to existing urban centers, active transportation corridors, or resource production areas. Discourage linear and leapfrog development patterns. Facilitate the re-use of abandoned industrial sites as appropriate.

Policies

LU

1.6.1 Land for Commercial and Industrial Uses

The County shall provide adequate amounts of land in and adjacent to identified Towns and Communities and within Rural Places to be designated and zoned to allow for and support commercial and industrial development.

LU

1.6.2 Limited Convenience Commercial Services

The County shall allow for limited convenience commercial services within Rural Places and Master Planned Communities upon approval of a Special Use Permit or administrative review. The uses are limited to those businesses which serve the needs of the surrounding area or which are part of an overall development plan or specific plan.

LU

1.6.3 Transportation Support for Commercial and or Industrial Uses

The County shall strive to improve access to road, rail, and air transportation in a cost-effective manner in order to facilitate the development of lands deemed appropriate for commercial and industrial uses.

LU

1.6.4 Transportation Support for Commercial and or Industrial Uses

The County shall utilize the Rogers Field Airport in Chester, Gansner Field Airport in Quincy and Nervino Airport in Beckwourth Land Use Compatibility Plans to guide planning efforts near these facilities.

GOAL 1.7 Preservation of Rural Lifestyle

<p>LU 1.7</p>	<p>To accommodate growth in a manner that preserves the predominate rural lifestyle and unique qualities that make the County an attractive place to live and that recognizes that a rural lifestyle does not always necessitate the provision of the full complement of services normally found in urban communities.</p>
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Policies

LU

1.7.1 Range of Residential Densities

The General Plan shall provide for a range of residential density designations and shall distribute these density designations as most appropriate and consistent with other General Plan goals and policies so that future residents have a range of lifestyle opportunities available to them.

GOAL 1.8 Land Use Pattern that Minimizes Travel



<p>LU 1.8</p>	<p>To develop land use patterns which minimize travel to jobs and services.</p>
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Policies

LU

1.8.1 Land for Large-scale Commercial and Industrial Uses

The County shall require that sites for moderate-to large-scale industrial and commercial development be located within or near the Town and Community areas; within areas for which Specific Plans or Master Plans have been prepared; or within areas that contain, or are capable of containing, infrastructure adequate to support the use of the property for more intensive non-residential purposes, such as abandoned mill sites. Additionally, the County shall consider the location of such land uses where appropriate to reduce travel and commute times.

LU

1.8.2 Land for Small-scale Commercial and Industrial Uses

The County shall provide for opportunities for small scale businesses and industrial uses through appropriate zoning.

GOAL 1.9 Communication Infrastructure

LU 1.9	To accommodate communication infrastructure facilities while requiring site provisions that protect the visual quality, health and character of the County.
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Policies

LU

1.9.1 Communication Tower Location Criteria

The County shall provide site development criteria in the County’s Zoning Code.



GOAL 1.10 Renewable Energy Generation and Transmission

LU 1.10	To accommodate renewable energy generation and transmission while requiring site provisions that protect the visual quality and character of the County.
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Policies

LU

1.10.1 Renewable Energy Generation and Transmission Location Criteria

The County shall collaborate with stakeholders to create renewable energy generation and transmission criteria for optimal siting in the County’s Zoning Code.

LU

1.10.2 Renewable Energy Resources and Military Operations Areas

The County will evaluate renewable energy projects proposed within Military Operations Areas (MOAs) and Military Training Routes (MTRs) to ensure that all priorities are given due consideration, including safety, generation and transmission of alternative energy, and review comments received by and from the military.



GOAL 1.11 Land Use and Water Conservation

**LU
1.11**

To promote development patterns that recognize the need to conserve water resources, consistent with other stated goals.

Policies

LU

1.11.1 Groundwater Management Plans

The County shall support the development and implementation of a regional groundwater management plan and shall work with water resources agencies, water users, and other affected parties to develop basin-specific plans for high priority groundwater basins to ensure a sustainable, adequate, safe and economically viable groundwater supply for existing and future uses within the County.

Land Use Element Implementation Measures

Work Plan/Implementation Measures

The following table documents the implementation measures included with the General Plan to implement the goals and policies included in this element.

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
1. Encourage all new residential development projects to be located within or adjacent to mapped Planning Areas where basic infrastructure, services, and adequate response times for such services as water, wastewater disposal, utilities, fire protection, police and emergency medical, and commercial services typical for the planning area type, exist or require that the project provide its own internal infrastructure and services that are bonded for long term maintenance.	1.1.1					
2. Establish a database which identifies vacant and underutilized parcels within existing developed areas. Make this information available to the public. The permitting process shall be streamlined for projects meeting in-fill goals.	1.1.2					
3. a. In areas where adequate water, sewer and fire protection and emergency medical services exist or can be made available and community character will not be affected, identify suitable locations to designate to accommodate higher density residential use. b. Encourage the use of clustering of residential or non-agricultural land uses away from agriculturally-sensitive areas to minimize impact to agricultural operations, whenever possible. Consider amending existing zoning	1.1.3					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>and subdivision regulations to allow for a reduction of minimum lot sizes when cluster subdivisions are used to minimize impacts on adjacent agricultural uses and/or sensitive environmental areas, and where environmental conditions allow. Consider developing a density bonus or TDR programs that support the stated intent. Consider developing a TDR program that includes Agriculture Preserve, Agriculture & Grazing and Timber Resource Lands as sending parcels.</p>						
<p>4. a. Update the Zoning Code to ensure that areas designated for agricultural uses both limit and allow uses that directly relate to agricultural production, support agriculture or compliment agricultural uses and landscapes, such as farm stays, hunting and fishing clubs and other uses compatible with agriculture.</p> <p>b. Minimum lot size requirements for previously existing legal lots do not apply. Existing lawful non-conforming lots will be permitted to develop at a density of at least one dwelling unit per legal lot, provided all life safety-related Land Development, Environmental Health, and Building standards can be met.</p> <p>c. Adopt policies, standards, and guidelines supporting the implementation of an agricultural buffer setback outlining specifics of the setback, including special circumstances for variations in distance and permitted uses within the setback.</p> <p>d. Adopt policies that address building site clustering with</p>	1.1.4					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>creation of permanent open space, restriction of building area on lots that will support building construction, or other means which are consistent with the protection of natural resources and environmental characteristics of the site. Open space created through clustering shall be assured of permanent maintenance as open space by mechanisms such as, but not limited to, dedication, permanent easement, irrevocable trust, deed restrictions, or other mechanism assuring its permanent status.</p>						
<p>5. The County and the City through a joint planning effort may map and develop Community Plans that address future development opportunities and the criteria to be applied to the review of development opportunities.</p>	1.1.5					
<p>6. a. Within the City's Sphere of Influence, discretionary development projects shall first be referred to the City for possible annexation. If the City does not choose to annex, the City's review and comments shall be considered by the County in processed the discretionary development project.</p> <p>b. Should the Plumas Local Agency Formation establish an Area of Concern or interest to the City, applications for discretionary land use projects shall be referred to the City for review and comment.</p>	1.3.1					
<p>7. Amend the zoning ordinance, including but not limited to special use permit and variance provisions, to establish discretionary review of all proposed development projects within</p>	1.4.1					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
the MOAs.						
8.. Require the use of existing infrastructure for all new development. If existing infrastructure is not available or adequate, require new development to pay its reasonable fair-share towards the construction or expansion of infrastructure for roads, water, sewer, drainage and other infrastructure necessary for the completion of the development.	1.5.1					
9.. Identify existing water, sewer, drainage, public safety services, and roadway facilities and infrastructure, whether private or public, and include this information on the County's Geographic Information Services database making this information readily available for public and/or private inquiries. Use this information to develop a land use pattern that maximizes the use of existing infrastructure.	1.5.2					
10. Require new developments located in an area not currently served by an organized fire or emergency services provider to be annexed into an existing fire district or establish a funding mechanism appropriate to cover costs associated with the provision of such services at a service level appropriate for the size and scale of the development. Establishment of a funding mechanism may be waived when adequate alternative service levels are provided to the satisfaction of the service district or provider.	1.5.3					
11.. a. Update the Zoning Code to be consistent with General Plan land use designations allowing for a variety of commercial and	1.6.1					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>industrial uses adjacent to, and/or within, Town and Community areas.</p> <p>b. Support efforts to improve access to public infrastructure to facilitate the efficient economic development of commercial and industrial properties.</p>						
<p>12.. Amend the Zoning Code to allow limited convenience commercial services in Rural Places and Master Planned Communities or in other small residential areas upon approval of a Special Use Permit, Planned Development Permit or administrative review to ensure compliance with existing approvals.</p>	1.6.2					
<p>13.. Investigate funding opportunities and development agreements, which will provide for access improvements usable by industrial and commercial uses.</p>	1.6.3					
<p>14. a. Ensure that the policies and development standards of the County Zoning Ordinance and similar regulatory documents are consistent with the adopted Airport Land Use Compatibility Plans regarding noise mitigation, land use restrictions, building height, lighting, and other site development standards, by the establishment of an Airport Combining Zone or an Airport Overlay Zone.</p> <p>b. Adopt the Airport Land Use Compatibility Plans as part of the General Plan by reference.</p>	1.6.4					
<p>15. . a. Analyze and, where necessary, amend the zoning map to be consistent with the planning area designations; Town, Community, Rural Places, Master Planned Communities.</p> <p>b. Initiate necessary and</p>	1.7.1					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
appropriate zoning code and zoning map amendments to ensure zoning consistency between Land Use and Zoning designations.						
c.						
16. . Incorporate within the Land Use and Zoning Map appropriate industrial and commercial uses within proximity to residential uses to minimize travel times and trip lengths.	1.8.1					
17. Undertake necessary and appropriate zoning code and zoning map changes to promote and encourage small-scale business and industrial land use growth.	1.8.2					
18. . Undertake necessary and appropriate zoning code and zoning map changes to promote and encourage the appropriate location for cellular tower facilities and other communication technology infrastructure within the County, utilizing such measures as co-location.	1.9.1					
19. The County will make the necessary and appropriate zoning code and zoning map changes to promote and encourage the appropriate renewable energy resources and transmission corridors in the County's Zoning Code. The County will assist stakeholders in resolving generation and transmission siting issues.	1.10.1					
20. The County shall coordinate with the military experts to site renewable energy facilities in a manner that does not significantly impact military necessities. The County will give due consideration to issues including, but not limited to: light and glare, heat generation, smoke, dust, equipment testing and operation, personnel training and flight operations. The	1.10.2					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
County will facilitate collaboration between stakeholders to ensure balanced and compatible land use priorities.						
21. The County shall charter the Plumas County Coordination Council to be the forum responsible for the coordination of planning efforts between the County and other local, state and federal land managers.	1.4.1 1.4.2					

HOUSING ELEMENT (2)

Reserved

NOISE ELEMENT (3)

Introduction

Throughout Plumas County, residents are concerned about controlling noise levels and protecting sensitive uses from excessive noise. Although the county's rural setting and predominantly agricultural/open-space character reflect a quieter environment, there are still a number of significant sources of environmental noise, including noise associated with various modes of transportation and with some industrial and agricultural operations.



Figure 16. Train in Canyon.
Photo Credit: Design Workshop

The Noise Element of the general plan provides a basis for comprehensive local programs to control and abate environmental noise and to protect citizens from excessive exposure. The County's Noise Element addresses community noise problems, in accordance with Government Code Section 65302(f).

Plumas County is committed to protecting its communities in a manner that also addresses climate change. As part of the "Goals" section of this element, policies and implementation measures related to climate change are denoted with the symbol:



Setting / Existing Condition

Existing noise conditions in Plumas County were assessed as part of the General Plan update in order to document existing noise sources and, to the extent possible, quantify noise from these sources. The dominant sources of noise in Plumas County are mobile, related to automobile and truck traffic, aircraft and train transportation. Stationary sources in the county include power plants, lumber mills and aggregate mining and processing facilities. To a smaller extent, construction sites are also considered a stationary source of short-term, or temporary, noise in the County. **Table 3-1** provides a summary of the key noise sources within each of the County's community areas.

Mobile Noise Sources

Mobile noise sources generally include those associated with various modes of transportation, including roadway traffic, trains and aircraft operations. The general location of these sources is provided in Figure 17, with each source further described below.

Roadway Noise

The primary factors that determine roadway noise levels are traffic volumes, percentage of heavy trucks and buses on individual roadways, average vehicle speed, and presence of natural or human-made noise attenuation features such as sound walls and landscaping. Given the predominately rural nature of the County, roadway noise impacts are those associated with the larger regional, or Statewide, network. **Table 3-2** identifies existing traffic noise level estimates for selected roadways with available traffic data.

**TABLE 3-1. INVENTORY OF PROMINENT NOISE SOURCES
WITHIN THE COMMUNITY AREAS OF PLUMAS COUNTY**

Community Area	Source of Noise		Railroads	Stationary and Recreational Sources
	Roads	Airports		
Towns				
Chester		Chester – Rogers Field Airport		Collins Pine Sawmill. Chester Pit Mine at Chester Rogers Field.
Lake Almanor Peninsula/Country Club/Hamilton Branch Greenville		Helipad	Burlington Northern/Santa Fe	PG&E Powerhouse motorized watercraft,
East Quincy			Quincy Railroad. Burlington Northern/Santa Fe	Sierra Pacific Industries Sawmill. Plumas County Fairgrounds
Quincy		Quincy – Gansner Field Airport Hospital helipad	Quincy Railroad	Plumas County Fairgrounds.
Graeagle Delleker			Union Pacific Railroad	Plumas County Transfer Station Industrial uses on Delleker Road
City of Portola			Union Pacific Railroad	Plumas County borrow pit-Rocky Point Road
Communities				
Crescent Mills			Burlington Northern/Santa Fe	
Taylorsville Clio Beckworth		Beckwourth-Nervino Airport		Sierra Aggregates Quarry-Beckwourth-Calpine Road.
Vinton/Chilcoot La Porte			Union Pacific Railroad	
Rural Places				
Prattville East Shore			Burlington Northern/Santa Fe	Motorized watercraft
Canyon Dam			Burlington Northern/Santa Fe	Motorized watercraft
Indian Falls Keddie Meadow Valley Spanish Ranch Tollgate Bucks Lake Twain Belden Tobin Greenhorn Ranch Sloat/Cromberg			Union Pacific Railroad	Soper Pit mining operation
Blairsdan C-Road Mohawk Vista Lake Davis Little Grass Valley			Union Pacific Railroad	Motorized watercraft Twain Enterprises Quarry Tobin Quarry.
Master Planned Communities				
Lake Almanor West Gold Mountain Valley Ranch Whitehawk Ranch Grizzly Ranch				Sierra Pacific Industries/Sloat Pit and Riverside Rock Mining Operations.
				Motorized watercraft

Source: ESA, 2011.

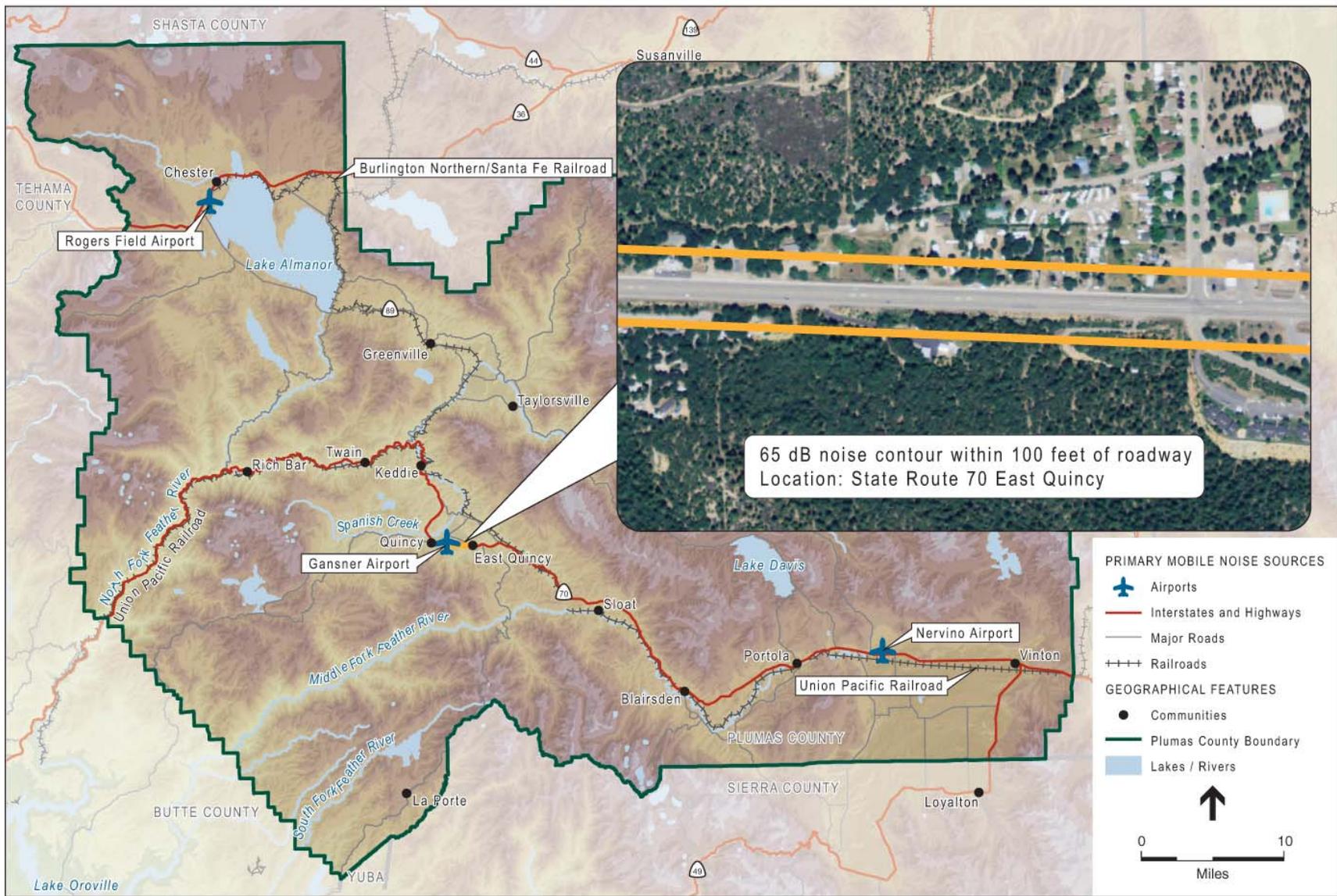


Figure 17. General Noise Location. ESA 2011

TABLE 3-2. EXISTING TRAFFIC NOISE LEVEL ESTIMATES.

State Route (SR)	Roadway Segment	Annual Average Daily Traffic			L _{dn}
		Autos	Trucks	Heavy Trucks	
36	Tehama County to SR 89	1,250	126	49	65 dB within 100 feet of roadway
36	SR 89 to Lassen County	1,550	214	83	70 dB within 100 feet of roadway
49	All segments	750	277	130	70 dB within 100 feet of roadway
70	Butte County to Junction SR 89	1,250	233	117	70 dB within 100 feet of roadway
70	Junction SR 89 to Portola	3,000	209	50	65 dB within 100 feet of roadway
70	Portola to Lassen County	3,000	258	100	70 dB within 100 feet of roadway
89	Sierra County to Junction SR 70	705	100	49	65 dB within 100 feet of roadway
89	Junction SR 70 to Junction SR 147	1,325	87	35	65 dB within 100 feet of roadway
89	Junction SR 147 to Junction SR 36	1,000	136	55	65 dB within 100 feet of roadway
147	Junction SR 89 to Lassen County	940	93	30	65 dB within 100 feet of roadway
284	Junction SR 70 to Frenchman	260	0	0	65 dB within 100 feet of roadway

Source: Plumas County Transportation Commission, 2010. Plumas County Regional Transportation Plan Environmental Impact Report.

Compared to more urbanized areas of California, traffic volumes along County roadways are fairly low, with many roadways experiencing fewer than 3,000 vehicles per year. Consequently, noise levels along these roadways are considered fairly low. As shown in Table 3-2, noise levels along local County roadways or major arteries are typically between an L_{dn} of 65 and 70 dB. An increase in traffic volumes means a comparable increase in sound energy. For example, ten times as many vehicles per hour results in ten times as much sound energy, resulting in a 10 dB increase and a perceived doubling of noise levels.

Corresponding with the information found in Table 3-2, noise contours for a segment of State Route 70 from Junction State Route 89 to the City of Portola are presented in Figure 17. It should be noted, that the contours shown in Figure 17 do not consider a variety of site specific topographic conditions, such as sound berms or vegetation barriers, that could serve to reduce the noise levels experienced at individual locations along the roadway.

Railroad Noise

Plumas County has two active rail lines used by the Union Pacific Railroad and the Burlington Northern/Santa Fe Railroad (see Figure 17). While both lines are primarily used for freight and local shipping and receiving, a portion of the Union Pacific line through the Feather River Canyon is recognized as a scenic route, with occasional chartered passenger trains. Daily traffic on the Union Pacific and Burlington Northern Santa Fe lines in the County consists of a limited number of trains per day. This volume creates minimal noise impacts in term of frequency.

Typically, noise associated with railroad operations is caused by diesel engines, switching operations and whistles. Generally, trains operate at low speeds through populated areas as a safety precaution, and noise levels are correspondingly lower at lower speeds. Switching operations usually occur at stations or depots.

Whistles are blown in advance of grade crossings. Generalized noise contours are provided below in **Table 3-3**.

TABLE 3-3. EXISTING RAILROAD NOISE CONTOURS

Contour	Mainline (Union Pacific)*	Spur line (BNSF)*
60 dB L _{dn}	600 feet	300 feet
65 dB L _{dn}	360 feet	180 feet
70 dB L _{dn}	200 feet	80 feet

Notes: *Distances from rail line

Source: Plumas County Transportation Commission, 2010. Plumas County Regional Transportation Plan Environmental Impact Report.

Airport Noise

Three public-use airports are located in the County: Nervino Airport in Beckwourth, Rogers Field Airport in Chester and Gansner Field Airport in Quincy (see Figure 17). Airport noise caused by aircraft depends primarily on the type of aircraft and the frequency and direction of flights, with specific noise events caused by aircraft flyovers, takeoffs and landings. Noise from aircraft warming up early in the morning can also be a significant source of noise from airports. Figure 18 and Figure 19 identify existing and projected noise levels associated with airport activity in Plumas County.

Stationary Noise Sources

Stationary or non-transportation noise sources in Plumas County are those caused by a variety of industrial or resource extraction-related activities, including manufacturing operations, power plants, lumber mills, aggregate mining and processing plants, race tracks, shooting ranges and car washes, to name a few. Additionally, noise from temporary wood and gravel processing operations varies significantly from site to site and is the result of factors including noise source location and surrounding natural conditions. For example, tree cover near the Collins Pine Lumber Mill in Chester reduces off-site noise whereas the Sierra Pacific Industries facility in Quincy, which is located in the middle of the American Valley, doesn't have tree cover to help reduce noise. Table 3-1 (above) identifies the primary stationary noise sources for the various community areas that comprise Plumas County.

Construction-related activities can also be a source of stationary (temporary) noise. Two types of short-term noise are emitted during construction. First, construction crew commutes and the transport of construction equipment and materials to construction sites would incrementally increase noise levels on access roads leading to the sites. Although there would be a relatively high single-event noise exposure potentially causing intermittent noise nuisance; for example, passing trucks at 50 feet would generate up to a maximum of 86 dBA L_{max}, the effect on longer term (hourly or daily) ambient noise levels would be minimal. Second, noise would be generated during excavation, grading and erection of buildings. Construction typically occurs in discrete steps, each of which has a distinctive mix of equipment and, consequently, distinctive noise characteristics. These various sequential phases would change the character of the noise generated on each site and, therefore, the noise levels surrounding these sites as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. **Table 3-4** lists typical construction equipment noise levels recommended for noise-impact assessments, based on a distance of 50 feet between the equipment and a noise receptor.

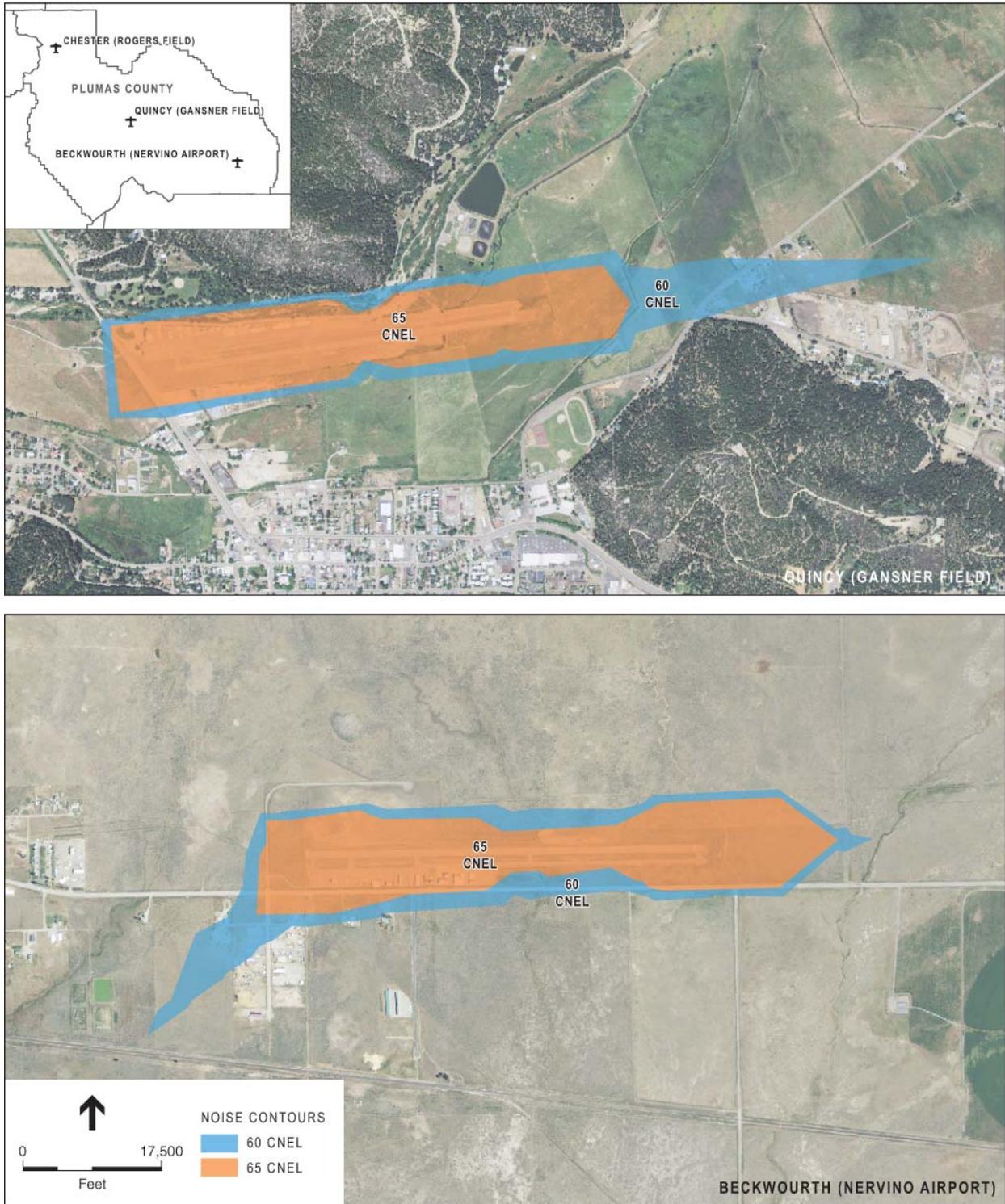


Figure 18. Gansner Field & Beckwourth (Nervino) Airport Noise Contours. ESA 2011



Figure 19. Chester (Rogers Field) Noise Contours. ESA 2011

TABLE 3-4. TYPICAL CONSTRUCTION EQUIPMENT MAXIMUM NOISE LEVELS

Type of Equipment	Range of Maximum Sound Levels (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Pile Drivers	81 to 96	93
Rock Drills	83 to 99	96
Jackhammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	68 to 80	77
Scrapers	83 to 91	87
Haul Trucks	83 to 94	88
Electric Saws	66 to 72	70
Portable Generators	71 to 87	80
Rollers	75 to 82	80
Dozers	85 to 90	88
Tractors	77 to 82	80
Front-End Loaders	86 to 90	88
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	85
Air Compressors	76 to 89	85
Trucks	81 to 87	85

Source: Bolt, Beranek and Newman, 1987.

Noise Principles and Descriptors

Noise is defined as unwanted sound. Sound, traveling in the form of waves from a source, exerts a sound-pressure level, referred to as sound level that is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing and 120 dB corresponding to the threshold of pain. Pressure waves traveling through air exert a force registered by the human ear as sound.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency but rather a broad band of frequencies varying in levels of magnitude or sound power. When all the audible frequencies of a sound are measured, a sound spectrum consisting of a range of frequencies spanning 20 to 20,000 Hz is plotted. The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the sound frequency-sound power level spectrum.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured with an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to low and extremely high frequencies as compared to the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). Frequency A-weighting follows an international standard methodology of frequency de-emphasis and is typically applied to community noise measurements. Selected representative noise sources and their corresponding A-weighted noise levels are shown in Figure 20.

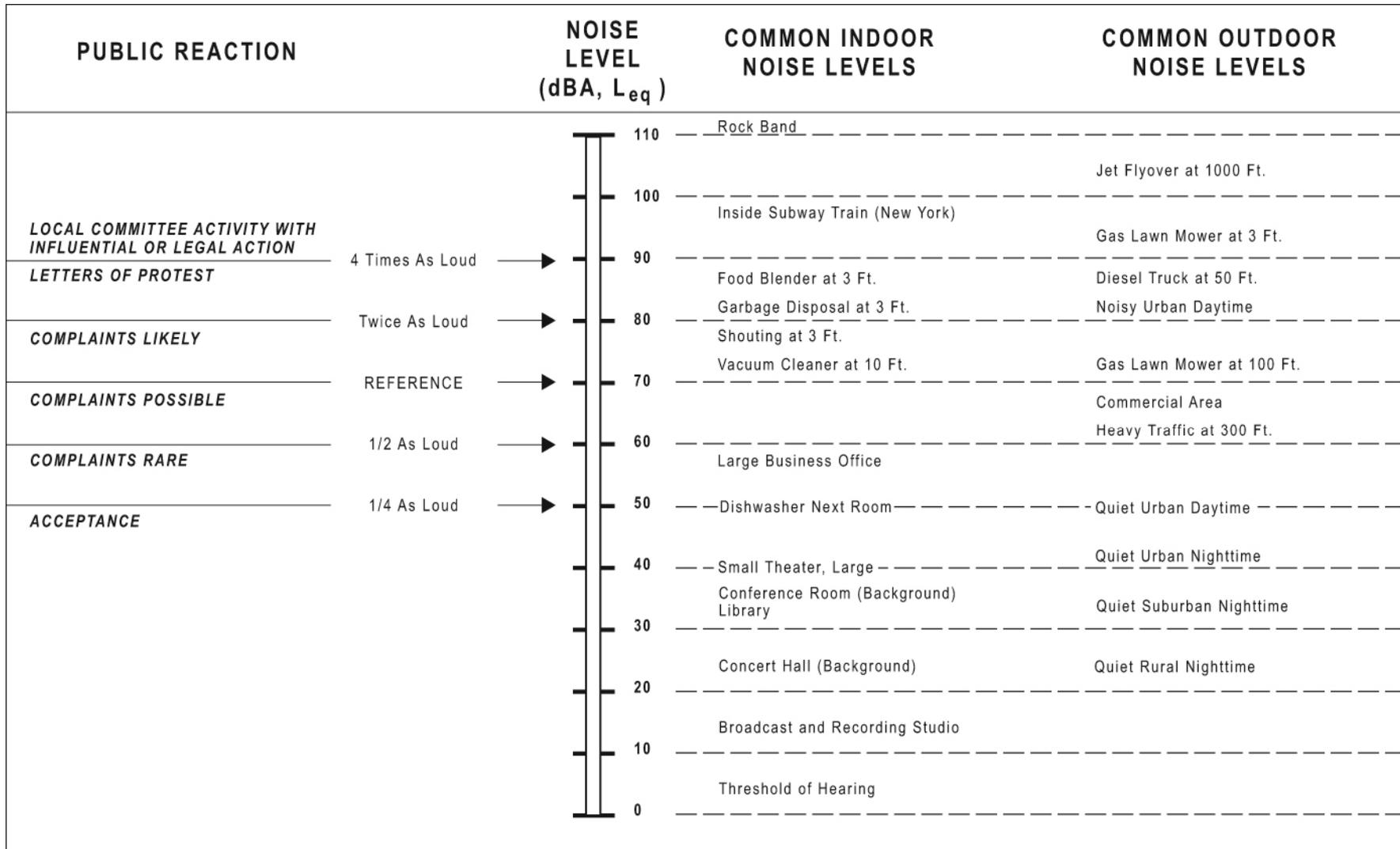


Figure 20. Selected Noise Sources and Their Corresponding A-weighted Noise Levels. ESA 2011

Noise Exposure and Community Noise

Noise level is a measure of noise at a given moment. The noise levels presented in Figure 20 describe the effects of short-duration noise levels. Noise exposure, meanwhile, is measured over a period of time. Noise exposure in a community, or community noise, comes from both background sources such as distant traffic noise and single-event sources such as a nearby vehicle passing by, an aircraft flyover, or a siren. Noise from background sources changes gradually throughout the day, while single-event noise fluctuates by the minute

or the second. Background noise is often not consciously identified by an individual, while single-event noise is generally identifiable. The total noise exposure of a community is the sum of background and single-event noise sources taken over a period of time.

In order to characterize the noise environment of a community, noise measurements are taken over a period of time. Given that noise in a community varies with time, several statistical descriptors are used to evaluate cumulative noise impacts. The most frequently used noise descriptors are summarized below. The DNL and CNEL descriptors are used specifically with 24-hour noise measurements and account for the variations in sensitivity to noise at different times of day.

Effect of Noise on People

The effects of noise on people can be placed into three categories:

- Subjective effects of annoyance, nuisance or dissatisfaction.
- Interference with activities such as speech, sleep or learning.
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Within those categories, individual thresholds of annoyance vary widely, and different tolerances to noise tend to develop based on an individual's past experiences with noise. There are no universal noise level thresholds that correspond to specific levels of annoyance and dissatisfaction.

However, an important factor of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so called "ambient noise" level. In general, the more a new noise exceeds the previous ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived.
- Outside the laboratory, a 3 dBA change is considered a just-noticeable difference.
- A change in level of at least 5 dBA is required before a change in human response would be expected.
- A 10 dBA change is subjectively heard as approximately a doubling in loudness and can cause adverse response.

These relationships occur in part because of the logarithmic nature of sound and the decibel system used to describe sound. The human ear perceives sound in a non-linear fashion; the decibel scale was developed based on logarithms to accurately characterize human sound perception. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather

logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

Noise Attenuation

Point sources of noise, including stationary mobile sources such as idling vehicles, attenuate or lessen at a rate between 6 dBA for hard sites and 7.5 dBA for soft sites for each doubling of distance from the reference measurement. Hard sites are those with a reflective surface between the source and the receiver such as parking lots or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the changes in noise levels with distance or the drop-off rate are simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface such as soft dirt, grass or scattered bushes and trees. In addition to geometric spreading, an excess ground attenuation value of 1.5 dBA per doubling distance is normally assumed for soft sites. Line sources, such as traffic noise from vehicles, attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement (California Department of Transportation, 1998).

Noise and Land Use Compatibility Standards

One of the primary purposes of a noise element is to help establish a land-use pattern that minimizes the exposure of residents of the community to excessive noise. The State of California General Plan Guidelines, published by the Governor's Office of Planning and Research, defines land-use compatibility guideline criteria for noise exposure. These criteria, shown in Figure 21, are the basis for most land-use compatibility criteria used by cities and counties.

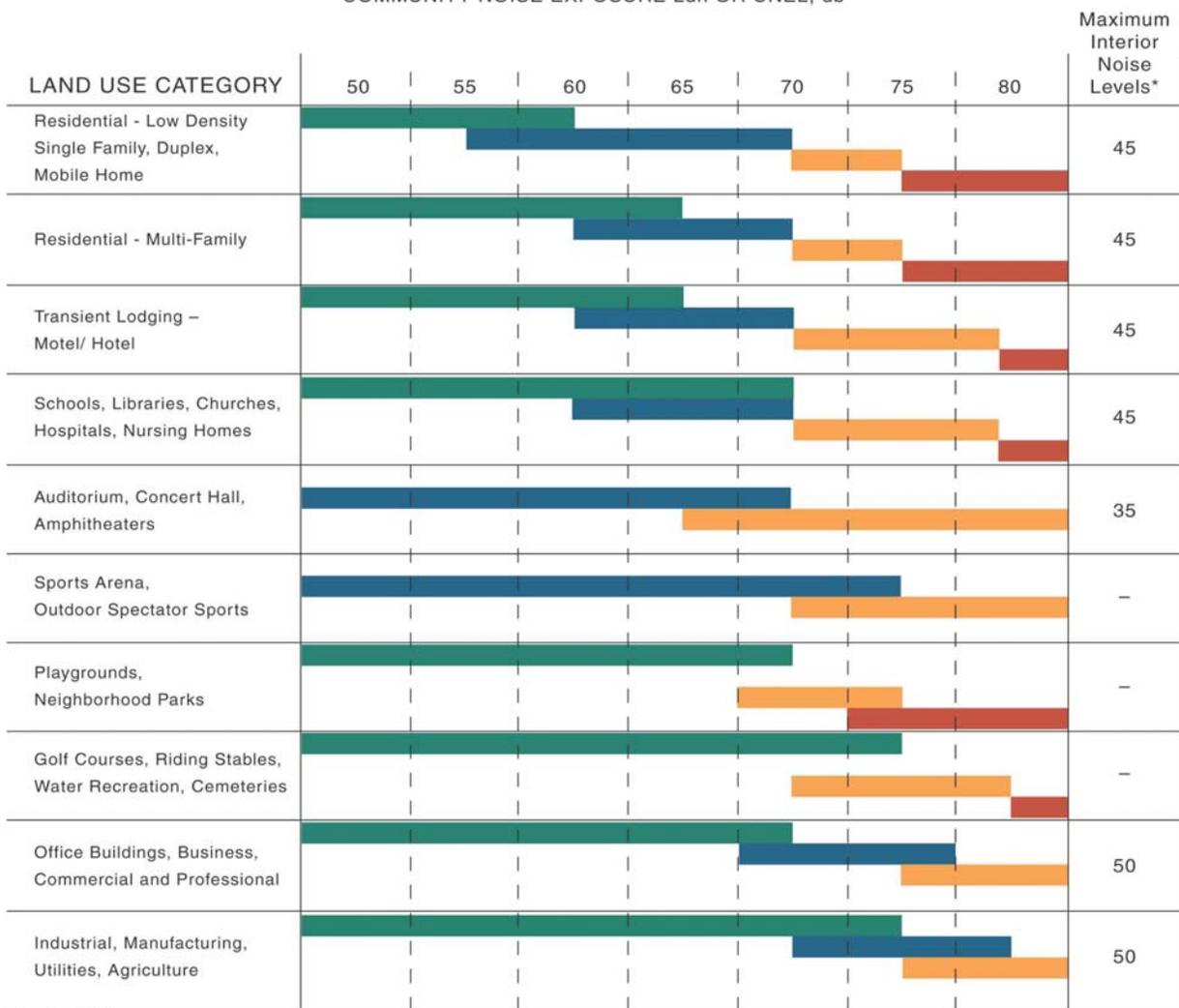
Evaluating new development projects for noise impacts should be based on a comparison of the noise compatibility standards identified in Figure 21 with noise contours and other available information. Fences, landscaping and noise insulation can be used to mitigate the hazards of excessive noise levels.

A standard construction wood frame house reduces noise transmission by 15dBA. Since interior noise levels for residences are not to exceed 45dBA, the maximum acceptable exterior noise level for residences is 60dBA without any additional insulation being required. In areas where CNEL noise levels exceed 60dBA, the need for additional noise insulation will vary depending on the land-use designation; adjacent uses; distance-to-noise source; and intervening topography, vegetation and other buffers. The California Buildings Standards code provides standards for insulation requirements which serve to attenuate noise.

Appropriate standards for short-term noise levels measured by L_{max} vary with the type of land use and the time of day. Acceptable daytime levels in industrial and commercial areas are typically based on a combination of health and nuisance considerations and typically do not exceed 85 dBA. In residential areas, standards are typically set to avoid the perception of nuisance, such as noise levels that block normal conversation. A noise level above 66 dBA requires raised voices to be heard at a distance of three feet. Indoor noise levels between 50 and 60 dBA can disturb sleep.

The perception of nuisance will vary with the sound level, frequency and fluctuation. It also depends upon the character of the sound, number of noise events, familiarity and predictability, and the attitude of the listener. CNEL and L_{max} are typically the basis for making nuisance determinations but other factors may be considered. For example, an

COMMUNITY NOISE EXPOSURE Ldn OR CNEL, db



*Due to exterior sources

- NORMALLY ACCEPTABLE**
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
- CONDITIONALLY ACCEPTABLE**
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
- NORMALLY UNACCEPTABLE**
New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirement must be made and needed noise insulation features included in the design.
- CLEARLY UNACCEPTABLE**
New construction or development should generally not be undertaken.

SOURCE: Bolt, Beranek, and Newman, Inc., 1974; State of California General Plan Guidelines, Office of Planning and Research, 1998; and ESA, 2008

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Figure 21. Community Noise Exposure. Bolt, Beranek & Newman, Inc., 1974

annual high school parade may exceed residential noise levels but might not be deemed a nuisance.

Sensitive Receptors

Some land uses are considered more sensitive to ambient noise levels than others because of the amount of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities typically involved. Residences, hotels, schools, rest homes and hospitals are generally more sensitive to noise than commercial and industrial land uses.

Legal Basis

The purpose of the noise element is to limit the exposure of the community to excessive noise levels. A noise element must identify and appraise noise problems in the community. The noise element shall recognize the guidelines established by the Office of Noise Control and local governments shall “analyze and quantify”, to the extent practicable, as determined by the legislative body, current and projected noise levels and the extent of noise exposure through actual measurement or the use of generally accepted noise modeling techniques. Technical data relating to mobile and point sources must be collected and synthesized into a set of noise control policies and programs that “minimizes the exposure of community residents to excessive noise.” Noise level contours must be mapped and the conclusions of the element used as a basis for land use decisions that minimize exposure of community residents to excessive noise. The element must include implementation measures and possible solutions to existing and foreseeable noise problems, if any. Furthermore, the policies and standards must be sufficient to serve as a guideline for compliance with sound transmission control requirements. The noise element directly correlates with the land use, circulation, and housing elements.

The noise element must be used to guide decisions concerning land use and the location of new roads and transit facilities as these are common sources of excessive noise levels. The noise levels from existing land uses, including mining, agriculture, and industrial plants, must be closely analyzed to ensure compatibility, especially where residential and other sensitive receptors have encroached into areas previously occupied by these uses.

Relationship to Other Elements

Noise levels are considered in the Land Use Element to avoid direct conflicts between neighboring uses and to establish patterns of land uses that minimize noise exposure. Policies in the Circulation Element related to road location, design and non-motorized transportation can affect traffic noise levels. Policies of the Housing Element and Conservation/Open Space Element also reflect noise considerations.

Definitions

Due to the highly technical nature of this topic, this element begins with some background information regarding noise and includes several key terms and concepts used in analyzing noise conditions. The following key terms are also provided from the Governor’s Office of Planning and Research “Guidelines for the Preparation and Content of the Noise Element of the General Plan” (2003 General Plan Guidelines, Appendix C).

Ambient Noise Level: The composite of noise from all sources near and far; the normal or existing level of environmental noise at a given location.

A-Weighted Sound Level (dBA): Sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network, which de-emphasizes very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. All sound levels in this report are A-weighted, unless reported otherwise.

Community Noise Equivalent Level (CNEL): The Average A-weighted noise level during a 24-hour day, obtained after adding 5 decibels to measurements taken in the evening from 7:00 to 10:00 pm and 10 decibels to measurements taken between 10:00 pm and 7:00 am.

Day/Night Noise Level (L_{dn}): The average A-weighted noise level during a 24-hour day, obtained after addition of 10 decibels to levels measured in the night between 10:00 pm and 7:00 am.

Decibel (dB): A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micropascals or 20 micronewtons per square meter.

Equivalent Noise Level (L_{eq}): The average A-weighted noise level during a measurement period.

Frequency (Hz): The number of complete pressure fluctuations per second above and below atmospheric pressure.

Intrusive Noise Levels: That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

L_{01} , L_{10} , L_{50} , L_{90} : The A-weighted noise levels that are exceeded 1%, 10%, 50% and 90%, respectively, during a measurement period.

Logarithms: The power to which a fixed number, called the base, must be raised in order to produce a given number, the antilogarithm.

L_{max} and L_{min} : The maximum and minimum A-weighted noise level during the measurement period.

Major Environmental Noise Generation Sources: Include, but are not limited to: State highways, freight on-line railroad operations, County airports and local industrial activities. These sources are defined as those above-noted land uses whereby the immediate community noise equivalent level (CNEL) meets or exceeds an exterior level of 60 decibels (dB).

Noise Sensitive Uses: Include residences, hospitals, convalescent homes, schools, and churches.

Values and Issues

Plans and Planning

The following plan and organization will affect or be involved in the implementation of noise-reduction strategies in Plumas County:

- ALUCP, as administered by the Plumas County Airport Land Use Commission. Goals

GOAL 3.1 Minimize the Exposure to Excessive Noise

N
3.1

To establish and maintain a quiet and healthy environment with land uses arranged and managed to reduce annoyance and complaints and minimize the exposure of community residents to excessive noise.

N

3.1.1 Primary Noise Sources

The County shall identify “major environmental noise generation sources” to include but not be limited to: State highways, primary arterials and major local streets, freight on-line railroad operations, County airports and local industrial plants, such as sawmills and other resource production facilities. These sources are defined as those above-noted land uses whereby the immediate CNEL meets or exceeds an exterior level of 60 dB.

N

3.1.2 Sensitive Land Uses

The County shall identify “noise sensitive areas” to include: residences, hospitals, convalescent homes, schools, and churches.

N

3.1.3 Noise / Land Use Compatibility Standards

When considering a discretionary project, the County shall refer to the Noise Land Use Compatibility Standards, as shown in Figure 21, as a guide to ensure compatibility of land uses. New development of noise sensitive land uses will not be permitted in areas exposed to existing or projected levels of noise which exceed the levels specified in Figure 21 unless the project design includes effective mitigation measures to reduce exterior noise and noise levels in interior spaces to the levels specified in Figure 21.

N

3.1.4 Construction Noise

The County shall seek to limit the potential noise impacts of construction activities on surrounding land uses. The standards outlined below shall apply to those activities associated with actual construction of a project as long as such construction occurs between the hours of 7 a.m. and 7 p.m., Monday through Friday and 8 a.m. and 5 p.m. on weekends or on federally recognized holidays. Exceptions are allowed if it can be shown that construction beyond these times is necessary to alleviate traffic congestion and safety hazards.

**TABLE 3-5. MAXIMUM ALLOWABLE NOISE EXPOSURE WITHIN PLANNING AREAS –
CONSTRUCTION NOISE**

Land Use Designation	Time Period	Noise Level (dB)	
		L _{eq}	L _{max}
Residential	7 am to 7 pm	55	75
	7 pm to 10 pm	50	65
	10 pm to 7 am	45	60
Commercial and Public Facilities	7 am to 7 pm		90
	7 pm to 7 am		75
Industrial	Any Time		90

Any adopted community plan area should refer to the land use designations that most closely correspond to the General Plan land use designations for similar development.

N

3.1.5 Development Surrounding Airports

The County shall require that development around local public-use airports be consistent with the noise standards contained in the approved Airport Land Use Compatibility Plan.

N

3.1.6 Noise-Generating Land Uses

The County shall protect important agricultural, commercial, industrial and transportation uses from encroachment by noise sensitive land uses. Temporary and portable industrial operations such as wood processing and gravel recovery operations must be considered on an individual basis and should be located near existing resource extraction or timber harvesting areas.

N

3.1.7 Noise Standard Exceptions

The County may allow greater exterior noise levels for some proposed new developments when it is not feasible to reduce noise levels in outdoor activity areas to acceptable noise levels specified in Figure 21 or less using practical application of the best-available noise reduction measures.

N

3.1.8 Noise Source Exemptions

The County shall consider the following noise sources to be exempt from the noise standards in this element:

- Emergency warning devices and equipment operated in conjunction with emergency situations, including sirens and generators which are activated during power outages. The routine testing of such warning devices and equipment shall also be exempt provided such testing occurs during daylight hours.
- Activities at schools, parks or playgrounds, provided such activities occur during daylight hours.
- Activities associated with County-permitted events and festivals.

N

3.1.9 Environmental Review Process

For noise-sensitive locations where noise contours do not exist, the County shall require a noise analysis and determine the appropriate noise abatement measures, to the extent practicable, consistent with the General Plan and State standards as part of the environmental review process for individual projects.

N

3.1.10 Noise Buffering

The County shall require noise buffering or construction treatments in new development that includes noise sensitive uses located near major streets, highways, airports, railroad tracks or other significant noise sources. Setbacks shall be the preferred method of noise abatement for residential projects. Noise walls shall be discouraged in favor of less-intrusive noise mitigation measures such as landscaping and berms.

N

3.1.11 Noise Study Requirements

When a discretionary project has the potential to generate noise levels in excess of general plan standards, the County shall require the preparation of a noise study. The noise study shall measure or model as appropriate, CNEL and L_{max} levels at property lines and, if feasible, receptor locations. Noise studies shall be prepared by qualified individuals using calibrated equipment under currently accepted professional standards and include an analysis of the characteristics of the project in relation to noise levels, all feasible mitigations and projected noise impacts. The Noise Guidebook published by the U.S. Department of Housing and Urban Development, or its equivalent, shall be used to guide analysis and mitigation recommendations. The noise or acoustic analysis should be the responsibility of the project applicant.

N

3.1.12 Agency Coordination and Information Sharing

The County shall establish and maintain coordination among other City, County and State and/or Federal agencies involved in noise abatement to reduce noise generated from sources outside the County's jurisdiction.

Noise Element Implementation Measures

Work Plan/Implementation Measures

The following table documents the implementation measures included with the General Plan to implement the goals and policies included in this element.

Implementation	Implement s what Policy	Who is Responsible	2010- 2015	2015- 2020	2020- 2030	On- Going
<p>1. Noise Generation Source Map and Noise Contour Map.</p> <p>The County shall prepare and maintain a map showing the major environmental noise generation sources as shown in Table 3-1, Table 3-2, and Table 3-3 and noise contours around those sources.</p> <p>Combine refinement of existing data in conjunction with area-wide General Plan Amendments to use in updating map.</p>	3.1.1	Environmental Planning and Health				
<p>2. Noise Ordinance.</p> <p>The County shall prepare, adopt, and regularly update a Noise Ordinance to implement the policies in this element. The ordinance should address the following:</p> <p>a. Establishment of noise sensitive protection areas around existing noise sensitive uses. Within these protection areas establish "limited" combining or overlay zones for all industrially zoned lands which would require mitigation of noise impacts which exceed 60 dB at the noise sensitive site or cause the interior noise level to exceed 45 dB or existing levels, whichever is greater, except where specifically altered based upon field measurements, environmental, social, economic or physical factors.</p> <p>b. Prohibition of new noise sensitive uses within the noise contour established around industrial noise generation sources in order to protect existing industrial areas.</p> <p>c. Requirements for new subdivisions to utilize normal residential design and construction techniques to</p>	3.1.2					

Implementation	Implement s what Policy	Who is Responsible	2010- 2015	2015- 2020	2020- 2030	On- Going
achieve interior noise levels of 45 dB by site location.						
d. Requirements that new established uses do not increase off-site noise to a level which exceeds the ambient noise level for the specific land-use area.						
e. Requirement for the preparation of a noise analysis/acoustical study, by a project applicant, including recommendations for attenuation, for all proposed projects which may result in potentially significant noise impacts to nearby sensitive land uses.						
f. Requirement for a noise analysis/acoustical study, by a project applicant, with recommendations for attenuation, for all proposed development within noise-impacted areas that may reasonably be expected to be exposed to levels that exceed the appropriate Land Use / Noise Compatibility Standards.						
g. Establishment of construction noise standards as a method of limiting the potential noise impacts of construction activities on surrounding land uses.						
3. a. Ensure that the policies and development standards of the County Zoning Ordinance and similar regulatory documents are consistent with the adopted Airport Land Use Compatibility Plans regarding noise mitigation and other site development standards by the establishment of an Airport Combining Zone or an Airport Overlay Zone.	3.1.5					
b. Adopt the Airport Land Use Compatibility Plans as part of the General Plan by reference.						

CIRCULATION ELEMENT (4)

Introduction

Circulation Context

As a largely rural County, circulation factors are vital in shaping the human geography and quality of life in Plumas County. The County is dependent on air and State highway networks to provide access to larger town and community centers that generate economic

activity and serve local residents. Within the County, highways along with County, City of Portola and Forest Service roads and the Plumas County Transit program provide mobility between communities and for rural/resource areas. Within communities, bicycle and pedestrian facilities, along with the roadway network, allow mobility while also helping to shape the character of each community.

The purpose of the Circulation Element is to establish transportation goals and policies, to guide transportation projects and services to achieve community goals, and to establish specific implementation measures to ensure that the transportation system in Plumas County adequately addresses the transportation issues and planned growth for the County through the year 2030. Transportation plans and policies included in this Circulation Element are intended to contribute to the achievement of the planned land-use pattern and to ensure that applicable standards can be achieved with build-out of the Land Use Element.

Plumas County is committed to protecting its communities in a manner that also addresses climate change. As part of the “Goals” section of this element, policies and implementation measures related to climate change are denoted with the symbol:



Setting / Existing Condition

Roadways

The state highway system provides the key inter-community roadway links within Plumas County. East-west access across Plumas County is provided by State Route (SR) 36 in the northern portion of the county and by SR 70 in the central/southern portions of the county, while SR 89 provides north-south access across the county. SR 147 serves the east side of Lake Almanor, while SR 49 and SR 284 provide access south towards Loyalton and north to Frenchman Reservoir in the far eastern portion of the county. County roads (and city roads in Portola) also provide important access, as do Forest Service roads. In total, there are 1,823 miles of public roadway in Plumas County, including 935 miles of US Forest Service Roads, 674 miles of county roadways and 182 miles of state highways.

Due to the relatively dispersed nature of development in Plumas County, traffic congestion is not an issue, with the exception of “bell times” at some school areas and some locations around Lake Almanor during the summer months. SR 70 in Quincy is the busiest highway in Plumas County, with a peak-month, typically August, Average Daily Traffic (ADT) volume of 12,200. Other relatively busy locations are on SR 36 in Chester (7,900 ADT) and SR 70 in Portola (7,800 ADT). Overall, peak month volumes



Figure 22. Highway 89, Graeagle, CA. Photo Credit: Coleen Shade

on Plumas County state highways have declined by 12 percent over the last 10 years. This decline has been seen in all regions of the County. Caltrans counts of all trucks countywide have declined by 15 percent since 1992. However, the number of the largest trucks (5 axle and above) has climbed by 45 percent over this same period, particularly along SR 70.

Public Transit Services

Several public transit deviated fixed-routes are offered in the County. Buses provide a total of fifteen daily round trips within Quincy, three daily round trips between Quincy and Portola as well as three daily round trips between Chester and Quincy. Connections are available to Lassen County transit service at Hamilton Branch at the north end of Lake Almanor. This service carries approximately 54,000 passenger-trips annually and is available to all, with much of the ridership generated by human service agency clients and Feather River College Students. Unfortunately, transit service to Chico and Reno were recently eliminated due to lack of ridership.

Rail

Although there is no passenger rail service in Plumas County, there are two active freight rail operations. Union Pacific Railroad operates a line connecting Roseville, CA to the west with Salt Lake City, Utah to the east. Burlington Northern Santa Fe (BNSF) Railroad operates track from Keddie and along Lake Almanor into Lassen County and Oregon. An active railroad spur connects the Sierra Pacific Industries mill in Quincy with the Union Pacific Railroad above the American Valley. The Almanor Railroad spur serving the Collins Pine mill in Chester was recently abandoned and dismantled, offering a potential future recreational trail site.

Airports

While there are no commercial airports in Plumas County, there are three publicly owned airports: Gansner Field Airport in Quincy, Rogers Field Airport in Chester and Nervino Airport in Beckwourth. As a whole, these airports serve approximately 44,000 operations (takeoffs plus landings) annually. In addition to the airports, the Plumas District Hospital in Quincy, the Indian Valley Health Care District in Greenville and the Eastern Plumas Hospital in Portola have heliports. The closest commercial airport is Reno/ Tahoe International Airport in Reno, Nevada.

Bicycle and Pedestrian Facilities

There are many hiking trails in Plumas County and planning for future bicycle and pedestrian facilities along main travel corridors and in communities is ongoing. A key new element is the Feather River College/Gansner Pathway in the Quincy area.

Values and Issues

This Circulation Element addresses key related policy issues, including the following:

- A lack of adequate and consistent **funding to improve and maintain the transportation system**. If roadway maintenance projects are delayed due to limited funding, routine maintenance can turn into much more costly repairs. The fate of certain transportation revenue sources important to Plumas County, both from State and Federal funding sources, require Congressional action to be continued or will end. Availability of State and Federal funding for transportation improvements is extremely limited. This requires that improvements be carefully planned to minimize necessary costs and that new developments address their financial impacts on circulation systems. At a local level, it is important that

policies allow for funding of appropriate circulation improvements as part of the development process.

- The concept of “**complete streets**” to address both environmental and mobility goals which reflect roadway corridors that need to serve, as appropriate, travel by all modes rather than by motor vehicles only. Reflecting the importance of this concept, in 2008 the state enacted the California Complete Streets Act which requires the “complete streets” concept be included in General Plan Circulation Elements throughout the state.
- Transportation issues that have substantial local and global **impacts on the environment**, such as water quality, air quality, noise and overall “livability.” At a much broader scale, transportation generates a very significant proportion of overall GHG emissions. This Circulation Element includes policies that address these important issues.
- **Plumas Transit** service enhancement. Although it serves the needs of many residents, transit in Plumas County is relatively infrequent and therefore less appealing to those with ready access to a private automobile. It will be important to enhance transit service in the future, particularly to provide regional connections to more populated areas as the population ages and grows.
- The lack of **bicycle and pedestrian facilities**, particularly within communities. In addition, the community needs Class II bikeways or wider roadway shoulders along roadways between communities. Without these improvements, the conditions are unsafe for cyclists and non-auto travel is discouraged.
- **Operational issues** associated with limited mountain highways, including the need for snow removal, truck climbing lanes, pullouts and safety improvements, such as providing wider shoulders. Although these types of improvements are needed to maintain the safety and efficiency of the roadways, construction can be limited by rugged topography and may have a significant environmental impact.

Legal Basis and Requirements

The Circulation Element is prepared pursuant to Section 65302(b) of the California Government Code. It is required to address the location and extent of existing and planned transportation routes, terminals and other local public utilities and facilities. The law emphasizes that the Circulation Element be coordinated with the Land Use Element. In addition, AB1358 requires that, as of January 2011, all circulation-element updates must plan for the development of multimodal transportation networks (“complete streets”).

Relationship to the Other Plan Elements

Circulation issues impact or are impacted by every other element of a General Plan. Plumas County’s circulation network must accommodate the future travel demands resulting from the Land Use Element and contribute to the attainment of desired land-use patterns. The Circulation Element must also support the strategies of the Housing Element, Economic Element, and Health and Safety Element. As a key potential generator of environmental impacts, the Circulation Element must also consider effects on the Noise Element and Conservation Element. Also, circulation issues have an important correlation with public health issues. In particular, circulation strategies that encourage bicycling and walking are important in promoting physical fitness and healthy lifestyles.

TABLE 4-1 CIRCULATION POLICY SUMMARY

Policy Direction	General Plan Elements – Location Addressed
Major thoroughfares and transportation routes	Agriculture and Forestry (Section 8.13)
Local public utilities and facilities	
Transit	
Bicycles and pedestrians	Conservation and Open Space (Section 7.8)
Truck routes	Agriculture and Forestry (Section 8.13)
Railroads	
Airports	Land Use (Section 1.5)
Parking facilities	
Transportation system management	
Air pollution from motor vehicles	Land Use (Sections 1.1) Conservation and Open Space (Section 7.9 and 7.10)

Definitions

Average Daily Traffic: The number of vehicles, actual, estimated, or projected, traveling a road segment per day.

Community Area: Any Community Plan Area, Specific Plan Area, Special Plan Area, Mixed Use/Master Project Area, Community Center or Residential Center.

Complete Streets: Roadway corridors designed and operated to enable safe, attractive and comfortable access and travel for all travel modes.

Bicycle Facility Classifications:

Class I Bikeway – A facility that is physically separated from a roadway and designated for the use of bicycles and often other non-motorized travel modes.

Class II Bikeway (Bicycle Lane) – A facility featuring a striped lane on the paved area of a road for preferential use by bicyclists, typically located along the edge of the paved area outside of the motor vehicle travel lanes.

Class III Bikeway (Bike Route) – A bicycle facility identified only by guide signing and/or pavement markings (“sharrows”), typically indicating a preferential route connecting other bikeway facilities.

Cul-de-sac: A short street or alley with only a single means of ingress and egress at one end and with a large turnaround at its other end.

Degradation of LOS: Degradation of LOS occurs when the level of service is reduced due to actual or projected traffic impacts.

Level of Service (LOS): Denotes the ease with which a motorist moves through a roadway element. It is a measure of convenience, not a measure of safety or consistency with design standards. Levels of service are divided into categories “A” through “F,” which reflect delays and operating speeds dependent on road characteristics, terrain, traffic flow, pedestrian/bicycle activity, and road purpose. LOS categories are presented below:

LOS A	Free flow conditions; Low volumes; High operating speed; Uninterrupted flow; No restriction on maneuverability; Maintenance of drivers’ desired speeds; Little or no delays.
LOS B	Stable flow condition; Beginning of operating-speed restrictions.
LOS C	Stable flow, but speed and maneuverability restricted by higher traffic volumes.
LOS D	Approaching unstable flow; Low speeds.
LOS E	Lower operating speeds; Volume at or near capacity; Unstable flow.
LOS F	Forced flow conditions; Low speeds; Volumes above capacity; Stoppages for long periods because of congestion.

Local Road: Can be public or private and have a primary role of providing access to individual parcels (e.g., residences, businesses or other abutting properties). Through movement is secondary to the access function and is discouraged by both design and traffic control to encourage low vehicle speeds.

Major Arterial: Has a key role in providing high mobility of inter-regional and intra-regional travel. Efforts are made to minimize access points in order to aid through travel flow.

Major Collector: Generally serves the more important intra-county travel corridors and traffic generators not served by major or minor arterials.

Minor Arterial: Provides more land access than do major arterials, while still providing adequate mobility for accommodating longer distance trips.

Minor Collector: Gathers traffic from local roads and provides connectivity to higher class major collectors and major and minor arterials. Minor collectors may have Class II bike lanes.

Major Thoroughfare: Major thoroughfares are defined in Plumas County as all arterials and major collector roads.

Multimodal: Facilities, programs or policies that include more than one mode of transportation.

Plumas County Transportation Commission: Established under State law to guide transportation funding and project decision-making throughout the County. The Plumas County Transportation Commission controls funding for transit and funding for the State Transportation Improvement Program (STIP). The Plumas County Transportation Commission Board is made up of representatives from both Plumas County and the City of Portola.

Private Road: Privately owned, and usually privately maintained, motor vehicle access that is not dedicated as a public street.

Project Specific Improvements: Improvement requirement imposed that applies specifically to the project being considered, based on the project's traffic generation, its base zoning district and the condition of the road affected by the project. The purpose of project specific improvements is to promote safe ingress and egress and to ensure that the project's specific impact to the road system is mitigated.

Public Road: A road dedicated and established for public use. Public roads in Plumas County include highways in the State-maintained system, roads accepted into the County-maintained system, roads maintained by a County Service Area or Community Services District, and roads used by the public but for which no public agency has the responsibility of maintenance.

Resource Transportation Routes: Resource transportation routes are those roads that provide primary access to timber and mining resource areas.

Roundabout: A circular roadway intersection where traffic circulates counterclockwise around a center island and entering drivers must yield to traffic circulating within the roundabout.

Signal Controlled Intersection: An intersection with traffic controlled by a mechanical or electrical signal device.

Stop-Sign Controlled Intersection: An intersection with traffic controlled by stop signs on one or more approaches.

Traffic Impact Fees (TIF): Fees charged by the County for road improvements to offset cumulative impacts caused by land development. The amount of fees charged corresponds to the need for improvements attributable to a particular development. The monies are not used for general maintenance but for design studies, engineering and capital improvements.

Transit Service Efficiency: Several common measures of the efficiency of transit service, including passenger trips served per vehicle-hour of service, the cost per vehicle-hour of service, the cost per passenger trip served and the “farebox return ratio” which is defined as the ratio of total fare revenues to total operating costs.

Vehicle-Mile of Travel: A common measure of overall traffic activity, reflecting one mile of travel by one vehicle.

Plans and Planning

Regional Transportation Plan

The Plumas County Regional Transportation Plan (RTP) is a document prepared by the Plumas County Transportation Commission (PCTC), as required by state law. It considers a 20-year planning horizon and is updated every five years, with the most recent update adopted on October 20, 2009. The Regional Transportation Plan presents goals and policies related to transportation, an assessment of current and forecast conditions, and a financially constrained program of transportation projects. It is important in the implementation of circulation plans throughout Plumas County, as Federal and State funding must be consistent with the Regional Transportation Plan.

- Plumas County Regional Transportation Plan
- Plumas County Airport Land Use Compatibility Plan
- Plumas County Bicycle Transportation Plan
- Plumas County Trails Master Plan
- National Forest System Roads

Goals

GOAL 4.1 Adequate Roadway System

CIR 4.1	Develop and maintain a roadway system that provides access and mobility for Plumas residents, visitors and businesses and that adequately serves existing and planned land uses while maintaining the region's character and providing safe and reliable infrastructure.
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Policies

CIR

4.1.1 Roadway Classification System

The County shall maintain and annually update a road classification and condition status report which identifies road standard class and existing deficiencies.

CIR

4.1.2 Level of Service Standard

The County shall maintain a minimum Level of Service standard of LOS D in areas for which Community Plans or Specific Plans have been prepared, and LOS C in other areas of Plumas County. For signalized intersections, LOS standards should be applied to the total intersection LOS. For roundabouts and stop-sign controlled intersections, Level of Service standards shall be applied to the worst approach Level of Service.

CIR

4.1.3 Required Roadway Access

The County shall require that every parcel created and all developments are provided with roadway access that will accommodate the permitted density and intensity of development. **Table 4-2** presents general roadway standards. The requirements for road standards shall be based on the planned density of development and projected traffic volumes as determined by the general plan designation of areas to be served, and the ability to accommodate emergency response and safe ingress/egress. Uses in industrial areas served by roadways that cannot accommodate all types of industrial uses shall be limited to those uses consistent with road conditions unless conditions are improved.

CIR

4.1.4 Developer Participation in Roadway Improvements

The County shall require all developments which are directly benefited by a precise planned road to dedicate land and/or pay a sum of money equal to the prorated share of the benefit received by such roadway and/or to construct a portion or all of such roadway and provide for on-going maintenance.

CIR

4.1.5 Developer Coordination with Roadway Plans

The County shall require all developments along the route of planned roadway alignments to incorporate them in their internal roadway systems and require developments near planned roadway alignments to provide for future access to them.

CIR

4.1.6 Roadway Elements Eligible for Developer Fee Programs

The County shall expand the ability to fund roadway improvements from development by defining “major thoroughfare” to include only arterials and major collector roads in Plumas County.

CIR

4.1.6 General Plan Road Standards

The following road standards shall be applied to the designated planning areas:

Town and Community Planning Area and Master Planned Communities: A paved roadway maintained year-round including snow removal by the State, County or private association. All developments shall be required to provide a paved internal roadway system. A parking lot is an internal roadway system. All development shall make provisions for access to any adjacent lands that are not otherwise served by or shown on a planned roadway alignment to be served by another paved public roadway.

Planned roadway alignments and roads serving commercial and industrial parcels shall be paved before issuance of building permits for those parcels. All commercial and industrial parcels shall be served by a structural fire protection entity and shall be within reasonable service distance from existing fire protection facilities and as determined by the appropriate area.

Areas Outside Planning Area: All developments shall have legal access by means of Forest Service Roads or private road easements. All developments shall provide a graded roadway that provides access to each parcel created. If the roads are not in existence, they will be required to be provided before development. Development that exceeds these standards may be permitted but will not entitle the developer to the population densities in Town and Community Planning areas.

Resource Transportation Routes: Resource transportation routes are those roads that provide primary access to timber and mining resource areas.

GOAL 4.2 Complete Streets



CIR 4.2

The County shall seek to develop or upgrade all State Highways, arterials and collectors as Complete Streets that accommodate all travel modes with appropriate strategies based on planning area designation.

Policies

CIR

4.2.1 Complete Street Design

The County shall support the elements of Complete Streets design, including the following:

- Balanced design that accommodates walking, cycling, transit, driving, parking, snow removal, drainage, storm water management, emergency vehicle access and deliveries
- Appropriate street design that relates well to the uses bordering the street and allows for contiguous development
- Interconnected network of facilities that increases travel route options and allows short trips to be completed off arterial roadways
- Appropriate pedestrian and bicycling facilities that promote safety and maximize access
- Well-designed and low-impact street lighting where appropriate within community areas
- Appropriate landscaping that benefits the surroundings and encourages travel speeds compatible with all uses and adjacent land uses
- Sustainable design that minimizes runoff of erosion, responds to the local climate and conserves natural resources
- Well-maintained facilities

- Design that encourages the use of cul-de-sacs over alternative designs, such as t-turnarounds.

CIR

4.2.2 Support of Multimodal Projects

The County shall support and promote plans that propose multimodal use of the highway system. Encourage the use of roundabouts over stoplights where feasible.



GOAL 4.3 Transit

CIR 4.3	Enhance the mobility of Plumas County residents and visitors through improvements in public transit services and improve awareness of public transit options.
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Policies

CIR

4.3.1 Enhancement of Transit Service

The County shall strive to increase transit service availability, efficiency and convenience for all residents, employees and visitors to the degree feasible with available resources countywide.

CIR

4.3.2 Expansion of Transit Service to Urban Areas

The County shall encourage the expansion of public transit services to nearby urban areas in order to reduce automotive dependency, ease peak seasonal traffic and encourage additional local transit ridership.

CIR

4.3.3 Improvement of Bus Stops

The County shall coordinate with the School Districts to develop new attractive, snow-free, accessible and pedestrian-friendly bus stops, with benches and shelters where warranted.

CIR

4.3.4 Ridesharing

The County shall promote ride sharing programs, including providing a web site or message board for coordinating shared rides and hiring or designating a rideshare coordinator to develop and implement ridesharing programs. The County shall encourage festival and other special-event organizers to promote carpooling among event attendees, through coordination with web-based carpool matching services and through parking incentives to carpooling patrons, with four or more persons per vehicle for on-site parking.

GOAL 4.4 Bicycle and Pedestrian



CIR 4.4

Encourage non-auto transportation throughout Plumas County by providing a safe, comprehensive and integrated system of facilities for pedestrians, cyclists and other non-motorized modes of transportation.

Policies

CIR

4.4.1 *Bicycle and Pedestrian Facility Network*

The County will support or consider establishing a network of multi-use trails, sidewalks and lanes to facilitate safe and direct off-street bicycle and pedestrian travel and will provide bike racks where appropriate.

CIR

4.4.2 *Bicycle and Pedestrian Facilities in New Development*

The County will amend the County Code to include standards for safe pedestrian and bicyclist accommodations, including:

- “Complete Streets” policies that foster equal access by all users in the roadway design
- Bicycle and pedestrian access internally and in connection to other areas through bikeways and pedestrian paths
- Safe access to public transportation and other non-motorized uses through construction of dedicated paths
- Safe road crossings at major intersections, especially for school children and seniors
- Adequate, convenient and secure bike parking at public and private facilities and destinations in all urban areas
- Requiring new development and redevelopment projects to include bicycle facilities, as appropriate with the new land use, including bicycle racks or covered, secure parking near the building entrances

CIR

4.4.3 *Inclusion of Bicycle and Pedestrian Access in New Transportation Projects*

The County shall include safe and convenient bicycle and pedestrian access, where feasible and warranted, in all transportation improvement projects. Provide separated, safe and secure bicycle and pedestrian access as part of any roadway improvement work, where feasible and warranted. Ensure that access for pedestrians and bicyclists is available during construction.

GOAL 4.5 Aviation and Rail

CIR 4.5

Protect the present air and rail transportation facilities to ensure that local policies, developments and other actions do not restrict utilization and maintenance, preserve the viability and utility of existing facilities, and prevent incompatible land uses.

Policies

CIR

4.5.1 Compatibility of Airports with Adjacent Land Uses

The County shall, through the Airport Land Use planning process, preserve the viability of airports through control of inappropriate land uses within the zone of influence.

CIR

4.5.2 Encouragement of Maintenance, Improvement and Use of Railroad Facilities

The County shall support efforts to expand privately-owned rail service and support preservation of railroad rights-of-way in the County for future uses.

GOAL 4.6 Environmental Enhancements / Climate Change



CIR 4.6

Protect and enhance the environment, both locally and globally, in the development and maintenance of the transportation network.

Policies

CIR

4.6.1 Minimizing of Environmental Impacts

To the extent practicable, the County shall avoid, minimize and/or mitigate impacts to the environment arising from transportation-related projects and programs. The County shall continue to require environmentally sound practices for transportation facility construction and maintenance. New roads, improvements to the existing road system, and all trails and pathways shall be located, constructed and maintained in a manner that minimizes impacts on the environment to the degree feasible.

CIR

4.6.2 Paving of Additional Roadways to Improve Environmental Quality

The County, in order to improve air and water quality, shall review roadway standards to require pavement of additional roadways where warranted based on traffic volumes and characteristics of surrounding areas.

CIR

4.6.3 GHG Reductions

The County shall consider GHG emissions as part of every transportation capital-improvement project decision and aggressively pursue projects that have positive GHG impacts and that are realistic given the rural nature of Plumas County, including transit programs, ridesharing programs, bicycle and pedestrian improvements, driver information strategies and maintenance of existing roadways to reduce vehicle emissions.

CIR

4.6.4 *Climate Action Plan*

The County shall establish a Plan that identifies strategies for increasing energy efficiency, carbon sequestration, GHG emissions reductions, and land use and transportation strategies that are consistent with the State of California's Global Warming Solutions Act.

Circulation Element Implementation Measures

Work Plan/Implementation Measures

The following table documents the implementation measures included with the General Plan to implement the goals and policies included in this element.

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
1. Complete and adopt an updated Bicycle and Pedestrian Transportation Plan focusing on non-motorized travel within and between communities and use it to guide funding decisions to enhance the network.	4.4.1 4.4.3	PCTC				
2. Revise the County Code to define a “major thoroughfare” as a County Road identified as a principal arterial, minor arterial or major collector.	4.1.6	BOS				
3. Update roadway classification and condition status report.	4.1.1	Public Works				
4. Apply Complete Street design criteria in reviewing transportation and development projects.	4.2.2	Planning, Public Works				
5. Update the Plumas County Transit Development Plan.	4.3.1 4.3.2	PCTC				
6. Prepare a Countywide Bus Stop Improvement Plan.	4.3.3	PCTC				
7. Adopt a policy requiring ridesharing incentive programs as part of special event permitting	4.3.4	Planning				
8. Amend the County code to require consideration of bicycle and pedestrian facilities in new developments.	4.4.3	Planning				
9. a. Ensure that the policies and development standards of the County Zoning Ordinance and similar regulatory documents are consistent with the adopted Airport Land Use Compatibility Plans regarding noise mitigation, land use restrictions, building height, lighting and other site development standards, by the	4.5.2	Airport Land Use Commission				

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
establishment of an Airport Combining Zone or an Airport Overlay Zone. b. Adopt the Airport Land Use Compatibility Plans as part of the General Plan by reference.						
10. Review roadway standards to require paving of additional roadways to reduce air and water pollution.	4.6.3	Public Works				

ECONOMICS ELEMENT (5)

Introduction

The Economics Element of the Plumas County General Plan is intended to articulate a set of long-range goals for economic development within the County and to provide a framework of policies that the County will enact in order to help achieve

those goals. In addition, the Economics Element includes a number of Implementation Measures which are not intended to be prescriptive but to provide examples of actions that the County may take in order to help achieve the stated goals.

The Economics Element aims to establish the County's commitment to economic vitality; to articulate the types of economic activity that the County seeks to retain, expand and attract to the County; and to outline steps that the County should take to protect and enhance local assets that are critical to the health of the local economy.

Plumas County is committed to protecting its communities in a manner that also addresses climate change. As part of the "Goals" section of this element, policies and implementation measures related to climate change are denoted with the symbol:



Figure 23. Feather River College Junior Rodeo
Photo Credit: Carol Dobbas

Setting / Existing Condition

Plumas County was historically a resource-based economy, exporting gold, timber, water and hydropower to benefit the surrounding regions. Agriculture, especially ranching, has also been a relatively consistent and dependable industry in the County's valleys. Increasingly in the last several decades, Plumas County's natural environment has made the County an attractive location for recreation, second homeownership and retirement living. Jobs in the government sector now represent the largest single-industry sector in Plumas County. Historically, rail transportation played an important role in the County's development; it continues to serve as an important transportation mode, particularly for commercial goods, as well as a draw for tourists interested in the County's railroad history.

Local Demographic Trends

Population

Plumas County's population is expected to grow by only 0.7 percent annually through 2050, lagging the projected growth of the state as a whole. The number of households, however, decreased by nearly 4 percent (817 persons) in Plumas County from 2000 to 2010, according to the 2000 and 2010 U.S. Census surveys. By 2011, the State Department of Finance estimated that Plumas County's population was up slightly, at 20,025 persons. The number of persons under the age of 18 years has fallen, and the number of persons age 65 and older has increased in Plumas County since 2000. If this aging trend continues, which would be consistent with the projections for the state as a whole, it may have myriad implications for the General Plan in relation to such topics as

the type and location of housing desired by local residents, public services and facilities needs, and demand for retail and services.

Housing

In terms of housing, the City of Portola Incorporated Area and Plumas County as a whole maintained high homeownership rates from 2000 through 2009. In 2000, the Unincorporated Area consisted of 72 percent homeowners and 28 percent renters, while Plumas County as a whole had 70 percent homeowners and 30 percent renters. These percentages were consistent through 2009. *[Need to verify]*

Plumas County can anticipate lingering effects from the collapse of the housing bubble, including housing foreclosures and vacancies, a slow recovery in property values that will impair project feasibility, reduced property tax revenues from new development, and the pressure to reduce development impact fees and other costs that developers face. The General Plan will need to balance short-term concerns about easing burdens on developers with long-term desires to promote high quality new development and maintain high public service and infrastructure standards so that new development is a long-term asset to the County.

Education

The educational attainment level data indicates that a higher percentage of residents have at least a high school degree in the Unincorporated Area and Plumas County than in California as a whole, but that a lower percentage of local residents have a Bachelors degree or higher in the Unincorporated Area and Plumas County than in California as a whole. In the Unincorporated Area, as of 2000, about 12 percent of the population age 25 and over had education less than a high school degree and 88 percent had a high school degree or higher. Detailed information on the level of education attainment shows that 18 percent of the Unincorporated Area population had a Bachelors degree or higher and six percent had a Graduate or Professional degree.

Employment Trends

For the 1990 to 2010 time period, total annual employment in Plumas County declined slightly, from a 1990 figure of 6,460 to a 2010 total of 6,370; however, this belies the fact that Plumas County employment grew between 1990 and 2005 (7,320 jobs), and then posted a sharp decline between 2005 and 2010. According to analysis of the data by the Alliance for Workforce Development, between 2005 and 2010, the biggest gains in employment, in order, were in State Government, Education and Healthcare, and Local Government.¹ The largest declines, in order, were in Construction; Manufacturing; Trade, Transportation & Utilities; Leisure and Hospitality; Financial Activities; and Farm employment.²

Other notable trends between 1990 and 2010, based on data compiled by the Alliance for Workforce Development, include:

¹ Note that 2010 Local Government includes employment in a range of agencies that perform the following services: Health Care & Social Assistance (32% of total); Educational Services (31%); Executive, Legislative, and General (17%); Justice, Public Order & Safety Services (7%); Trade, Transportation & Utilities (5%); Construction (3%); Water, Sewage, and Irrigation Systems (3%); Miscellaneous (2%).

² Alliance for Workforce Development, October 2011, based on data from Ca. Employment Development Department, Current Employment Statistics.

Notable Increases in Share of Jobs in County

	1990	2010
▪ Local Government	22%	33%
▪ Educational & Health	8%	6%
▪ Business & Professional	4%	3%

Relatively Stable in Share of Jobs in County

▪ Trade, Transportation, Utilities	15%	15%
▪ Leisure & Hospitality	13%	13%
▪ Farm	1%	1%
▪ State Government	2%	2%
▪ Other Services	2%	2%

Notable Declines in Share of Jobs in County

▪ Manufacturing	7%	11%
▪ Construction	4%	5%
▪ Mining & Logging	1%	4%
▪ Federal Government	6%	10%

Plumas County Non-Employers

Non-employers are businesses owned by self-employed people who do not have any employees. According to data furnished by the Alliance for Workforce Development, in 2009 Plumas County had 1,740 non-employers. A total of 303 non-employers were involved in Construction, accounting for the largest number. Next was Other Services, with 247, followed by Professional, Scientific, and Technical, with 235. Other notable groups of non-employers included Retail Trade (166), Real Estate Rental and Leasing (152), and Health Care and Social Assistance (151).

The number of non-employers in 2009 was the same as the number of non-employers in 2002. Plumas County non-employers had \$64.5 million in receipts in 2009. This is a significant amount of economic activity, when considered in light of the fact that wages paid to employees in all Plumas County industries were approximately \$120 million, and countywide taxable sales were approximately \$175 million in 2009.³

Labor Force and Unemployment

As shown in the table below, Plumas County's labor force has remained within a fairly narrow band ranging from a low annual average of 9,760 in 2000 to a high of 10,440 in 2004. The labor force declined after 2004, falling to 9,820 in 2008, before starting to climb slightly in 2009 and rising to 10,040 by 2010. Although the labor force increased slightly from the 2000 number, and was just 400 below the 2004 peak, this has occurred as the number of jobs countywide has declined. As a result, unemployment rates are at a high for the period. The average annual unemployment was 16.8 percent in 2010, compared to 7.1 percent in 2000. Because full-year data are not available yet for 2011, a comparable 2011 unemployment figure is not available; however, the August 2011 unemployment figure for Plumas County (non-seasonally adjusted) was 13.7 percent. Compared to the non-seasonally adjusted August monthly unemployment rates in the years 2000-2009, the 2011 figure is the highest.

³ Alliance for Workforce Development, October 2011.

TABLE 5.1. PLUMAS COUNTY LABOR FORCE AND UNEMPLOYMENT, 2000-2011

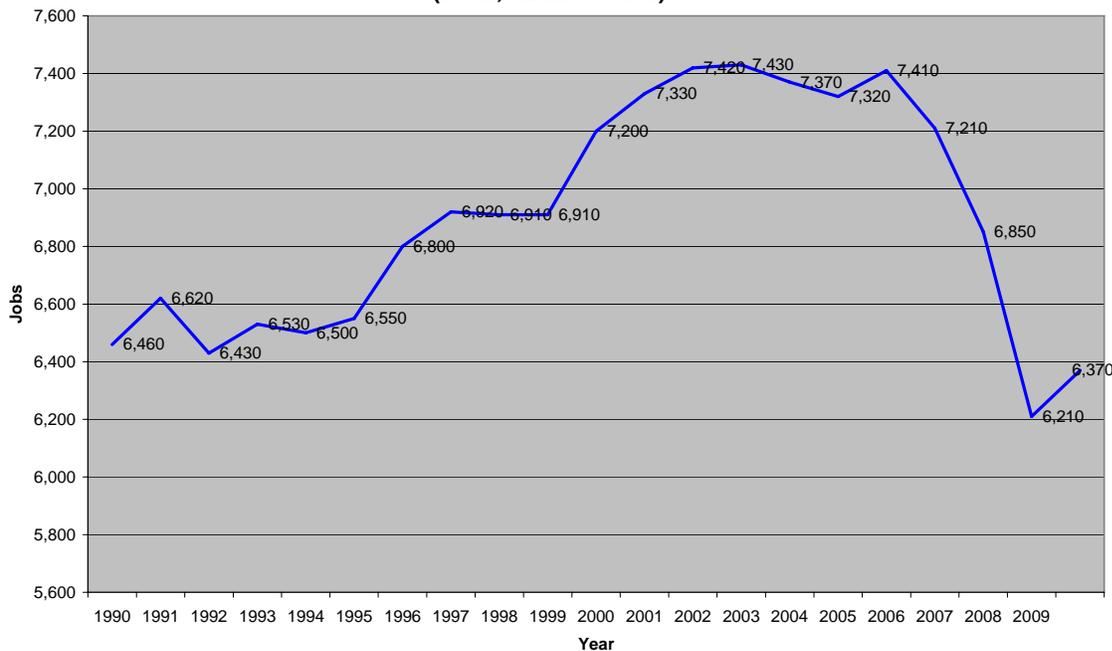
Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Labor Force (annual average)	9,760	9,960	10,260	10,520	10,440	10,150	10,110	9,970	9,820	10,030	10,040
Unemployment (annual average)	7.1%	7.6%	8.4%	9.9%	9.8%	8.5%	7.7%	8.5%	10.5%	15.7%	16.8%

Source: California Employment Development Department, Historical Civilian Labor Force, September 16, 2011

As of August 2011, the Plumas County communities that are home to the largest numbers of employed residents include the Quincy area, Chester/Lake Almanor Area, and Portola. Other locations with concentrations of more than 200 employed residents include Delleker, Graeagle, Greenville, and Meadow Valley. The data for individual communities reveal that the highest unemployment rates tend to be in the smaller communities. For example, Tobin, with a labor force of 20 has a reported unemployment rate of 100%. Other communities with unemployment rates above 50% include: C Road Census Designated Place (CDP; 60%), Canyondam CDP (60%), La Porte CDP (60%), and Whitehawk CDP (60%).⁴

Economic development efforts could focus in the short term on attracting or growing companies that provide employment opportunities compatible with residents' existing skills and education, while long-term strategies could include working with Feather River College and with existing business to link employment opportunities with residents' skills and education to develop courses and programs tailored to help local residents upgrade skills to fit with emerging industries.

Plumas County Jobs 1990-2010
(Total, All Industries)



Source: CA Employment Development Department.

Figure 24. Plumas County Jobs 1990-2010
California Employment Development Department

⁴ State of Ca., Employment Development Department, Monthly Labor Force Data for Cities and Census Designated Places, issued September 16, 2011.

Forestry Industry

The forestry industry during the years 1970 through the early 1990s was the economic base of Plumas County.^{5 & 6} Beginning in the early 1990s decreases in the amount of timber available led to a lower volume of timber production.⁷ Despite this decline, Plumas County remains one of the major timber producing counties in California, producing just under eight percent of the volume of timber harvest and representing about five percent of the value of the timber harvested in California.⁸ Sierra Pacific Industries and Collins Pine operate the two major timber mills still in the County – in Quincy and in Chester.⁹

Relating to employment changes in the Mining and Logging sector, Plumas County timber harvesting activity has fluctuated substantially since 1994 (the earliest year for which harvest data are readily available). Harvest volume reported by the State Board of Equalization was 105 million board feet in 1994. It peaked at 177 million board feet in 1999, and has generally been trending downward since. Harvest volumes dipped as low as 80 million board feet in 2002 before climbing back to 146 million in 2008. Volume dropped by more than half, to 64 million board feet in 2009 before rebounding slightly to 89 million board feet in 2011. In addition to a reduction in the volume of timber harvested, Plumas County's economy has also been affected by a reduction in the value of timber harvested. For example, the 2010 Plumas County timber harvest value was \$10,059,301, which is less than one-fourth the value of timber harvested in 1994, before accounting for inflation.¹⁰

According to data furnished by the Northern Rural Training Employment Consortium (NoRTEC), which covers 11 Northern California counties, regional employment in sawmills and wood preservation has been in steep decline since at least 2005. Sawmills and wood preservation employment fell from a peak of 3,176 jobs in 2005, to 1,257 jobs in 2010. Logging employment has seen a steady decline since at least 1991, when there were 1,921 jobs, to 2010, where the number had fallen to just 832.¹¹

Tax Revenue

Plumas County's total tax revenue continually rose from FY 2004-2005 to FY 2006-2007, increasing by 20.5 percent before decreasing in both FY 2007-2008 and 2008-2009 by nearly 13 percent combined. Property taxes and transient occupancy taxes were the two largest components in the total tax revenues, the latter underscoring the importance of tourism as a component of the contemporary economy. Property tax revenue continually rose from FY 2004-2005 to FY 2008-2009, albeit at a declining rate. For example, property tax revenue rose nearly 22 percent from FY 2004-2005 to 2005-2006 but only rose by just over two percent from FY2007-2008 to FY2008-2009. The transient occupancy tax revenues fluctuated throughout the period and followed no discernable pattern. Thus, the decline in revenues from FY 2006-2007 through FY 2008-2009 is the result of decrease in sales and use, in-lieu sales and timber-yield tax revenues.

⁵ Plumas County Economic Development Strategy 2002-2003.

⁶ Plumas County General Plan Visioning Workshop Series. July 21, 2007. http://www.countyofplumas.com/planning/general_plan/SBC_Memo.pdf. Accessed August 29, 2009.

⁷ Plumas County Economic Development Strategy 2002-2003.

⁸ California State Board of Equalization, Timber Tax Section, Report YT-36, April 8, 2011.

⁹ Plumas County General Plan Visioning Workshop Series. July 21, 2007. http://www.countyofplumas.com/planning/general_plan/SBC_Memo.pdf. Accessed August 29, 2009.

¹⁰ State Board of Equalization, Timber Tax Section, California Timber Harvest by County, 1994-2010.

¹¹ NoRTEC Logging Employment 1991-2010, as provided by Alliance for Workforce Development, October 2011.

Land-Use Patterns

The land-use patterns show that there is a limited amount of land available for new development within the County. The land area of Plumas County amounts to approximately 1.67 million acres, and about 1.18 million acres of the County are under governmental ownership, mainly Federal government ownership. This leaves only 482,908 acres for private development.

The limited supply of prime land is not necessarily a problem given the low projected population and employment growth rates and also reflects the County's historic attitude towards maintaining the natural environment, which is one of the County's most valuable assets in terms of the local quality of life. During the General Plan time horizon, it will be important to revisit and confirm or modify land-use designations to ensure that development occurs where it will best support new housing and economic development while limiting the impacts on the natural environment.

Projections

No data are available on the projected number of new housing units in Plumas County. However, data gathered for the Plumas County Housing Element indicate that construction of a maximum of 626 new units could be accommodated in the Unincorporated Area of Plumas County through 2014.

Likewise, employment projection data are not available for Plumas County alone, but the California Employment Development Department does make projection areas for the entire Northern Mountains Region that include Lassen, Modoc, Nevada, Plumas, Sierra, Siskiyou and Trinity Counties. Total non-farm employment in the region is expected to grow by 6.4 percent between 2006 and 2016. The industry sectors with the greatest projected gains include the education services, health care and social assistance sector and the professional and business services sector, with significant employment losses expected in the natural resource, mining and construction, and financial activities sectors.

Legal Basis and Requirements

An Economic Element is not one of the seven General Plan Elements required under State law; however, the law states that "the general plan may include any element(s) or address any subject(s) which relate to the physical development of the county (Government Code Section 65303)." Plumas County has elected to include an Economics Element in the General Plan Update because of the importance of economic development to the County's well being. In addition, economic development is highly interconnected with other required elements, including Land Use and Circulation. According to the California Office of Planning and Research, "upon adoption, an optional element becomes an integral part of the general plan. It has the same force and effect as the mandatory elements and must be consistent with the other elements of the plan."

Relationship to the Other Plan Elements

The Economic Element is most closely related to the Land Use Element and the Circulation Element. Since it dictates the locations where different types of activity may be undertaken within the County, the Land Use Element has direct linkages to the Economic Element. If the Land Use Element does not allocate adequate land to support the types of economic activity desired by the County, the Economic Element will be hobbled. Similarly, most economic activities are dependent to some degree on

transportation access. Unless the Circulation Element lays out a framework of transportation policies that will ensure transportation access to key locations targeted for economic development, the County will lack one of the key ingredients to economic success. It is important that the County considers how all policies contained in all other elements, in addition to the Land Use and Circulation Elements, will bear upon the County's economic development. Where a policy in a given element conflicts with a policy contained in the Economic Element, the requirement for internal consistency throughout the General Plan will require modifications to eliminate the conflict.

Definitions

Agritourism: The practice of touring agricultural areas to visit a working farm or any agricultural, horticultural or agribusiness operation for the purpose of enjoyment, education or active participation in the activities of the farm or operation. This tourism centered around working agricultural landscapes, which may include but is not limited to farm stays, farm stands and u-pick produce, farmers markets, harvest festivals, educational activities and other activities that connect typically urban dwellers with farmers and farming operations. This may also include fishing, hunting, All Terrain Vehicle (ATV) tours, and other activities that compliment and support the primary agriculture production and economics of mainly farms and ranches.

Biomass production: The production of organic matter that can be used as fuel to power residential, commercial or industrial activities or to power energy generation systems which then provide energy to be used in the residential, commercial or industrial sectors. Biomass may be produced specifically to be used for energy production, or it may be captured as a by-product of agricultural or industrial processes and utilized on a secondary basis for energy production.

Business Outreach Program: A program by which representatives of local economic development organizations actively contact business owners and solicit information from them about the local business environment, both positive and negative, and seek to understand steps that the economic development organizations can take to help improve conditions for the businesses.

Business Retention Program: An initiative that seeks to identify problems that could cause employers to leave a community and to build relationships with individual business owners to overcome these barriers in order to encourage the businesses to remain in the local area rather than relocating to seek more favorable conditions elsewhere. This can entail connecting local businesses to resources and assistance to address specific problems. A business outreach program often precedes a business retention program.

Buy Local Campaign: An effort to build awareness of the importance and benefits of shopping within the local community, rather than traveling outside the community to shop. Such campaigns advocate for purchasing goods and services from local businesses instead of from businesses in other communities or from chains headquartered outside of the local area to keep residents' dollars circulating in the local economy where greater multiplier benefits, including jobs, personal income and tax revenues, will be created.

Cottage Industry: See, also, Home Business.

Mineral Resource Areas: Locations that have been specifically identified as harboring mineral resources that are important to the local or regional economies.

Digital Infrastructure: The various types of equipment that form electronic communication networks.

Economic Development Service Providers: May include a wide range of organizations, including government agencies and non-profit organizations specifically organized to promote business retention, expansion and attraction as well as other types of organizations, which may be important partners in economic development. This may include educational institutions, financial institutions, utilities and transportation providers, Chambers of Commerce and other types of organizations that can contribute resources towards local economic growth.

Economic Sustainability: Economic sustainability involves economic activities that meet the community's present needs without compromising the ability of future generations to meet their own needs. In a natural resource-based economy such as Plumas County, this suggests the need to utilize resources in a manner that will not jeopardize their future availability and quality, and that today's economic activities do not degrade the natural beauty and quality of life that makes Plumas County an attractive place for residents and businesses.

Ecotourism: Ecotourism is responsible travel and tourism activities in fragile, pristine, and usually protected areas that strive to be low impact and often small scale. It is an alternative to mass tourism. Ecotourism typically involves travel to destinations where flora, fauna and cultural heritage are the primary attractions. One of the goals of ecotourism is to offer tourists insight into the impact of human beings on the environment and to foster a greater appreciation of natural habitats. Responsible ecotourism includes programs that minimize the negative aspects of tourism on the environment and enhance the cultural integrity of local people. Therefore, in addition to evaluating environmental and cultural factors, an integral part of ecotourism is the promotion of recycling, energy efficiency, water conservation and creation of economic opportunities for local communities.

Employment-Generating Land Uses: Land uses such as retail, office and industrial that are primarily identified as places of employment (as opposed to residential uses) or public or quasi-public uses which typically do not directly accommodate new employment.

Energy Facilities: Any facility that uses any type of fuel or energy resource to produce electrical power or thermal energy, and with a capacity of 250 kilowatts (kW) or more, and, including but not limited to, micro-hydro turbines, biogas from landfill or agricultural operations, solar, geothermal, wave, wind, bio-fuel, biomass, thermal biomass, coal, oil, natural gas, or nuclear and with the express intent of transmitting such power for commercial application, or those which transmit electrical power of greater than 69 kilovolts (kV) or pipelines conveying thermal energy exceeding one-quarter of a mile for commercial export.

Green Economy: An economy based on activities that leverage innovations that support sustainability. Such an economy may incorporate activities such as energy and resource conservation, renewable energy generation, organic food production, use of renewable materials in place of petrochemical or other non-renewable substances in manufacturing, and recycling.

Home Business: A business, profession or other economic activity conducted full- or part-time in the principal residence of the person conducting the business. Examples include general office use, tutoring, sewing and fabric crafts, fine arts activities, sales or surveys over the phone, computer programming, cosmetologists and hair care

providers, and occasionally licensed health care providers. In general, home businesses do not include any retail or wholesale sales on the premises, other than over the phone and through the mail, nor any industrial use other than custom crafts and sewing.

Home Industry: Any use permitted in an industrial zone and conducted by a resident of a dwelling unit on the parcel and subject to a review for compatibility with the neighborhood in which it is located.

Local Hiring: Occurs when local residents are hired to fill local job openings. While it is difficult to ensure that local residents fill local job openings in all cases, targeted outreach and other mechanisms can help to increase the proportion of local jobs that are filled by local residents, rather than by commuters. Benefits of local hiring include reduced commuting and associated environmental impacts and increased proportions of wages remaining to be spent within the local economy.

Local Spending: Occurs when residents spend their money within their local area. See also, Buy Local Campaign.

Master Plan Environmental Assessment: An environmental analysis conducted for a project that will allow individual components of the project to proceed at different times under the umbrella of the master plan assessment. For example, completion of a master plan environmental assessment for all of the development anticipated in a large business park will streamline the process of approving development on individual parcels within the business park as long as the use is consistent with the use envisioned in the master environmental assessment.

Non-Renewable Resources: Any natural resource that exists in limited supply and cannot be replaced once it has been extracted or procured, such as petroleum or mineral ore. Non-renewable resources that are not significantly altered by their use, including most metals, can often be recovered and their usefulness extended by recycling. See also, Sustainable Wood Production.

Non-Compatible Use: Activities or uses of property that inherently conflict with the established uses or activities on adjacent or nearby property.

Towns, Communities, Rural Places and Master Planned Communities: Locations identified in the Plumas County General Plan which have been deemed to be the most appropriate to support future population or employment growth.

Skill Enhancement Programs: Programs that provide people with training to enhance their ability to secure and maintain meaningful employment.

Sustainable Wood Production: Management of forests to produce wood for harvest at rates that can be sustained indefinitely without deterioration of watershed values or the availability of suitable habitats that support all wildlife indigenous to the area.

Telepresence: An alternative to physical presence and involves using telecommunications capabilities to allow individuals to interact with other individuals, without the need for physical proximity. This can include using telephone, e-mail and teleconferencing in place of face-to-face meetings to save time, money, fuel and other resources that would otherwise be required for travel.

Transit-Oriented Development: Real-estate development that is designed to leverage proximity to transit as an amenity to be utilized by the development's occupants. Transit-oriented development not only makes it easier for occupants to utilize transit services in place of relying on single-occupant vehicles; it also enhances transit system viability and effectiveness by increasing ridership.

Value-added Manufacturing: An activity or process that adds value to a finished product. The greater the proportion of value-added manufacturing for a finished product that occurs in the local area, the greater the economic benefit. For example, wood milling is a value-added process that can increase the economic benefits from the local forestry sector. An additional opportunity to add value could be to use locally milled wood to produce custom furniture in local workshops. At each of these steps, the value of the product produced from the tree material is increased, creating more income within the local economy. Value-added manufacturing includes food processing operations.

Vocational Training: Prepares trainees for jobs that are based on manual or practical activities, are traditionally non-academic and are focused on providing the study with entry into a specific trade, occupation or vocation. It is sometimes referred to as technical education. At the post-secondary level, vocational education is typically provided by a local community college or by private educational institutions. Vocational training, or re-training, is also available to previously employed workers who have been laid off or whose previous employer is defunct; such training was expanded under the American Recovery and Reinvestment Act of 2009.

Watershed Services: The function provided by Plumas County's forests and natural areas to capture rainwater and convey it to downstream users including those located outside of Plumas County who use the vast majority of water captured in Plumas County's watersheds. The concept of watershed services recognizes that Plumas County provides a valuable service to downstream water users which, if not provided or if compromised by lack of appropriate stewardship practices within Plumas County, would have severe economic and environmental consequences.

Wood Byproducts: Materials that are generated as part of the process of milling wood for lumber. This can include "slash" left in the forest after logging and sawdust and bark from sawmill operations. While historically viewed as waste in need of disposal, new uses are being developed including feedstock for co-generation power plants, bio-fuels, mulches and new types of engineered building materials.

Workforce Development: A broad range of employment and training services, including orientation to the work world, recruiting, placement, mentoring, follow-up counseling and workplace crisis intervention. These services are usually offered by nonprofit organizations or government agencies to individuals who are having difficulty entering or reentering the workforce in an effort to increase their competency and make them a greater asset in the workforce. Workforce development programs can also help companies and small businesses tap into new markets and successfully recruit appropriate employees.

Workforce Housing: Involves different types of housing that are affordable to the people who work within a given community. Workforce housing may be affordable by design, such as smaller homes on smaller lots, or rental apartments, or by subsidy, including low-income housing tax credits and/or local, state, federal or private grants, so that lower-income workers may pay a reasonable portion of their income to occupy the housing. Provision of adequate workforce housing can help to create a more balanced community that minimizes the need for workers to commute long distances in order to find appropriate, affordable housing.

Values and Issues

During the process of outreach and research for this General Plan Update, numerous community values relating to economic development emerged. Important values included:

- diversification of the economy
- sustainability of the local economy
- creation of economic opportunities for residents who are currently part of the work force
- preservation and enhancement of the County's natural assets. In planning and implementing economic development activities, it will be important to ensure that these values are maintained and enhanced.

Key issues identified in relation to economic development include:

- the need for living wage jobs that can support families
- the need to collaborate with the United States Forest Service and other local government entities in the region to plan and implement economic development activities
- the need to monetize the ecological services that Plumas County provides to regions outside the County and the State of California, in the areas of water supply, energy supply, forest resources, including commodities as well as recreational opportunities, and carbon sequestration in order to bring money to the County to fund stewardship activities that will help to maintain and enhance these services over time.

Plans and Planning

This section discusses the existing conditions in order to establish a baseline for purposes of further review. Names of organizations indicated here are only listed for the purpose of identifying existing participants and are purposely not listed under General Plan Goals and Policies.

There are several key plans or efforts in Plumas County that bear on local economic development. These include the economic development strategy prepared for the County by Plumas Corporation, the work of the Business and Career Network and the work of various private-sector organizations Alliance for Workforce Development. The Alliance for Workforce Development is a regional nonprofit that provides workforce development and business services to a five-county service area that includes Plumas County. The organization operates the Business and Career Network in Quincy, a one-stop center where partnering agencies provide services to job seekers and employers. Services include customized employee recruitment, financial incentives for training, business expansion and retention, job search assistance, vocational assessment, internships and entrepreneurial training.

Private Sector Business Organizations

A number of private-sector business organizations operate in Plumas County for the benefit of their members. These independent organizations conduct activities ranging from marketing to advocacy to providing tourist information, booking resources and member networking. While the focus of each individual organization's activity may not be as broad as countywide economic development, these organizations can certainly support countywide efforts and County efforts can leverage the work that these organizations undertake.

Goals

GOAL 5.1 Maintain a Diverse and Sustainable Economy

ECON 5.1	Establish and maintain a diverse and long-term, sustainable local economy and a strong economic base while protecting and maintaining communities, neighborhoods and natural assets.
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Policies

ECON

5.1.1 Use of Economics Element to Guide Decision-making

The County shall utilize the Economics Element to guide County decision-making on matters affecting economic development.

ECON

5.1.2 Preparation of Economic Development Strategy

The County shall coordinate the preparation and periodical update of an Economic Development Strategy to guide annual work plans and day-to-day activities to implement the goals and policies of the Economics Element. In implementing and following an economic development strategy, the County must maintain flexibility to respond to short-term economic opportunities that are consistent with the goals of the Economics Element.

ECON

5.1.3 Businesses that Help to Diversify and Strengthen the Local Economy

The County shall encourage businesses that contribute to a diverse, robust, viable and sustainable economy and are consistent with the goals and policies of the Countywide General Plan.

ECON

5.1.4 Discouragement of Non-Compatible Land Uses

The County shall protect the long-term economic viability of commercial, industrial, agricultural, timber and mineral resource lands by discouraging conversion and encroachment by non-compatible uses that adversely affect the sustainable uses of these lands.

ECON

5.1.5 Aggregate Mining Resources

The County shall support the continued operation of existing aggregate mining activities within the County as well as new aggregate mining in appropriate areas to meet the long-range construction needs of the region while meeting health and safety standards and all local, State and Federal environmental regulations.

ECON

5.1.6 Maintenance of an Adequate Supply of Land

The County shall maintain an adequate supply of properly zoned land, in accordance with the land-use designations in the General Plan and the infrastructure to support a broad range of economic development opportunities and to promote a balanced economy.

ECON

5.1.7 Retention and Expansion of Existing Businesses

The County shall encourage the retention and expansion of existing businesses in important economic export sectors, including forestry, forest products manufacturing and other types of manufacturing, agricultural goods and services, mining, tourism, retail businesses, energy resources, education and health care. This includes activities occurring on public as well as private lands within the County.

ECON

5.1.8 Attracting New Businesses

As part of an overall economic development strategy, the County shall strive to attract new businesses and pursue new economic opportunities. In these efforts the County shall collaborate with the City of Portola and both Sierra and Lassen Counties strategically to develop economic opportunities and market the larger region.

ECON

5.1.9 Maintaining Strong Working Relationships with United States Forest Service

The County shall establish and maintain a working relationship with the United States Forest Service within the County that fosters economic sustainability, including advocacy for plans and policies on National Forest lands that will help to create new economic activity that benefits the local economy.

GOAL 5.2 Expand the Tourism Economy

ECON 5.2	Expand the Plumas County Tourism Economy.
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Policies

ECON

5.2.1 Support of Tourism Development

The County shall strive to support year-round tourism development where it is compatible with the ongoing viability of the County's other sustainable industries, such as agriculture and timber.

ECON

5.2.2 Marketing Plumas County as a Tourism Destination

The County shall strive to support projects and activities that help to increase Plumas County's visibility and appeal as a visitor destination, including projects undertaken by private tourism providers.

ECON

5.2.3 Development of Plumas County as a Recreation Destination

The County shall support projects and activities that help to enhance Plumas County's appeal as a recreation destination.

ECON

5.2.4 Expansion of Arts-Based Tourism

The County shall encourage economic development and tourism through the performing, literary and visual arts.

GOAL 5.3 Product Development

ECON 5.3

Develop Plumas County's Assets to Support Economic Development.

Policies

ECON

5.3.1 Increased Investment in Public Lands

The County shall advocate for continued investment in the County's public lands to increase their attraction of visitors and a variety of other economic uses, where appropriate, including improvements to National Forest stewardship to enhance the forests' environmental/habitat, recreational and timber values. Encourage public/private partnerships with the National Forests, Lassen National Park and Plumas Eureka State Park.

ECON

5.3.2 Expansion of Broadband Communications

The County shall cooperate with public and/or private utility companies to expand the deployment of broadband communications and other new technologies capability within Plumas County's developed areas.

ECON

5.3.3 Expansion and Re-use of Assets

The County shall seek productive expansion and re-use of existing assets within the County to support economic development.

ECON

5.3.4 Adequate Water and Wastewater Facilities

When requested, and within available resources, the County shall assist local service providers in the pursuit of state and federal funding and development of land-use assessment and fee programs to upgrade and enhance water and wastewater facilities.

ECON

5.3.5 Addressing the Impact of an Aging Workforce on Local Industries

The County shall support efforts to study, understand and address issues relating to the needs of local industries in light of the trend towards an aging workforce. Conversely, encourage family-friendly economies that will attract and support young families.

GOAL 5.4 Employment

ECON 5.4

Ensure that all persons have access to meaningful employment.

ECON

5.4.1 Prioritization of Workforce Development

The County will place a high priority on the proactive development of the workforce through early and higher education, vocational training and lifelong learning so that residents are prepared to contribute to, and benefit from, the County's economic development.

ECON

5.4.2 Encouragement of Entrepreneurship

The County will encourage entrepreneurship so that residents can create their own employment opportunities.

ECON

5.4.3 Local Hiring

The County will encourage the employment of County residents.

GOAL 5.5 Support Business Retention, Expansion and Attraction

ECON 5.5

Align County Regulations and Procedures with Goals of Business Retention, Expansion and Attraction (Public Policy Initiative).

Policies

ECON

5.5.1 Streamlining of Regulations

The County shall streamline local regulations to facilitate economic development.

GOAL 5.6 Create Balanced, Sustainable Communities



ECON 5.6

Create Balanced, Sustainable Communities within the County to Foster Economic Development.

Policies

ECON

5.6.1 Encouragement of Transit-Oriented Development

The County shall encourage transit-oriented development by encouraging patterns of commercial and industrial development that support use of public transit.

ECON

5.6.2 Infill Development

The County shall investigate methods for making infill development more attractive to private developers.

ECON

5.6.3 Creation of a Vibrant Mix in Commercial Areas

The County shall create a vibrant mix of residential development, retail and other commercial services, employment opportunities, governmental services, restaurants, entertainment and cultural/recreational opportunities in Towns or Communities or areas where community plans or specific plans have been developed.

ECON

5.6.4 Encouragement of Industrial Park Development

The County shall encourage development of well-planned and designed industrial parks catering to existing local as well as outside opportunities, where appropriate.

ECON

5.6.5 Revitalization Promotion

The County shall promote the revitalization of communities in transition due to the decline of resource-based industries.

ECON

5.6.6 Reduction in Dependence on Non-Renewable Resources

The County shall strive to assist businesses in reducing their dependence upon non-renewable resources, such as fossil fuels.

ECON

5.6.7 Balance of Jobs and Housing Supply

The County shall work to achieve a balance between the availability of jobs and housing so that the demand for housing created by local employment opportunities is adequately addressed by the supply of local housing so that local employees are not required to commute long distances in order to find housing that is affordable and meets their needs.

ECON

5.6.8 Increase in Local Spending to Support More Diverse Local Retail Options

The County shall encourage economic development which increases the percentage of total personal income spent within the County.

ECON

5.6.9 Encouragement of a Broad Range of Retail

Within areas designated in the General Plan Land Use maps for commercial development, the County shall encourage the location of a broad range of local retail, service and support businesses providing additional goods and services that are not now available in the County.

ECON

5.6.10 Encouragement of Workforce Housing Development

The County shall encourage the provision of adequate housing to meet existing and future workforce housing needs and provide opportunities for local workers to reside in the community.

ECON

5.6.11 Historic Downtown Area Revitalization

The County shall encourage retail development that provides for revitalization of historic downtown areas.

ECON

5.6.12 Support of Economic Development with Public Resources

The County shall strive to provide appropriate public services and infrastructure to support economic development.

GOAL 5.7 Develop a Strategic Energy Plan



ECON 5.7

Develop a Countywide Strategic Energy Plan, including an effective energy strategy based on self-sufficiency, conservation and development of renewable energy resources that is actively implemented countywide and through Specific and Community Plans and through cooperation with utilities, State and Federal agencies and private interests.

Policies

ECON

5.7.1 Strategic Energy Plan

Develop a “business friendly” Strategic Energy Plan that balances the Energy Policies with Economic viability in order to protect, stimulate and create economic development and jobs.



GOAL 5.8 Develop a Diverse, Low-Cost Energy-Supply Portfolio

ECON **5.8**

Develop a diverse, low-cost energy-supply portfolio that balances County energy demands with social, economic and environmental needs, adequate to provide for local self-sufficiency.

Policies

ECON

5.8.1 Evaluation of Consistency with the General Plan

The County shall evaluate future energy projects and programs for consistency with social, economic and environmental goals of the General Plan.

ECON

5.8.2 State and Federal Energy-Planning Processes

The County shall monitor State and Federal energy-planning processes to identify local potential impacts and opportunities and, where appropriate, shall participate in State and Federal efforts to advocate for local energy goals and policies.

ECON

5.8.3 Future Energy Needs

The County shall project future energy needs for build out of the County's General Plan and shall strive to create sustainable local sources of energy generation sufficient to provide for those future uses.

ECON

5.8.4 Local Management and Ownership of Energy Supply

The County shall support projects consistent with this Plan that increase local management and ownership of energy supply and decrease expenditures for imported energy.

ECON

5.8.5 Financial Incentives for Energy Efficiency

The County shall explore participation in programs that provide financial incentives and financing to private parties to meet energy efficiency and conservation objectives, such as Property Assessed Clean Energy Bonds, on-bill financing, Community Choice Aggregation and participation in state and federal programs designed to encourage efficiency and renewable resources.



GOAL 5.9 Energy Efficiency and Transportation

ECON **5.9**

Develop a sufficient connection between land-use and transportation systems to maximize energy efficiency and minimize vehicle miles traveled.

Policies

ECON

5.9.1 Minimizing Infrastructure's Energy Usage

The County shall seek to create an arrangement of uses that minimize energy needed for transportation, buildings and infrastructure and its maintenance.

ECON

5.9.2 Land Use Density

The County shall encourage compact residential and commercial uses that reduce travel, infrastructure and energy use.

ECON

5.9.3 Mixed-Use Development

The County shall encourage commercial mixed-use development in town center areas and where appropriately designated to encourage energy efficiency.

ECON

5.9.4 Transit-Oriented Development

The County shall encourage location of residential, commercial and industrial uses along and close to main transportation routes to encourage future public transportation service.

ECON

5.9.5 Incentives for Use of Existing Infrastructure

The County shall provide incentives for the location of new uses in close proximity to existing infrastructure by requiring that new development pay the full cost of their share of the extension of new infrastructure and by creating incentives for uses that maximize the function of existing infrastructure.

ECON

5.9.6 Reduction in Single-Occupant Vehicular Travel

The County shall reduce the need for single-occupant vehicular travel by encouraging measures that ensure more occupants per vehicle, including making land-use provisions and incentives for the use of van pools, shared rides and alternative modes of transportation.

ECON

5.9.7 Encouragement of Pedestrian and Bicycle Traffic

The County shall encourage pedestrian and bicycle traffic by including provision for bike lanes and bicycle-friendly communities, bicycle parking and for pedestrian amenities in site design and facility improvements in all major residential, commercial and industrial development projects or retrofits. Encourage the widening of shoulders along County roads and State highways to promote safe bicycle travel.

ECON

5.9.8 Telecommuting

The County shall encourage the use of telecommuting by allowing appropriate home businesses and by supporting the development of a County-wide high-speed communications and data network.

GOAL 5.10 Building Energy Use



ECON 5.10

Encourage the construction, operation and maintenance of commercial, residential and industrial buildings as energy efficiently as possible, consistent with sound economic principles for energy efficiency.

Policies

ECON

5.10.1 Energy Efficient Building Construction

The County shall cooperate with energy utilities and other agencies to promote and implement energy-efficient building construction, renovation and retrofitting practices.

ECON

5.10.2 Residential Weatherization Programs

The County shall cooperate with energy utilities and other agencies to promote and implement residential weatherization programs.

ECON

5.10.3 Passive Solar Energy Utilization

The County shall encourage passive solar energy utilization through site design that maximizes solar exposure and utilizes an east-west street grid where practicable.

ECON

5.10.4 Energy Efficient Landscaping

The County shall encourage the design of landscaping to facilitate building energy efficiency including winter wind shielding and summer solar shading.

ECON

5.10.5 Retrofitting for Energy Efficiency

The County shall encourage retrofitting of existing buildings to improve energy efficiency where practicable.

GOAL 5.11 Energy Efficient Businesses and Agricultural Enterprises



ECON 5.11

Encourage the operation of businesses and agricultural enterprises as energy-efficiently as possible, within the bounds of sound economic principles. A specific objective of this goal is a 10% improvement in 2010 business and agricultural energy use on a per-capita basis by 2025.

Policies

ECON

5.11.1 Energy-Efficient Business Programs

The County shall encourage business and agricultural participation in energy efficiency programs.

ECON

5.11.2 Energy Efficiency in Economic Development Efforts

The County shall encourage local economic development efforts to include an energy efficiency component, including cooperation on the distribution of energy efficiency, waste management and water-conservation materials.

ECON

5.11.3 Installation of Energy Efficient Measures

The County shall cooperate with energy utilities and other agencies to implement energy efficient operations by promoting direct installation of energy efficiency measures.

ECON

5.11.4 Monitoring Energy Efficiency

The County shall require that staff monitor energy utility and agency programs in County facilities for demonstration or pilot projects and participate in such energy pilot projects where appropriate.



GOAL 5.12 Energy Efficient Community Services, Facilities & Infrastructure

ECON 5.12

Encourage the construction, operation and maintenance of community services, facilities and infrastructure as energy efficiently as possible, within the bounds of sound economic principles. A specific objective of this goal is a 15% improvement in 2010 community service, facility and infrastructure energy use on a per capita basis by 2025.

Policies

ECON

5.12.1 Selection Criteria for County Purchases

The County shall consider energy efficiency among its selection criteria for all future County purchases of energy consuming equipment, materials, goods and services.

ECON

5.12.2 Green Supply Chain Management Plan

The County shall develop a green supply-chain management plan, designed to guide purchasing, encouraging the purchase of sustainable and local products whenever economically practicable.

ECON

5.12.3 Energy Efficient Construction Standards

The County shall incorporate energy efficiency measures deemed to be cost effective within all future construction of new County facilities. The selection of appropriate measures will include the consideration of life-cycle analysis. County facilities shall be designed and built to at least the standards of private new construction.

ECON

5.12.4 Energy Efficient Operation and Maintenance

The operation and maintenance of all existing County facilities, including leased facilities, shall include an energy efficiency plan with specific efficiency-related goals and policies and all major facility retrofits and/or renovations shall include energy-efficiency measures, where economically feasible.

ECON

5.12.5 Encouraging Local Governments to Adopt Similar Policies

All other local governments, districts and agencies in the County are encouraged to adopt and implement similar energy-efficiency policies and practices to improve countywide public-sector energy efficiency.

GOAL 5.13 Increase Local Renewable Generation



ECON 5.13	Encourage the development of local renewable-energy resources for direct application and power-generation purposes. A specific objective of this goal is increasing the amount of current local renewable energy generation by 100% without adverse effects to energy resources or the environment in 10 years.
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Policies

ECON

5.13.1 Identification of Renewable Energy Resource Potentials

The County shall encourage public and private-sector efforts to further identify, characterize and map local renewable-energy-resource potentials and constraints, including technical and scientific surveys that define resource locations, quantities and qualities, including compatible development areas, in order to inform decision-making processes.

ECON

5.13.2 Development of Renewable Resources

The County shall preserve opportunities for development of renewable energy resources.

ECON

5.13.3 Integration of Energy Requirements into Building Standards

The County shall integrate technically and financially feasible renewable-energy requirements into development and building standards.

ECON

5.13.4 Incorporation of Renewable Use in County Facilities

The County shall explore the potential for use of renewable resource use in county-owned facilities during design of both new construction and remodeling, with a specific emphasis on the use of thermal biomass for combined heat and power systems, when appropriate.

ECON

5.13.5 Protection of Future Opportunities for Biomass Utilization

The County shall encourage the protection of the infrastructure necessary to preserve future opportunities for biomass utilization for energy production and associated economic uses.

GOAL 5.14 Evaluation of Energy Facility Proposals

ECON 5.14	Provide for the thorough and expeditious evaluation of energy facility proposals, including being able to site facilities in an environmentally sound manner and assuring compatible, environmentally sound operations, maintenance and transmission in a timely and orderly fashion.
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Policies

ECON

5.14.1 Establishment of Thresholds and Define Processes for Consideration

The County shall provide information about the processing of energy facility applications by establishing thresholds and defining processes for consideration in advance.

ECON

5.14.2 Early Consultation Provision

The County shall provide for early consultation pertaining to energy facilities to ensure the availability of comprehensive information in sufficient detail to enable the County to conduct a thorough analysis.

ECON

5.14.3 Ensuring Sufficient Transmission Capacity

The County shall ensure that all new energy facilities have sufficient transmission capacity dedicated or planned, with transmission lines sited.

ECON

5.14.4 Maximizing Use of Existing Transmission Facilities

To the greatest extent possible, the County shall ensure that increased demand for energy transmission shall be accommodated with existing transmission facilities or within existing transmission corridors.

ECON

5.14.5 Ensuring of Appropriate Location

The County shall ensure that facilities are sited and approved only within areas deemed appropriate as defined as being in compliance with General Plan land-use designations and provisions of the Zoning Ordinance.

ECON

5.14.6 Required Compliance Prior to Construction

The County shall require that all applicable local, State and Federal permits have been obtained and appropriate conditions satisfied before construction is allowed to begin.

ECON

5.14.7 Green Supply Chain and Waste Management Policy Required

The County shall require energy facilities to minimize waste disposal by maintaining a green supply chain and waste management policy.

ECON

5.14.8 Enhancement of Carrying Capacity of Public Infrastructure

The County shall require energy facilities to be sited such that they enhance and do not exceed the carrying capacity of affected public infrastructure; the facility developer shall pay all costs of public improvements.

ECON

5.14.9 Requirement of Updated Emergency Plans

The County shall require energy facilities to maintain and regularly update emergency plans, to coordinate such plans with local and state public-safety agencies and to make plans public within the parameters of the Homeland Security Act.

Economics Element Implementation Measures

Work Plan/Implementation Measures

The following table documents the implementation measures included with the General Plan to implement the goals and policies included in this element.

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>1. a. The County shall consider the establishment of an economic advisory body to assist in the development of an economic development strategy and workforce. Such a body should be appointed by the Board of Supervisors and should include representatives of key sectors, including but not limited to local business, forestry and timber products, energy, tourism, agriculture, banking and finance, health services and education. In addition, the County should seek participation from the United States Forest Service.</p> <p>b. The County shall manage the preparation and regular updates of an economic development strategy that that will guide the overall development of Plumas County as a competitive location for existing businesses to remain and expand and for attracting new businesses, consistent with the General Plan vision. The County may prepare the economic development strategy itself with guidance from the economic advisory body or may delegate this responsibility to local economic development service providers for adoption by the County with review and input by the economic advisory body.</p>	5.1.2					
<p>2. When requested, and as County resources allow, the County shall work with existing or prospective businesses in industries targeted by the County's economic development strategy to secure financial assistance from such sources as</p>	5.1.3					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
Community Development Block Grants, Economic Development Administration or United States Department of Agriculture Rural Development.						
3. The County shall include designated mineral resource areas in Plumas County land-use maps and protect these sites from encroachment.	5.1.4					
<p>4. a. As part of an overall economic development strategy, the County shall work with local partners to develop and implement an ongoing proactive business-retention program to support existing businesses and foster their expansion. As part of the business retention program, establish a business outreach program aimed at enhancing communication between existing businesses and the County, which could include convening business roundtable meetings for sharing information and concerns. The meetings should include representation from government and businesses and should provide a forum for any local business to share concerns.</p> <p>b. See policies and implementation programs in Agriculture and Forestry Elements, regarding ongoing support for these industries.</p> <p>c. As part of the larger economic development strategy, the County shall consider the establishment of a “local foods” initiative that will help to increase the supply of locally grown food. Elements of the initiative may include ensuring that existing policies facilitate greenhouse development on agricultural lands; expanding farmers market operations, working with local farmers to determine methods of extending the season,</p>	5.1.7					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>expanding number of vendors, increasing the days per week and considering other locations in the County; making it easier for farmers to establish farm stands for direct sales on agricultural property and supporting programs that promote and assist in the identification and marketing of local products, including outreach to the newspaper, Chambers of Commerce, businesses and any others seeking to improve the environment to foster an effective local foods initiative.</p> <p>d. The County shall consider designating a County staff person or third party economic development organization to collect and disseminate information to existing and prospective businesses regarding demographics, labor-force characteristics, availability of sites, including both buildings and land able to be developed, with appropriate zoning and infrastructure, transportation, and services, and other factors relevant to business location and expansion decisions, in collaboration with the City of Portola, County Chambers of Commerce and local property owners and real estate representatives.</p>						
<p>5. a. The County shall disseminate information on available sites. See Implementation Measure 5.1.6.d, above.</p> <p>b. The County shall ensure adequate land supply. See Policy 5.1.6 above.</p> <p>c. The County shall strive to support efforts of local economic development service providers to coordinate in conducting outreach and assistance to prospective new businesses.</p> <p>d. The County shall encourage and</p>	5.1.8					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>support efforts to foster new economic activity in conjunction with established industry, such as linking forestry to renewable fuels production or leveraging the value of Plumas County's "watershed services" to downstream users in order to support local watershed maintenance and enhancement activities.</p> <p>e. The County shall conduct and disseminate economic research relating to emerging markets, innovations and opportunities in which the County may have a competitive advantage.</p> <p>f. The County shall consider targeting Internet marketing, web design, video production and entertainment media firms for business-attraction efforts.</p> <p>g. The County shall encourage businesses and research that support sustainability and contribute to the emerging "green" economy, including agricultural and timber forestry enterprises.</p> <p>h. The County shall support appropriate home businesses, "cottage" industries, telecommuting and telepresence to link local businesses to the larger global economy and reduce fuel consumption.</p> <p>i. The County shall encourage public/private partnerships to market Plumas County as a business location.</p>						
<p>6. a. To the extent possible, the County shall prioritize development of basic public infrastructure for tourism, such as public restrooms and public gathering places.</p> <p>b. The County shall encourage tourism development that emphasizes protection and enhancement of the natural scenic beauty of Plumas</p>	5.2.2					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
County.						
<p>c. The County shall encourage and support lodging and food service facilities to support recreation and cultural and historic events and activities, including lodging and food facilities to support eco-tourism and agritourism needs, guest ranch facilities, campgrounds, bed and breakfasts, and event and business lodging.</p> <p>7. a. To the extent possible, the County shall support public/private tourism industry marketing efforts.</p> <p>b. The County shall support the efforts of private and non-profit and other groups to increase local spending through tourism and “shop local” campaigns. See Policy 5.6.8.</p> <p>c. The County shall support Scenic Byways, Bucks Lake Wilderness area and other designated recreational areas on the National Forests to further the promotion of tourism in the County.</p>						
<p>8. a. The County shall support the development of recreational events and activities that attract visitors on a year-round basis, including but not limited to, athletic events and outdoor activities.</p> <p>b. The County shall encourage destination recreation and tourism through projects on private lands. On public lands, coordinate efforts with Federal and State agencies. Some examples of activities are:</p> <ul style="list-style-type: none"> • Promoting motorcycle tourism, fishing, boating, golf, destination education facilities, viewing fall colors, ice fishing, and other outdoor activities during the four seasons • Developing snowmobile staging areas with parking and restrooms open in winter • Developing snowmobile trail 	5.2.3					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>network maps/web site</p> <ul style="list-style-type: none"> • Establishing routes, an overnight hut system, parking and trailhead facilities, etc. for back-country ski touring/snowshoeing • Developing destination mountain biking and whitewater rafting/kayaking destinations within the County; including provision of parking and river put-in/takeout facilities • Developing guidebooks for mountain routes, etc. • Installing “Share the Road-Bicycles” signs to support organized bike rides and events and independent cycle touring as visitor activities • Establishing bicycle touring routes and the pursuit of funding to widen shoulders to safe widths for cyclists on those routes • Promoting agritourism and the development of specialty agricultural products. • Promoting winter sports, destination hunting, fishing, and wildlife viewing. • Coordinating the marketing message promoting recreational resources and the availability of lodging and food services to accommodate visitors. 						
<p>9. a. As part of an overall economic development strategy, the County shall incorporate measures to encourage the development of the literary, performing and visual arts through programs and facilities which will support tourism and otherwise contribute to the retention and creation of job opportunities.</p> <p>b. The County shall support development of cultural tourism attractions based on the interpretation of the</p>	5.2.4					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>County's history, including collaboration with local groups on projects relating to local Native American culture and history, and other historic themes such as mining, logging and railroads.</p> <p>c. The County shall, where feasible, identify and support local groups in the performing and visual arts.</p> <p>d. The County shall establish and implement a standardized permitting process and requirements to facilitate concerts, festivals and other large visitor-attracting events while considering potential negative impacts on the surrounding community.</p> <p>e. The County shall encourage protection, maintenance and restoration of historic facilities, structures, including barns, and venues used for cultural and art activities.</p>						
<p>10. The County shall consider strategic use of County assets, such as property, buildings, structures and rights-of-way to be used in partnership with service providers to expand broadband and other new technology networks.</p>	5.3.2					
<p>11. As part of an overall economic development strategy, the County shall inventory and assess the County's existing assets for economic development and develop an action plan to maintain, improve, expand and re-use them for the benefit of economic development. Such an inventory could include:</p> <ul style="list-style-type: none"> • Plumas County's three airports • Old mine sites • Abandoned mill sites and other key opportunity sites • Railroad lines and spurs • Power transmission infrastructure and other 	5.3.3					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>infrastructure</p> <ul style="list-style-type: none"> • Support services and facilities, such as produce processing facilities, animal-processing facilities and dairies • Natural resources 						
<p>12. a. The County will support the location of a satellite campus for Feather River College within the County and will also explore incentives and marketing programs to attract an accredited four-year college or university to the County.</p> <p>b. The County shall encourage Feather River Community College and the public school system to develop and offer courses that will help local residents develop skills that will position them for jobs in Plumas County’s emerging industries.</p> <p>c. The County shall encourage collaboration between the public education system, non-profits and private sectors to promote education, vocational training, professional development, workforce development and lifelong learning in the workforce.</p>	5.4.1					
<p>13. a. As part of an overall economic development strategy, the County shall strive to support economic development programs that promote and seek funding for workforce development and housing and provide technical and financial assistance, including capital, technical expertise, and training, to businesses starting up and expanding.</p> <p>b. The County shall promote job training by coordinating with local non-profits, Feather River College, private sectors and agencies in placing unemployed residents, including youth, in appropriate skill-enhancement programs.</p>	5.4.2					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>c. The County shall strive to facilitate networking among local entrepreneurs and potential mentors by working with local business organizations to establish a Plumas County entrepreneur's and potential mentor's forum involving a speaker's series that would serve as a venue to attract entrepreneurs and potential mentors. The purpose of the forum would be for networking and to begin building a database of local entrepreneurs and potential mentors and their interests and resources, which can be used to help match fledgling businesses with mentors and resources to support their success.</p>						
<p>14. a. The County will continue its outreach to local residents in filling vacant positions within County departments and agencies.</p>	5.4.3					
<p>b. When considering any outsourcing of services to private enterprise, the County shall incorporate a preference for local firms, when financially feasible.</p>						
<p>15. a. The County shall implement a program that increases the efficiency of the development review process, which may include amending the Zoning Code to streamline review of minor projects with minimal environmental impacts that enhance the County's economic base on sites suitable for commercial and industrial uses.</p>	5.5.1					
<p>b. The County shall facilitate build-out of digital infrastructure by amending the Zoning Code as necessary to facilitate the installation of digital communications infrastructure for businesses and industry, including expanded availability of broadband service options</p>						

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
for home businesses.						
c. The County shall support efforts, including revisions to the Zoning Code to improve signage, displays and mapping for downtowns.						
d. The County shall review parking in existing communities and explore solutions to identified parking problems.						
e. The County shall modify the Zoning Code to facilitate commercial, industrial and/or mixed-use projects at sites near transit stops.						
f. The County shall support efforts of local economic development service providers to coordinate and identify ways that local regulations and procedures could be improved in order to better support business within the County.						
16. The County shall consider granting variances from development standards, modifications to impact fee requirements, expedited permit processing and other types of incentives in order to encourage transit-oriented development.	5.6.1					
17. The County shall consider granting variances from development standards, modifications to impact fee requirements, expedited permit processing and other types of incentives in order to encourage infill development.	5.6.2					
18. The County shall provide mixed-use zoning in downtown and community core areas to allow a mix of housing, retail, offices, entertainment and public/civic uses.	5.6.3					
19. The County shall encourage preparation of Specific Plans or master plans and master environmental assessments for industrial parks in order to streamline the subsequent	5.6.4					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
development process.						
20. The County shall coordinate with local businesses and Chambers of Commerce to create “buy local” campaigns to build local residents’ awareness of the options for and benefits of shopping locally.	5.6.8					
21. The County shall support and implement Policies and Implementation Measures in the Housing Element that are designed to increase the supply of affordable housing within County, including providing adequate sites zoned to accommodate anticipated affordable-housing needs and Policies and Implementation Measures that call for the provision of incentives or other forms of assistance or public/private partnerships to develop and maintain affordable housing.	5.6.7 5.6.10					
22. The County shall encourage property owners to utilize programs such as Historic Preservation Tax Credits to rehabilitate and reuse historic buildings while maintaining their historic integrity.	5.6.11					
23. a. The County shall develop and implement a program that analyzes the existing and potential public services and infrastructure available to vacant land zoned for commercial and industrial uses within Towns and Communities and take steps to strive to provide adequate public services and facilities to support their development with employment generating uses. b. The County shall strive to coordinate County budget and capital-improvement programs with the Economic Element to ensure that public facilities and services are appropriately located and sized and properly	5.1.6 5.6.12					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
timed to support the desired economic development						
23. The County shall support the re-use of abandoned or underutilized facilities and buildings in existing communities and shall investigate the use of incentives or grants for the establishment of new productive uses.	5.6.5					
24. The County shall charter the Plumas County Coordination Council to be the forum responsible for the coordination of planning efforts between the County and other local, state and federal land managers.	5.1.9					
25. The County shall support the re-use of abandoned or underutilized facilities and buildings in existing communities and shall investigate the use of incentives or grants for the establishment of new productive uses.	5.6.5					

PUBLIC HEALTH & SAFETY ELEMENT (6)

Introduction

The purpose of the Public Health and Safety Element is to provide the policy context for protecting and reducing the risk of both natural and man-made hazards to County residents, workers, visitors and properties. The element is comprised of the following key

sections:

- Section 6.1: General Health and Safety Policies
- Section 6.2: Geologic and Seismic Hazards
- Section 6.3: Wildland Fire Hazards and Fire Protection
- Section 6.4: Flood and Dam Inundation Hazards
- Section 6.5: Hazardous Wastes
- Section 6.6: Airport Hazards
- Section 6.7: Emergency Operations Management and Planning
- Section 6.8: Healthy Communities

Plumas County is committed to protecting its communities in a manner that also addresses climate change. As part of the “Goals” section of this element, policies and implementation measures related to climate change are denoted with the symbol:



Figure 25. Johnsville Fire.
Photo Credit: Jay Newman

Setting / Existing Condition

Geologic and Seismic Hazards

The risk of seismic hazards to residents of Plumas County is based on the approximate location of earthquake faults within and outside of the County. Several potentially active faults pass through Plumas County. The Almanor Fault, Butt Creek Fault Zone and the Mohawk Valley Fault are shown in Figure 6-1. The Indian Valley Fault is also considered an active fault located within the County. Additionally, the Honey Lake and Fort Sage Faults are two active faults located east of the County. Although several faults are within and near the County, seismic hazard mapping indicates that the County has low seismic hazard potential. Additionally, the County is not located within a delineated Alquist-Priolo Earthquake Fault Zone. The risks associated with earthquakes, such as surface fault rupture, within the County are considered low.

Rates of erosion are contingent on a number of factors, including the type of soil material and structure, slope, water runoff and levels of human activity. Overall, the County is primarily characterized as having a moderate potential for soil erosion (see Table 6-1). Areas classified as having a low and high potential for erosion are also found in the County, with a fairly significant portion of the County unclassified or not mapped. Areas with a high potential for erosion are identified on Figure 6-1 and coincide with locations located at higher elevations in the County.

TABLE 6-1. SOIL EROSION POTENTIAL IN PLUMAS COUNTY

Soil Erosion Potential*	Acres in the County
High	2,040
Moderate	1,178,600
Low	31,590
Not Mapped	460,240

*Erosion potential is based on k factor, which is an indication of a soil's inherent susceptibility to erosion, absent of slope and groundcover factors.

Source: California Department of Conservation Division of Mines and Geology, 2001

The County is located in an area with varying topography and slopes. Areas with steep slopes in the County could be prone to landslides, mud slides and avalanches. Landslides, or ground failure, are dependent on slope, geology, rainfall, excavation or seismic activity. Mud slides are often caused by heavy rainfall. Areas that have recently been subject to wildfire are susceptible to mud slides. Avalanches consist of a rapid flow of snow down a slope. They often reoccur in the same areas and can be triggered by varying weather patterns and human activity. As seen in Figure 6-1, the volcanic soils in the eastern portion of the Plumas National Forest are prone to landslides. The figure also shows that areas concentrated along the North and Middle Forks of the Feather River are also susceptible to landslides. Asbestos is a naturally occurring fibrous material found throughout California. Disturbance of rocks and soil containing asbestos could lead to several public health issues. Figure 6-1 identifies areas with the potential to contain naturally occurring asbestos. The highest concentration of these mapped areas are found in the western portion of the County

Wildland Fire Hazards and Fire Protection

Suppression of natural fires has allowed the forest understory to become dense, creating the potential for larger and more intense wildland fires. Wind, steepness of terrain and naturally volatile or hot-burning vegetation contributes to wildland fire hazard potential. In reviewing fire threat mapping data provided by the California Department of Forestry and Fire Protection, it appears that a majority of the County is classified as having a “Moderate” to “High” threat of wildland fire. Policies in both the Land Use Element and the Public Health and Safety Element address reducing wildland fire risks on structures and reducing future risks through development patterns in the County.

Flood and Dam Inundation Hazards

The County contains an extensive network of rivers and other waterways that flow out of higher elevations to the valley areas. The Federal Emergency Management Agency (FEMA) has identified several areas of the County as being within Special Flood Hazard Areas. These areas are identified in Figure 6-2 and are primarily located in and/or near the communities of Chester, Greenville, Crescent Mills, Taylorsville, Quincy, Vinton and Portola. The City of Portola, Quincy, East Quincy and the American Valley and Greenville are mapped in more detail to show Base Flood Elevation (BFE) data which is determined to be the elevation of the Base Flood or “100-year” flood.

Flooding can also result from dam inundation or from the structural failure of a dam that results in a large release of water from a reservoir that flows downstream and overtops the banks of rivers and creeks. Figure 6-2 identifies those locations prone to flooding from dam inundation, and, as expected, many of the areas overlap with FEMA-identified flood zones. Dam inundation areas are generally found along the North and Middle Forks of the Feather River, Indian Creek between Taylorsville and Antelope Lake, Sierra Valley and Indian Valley.

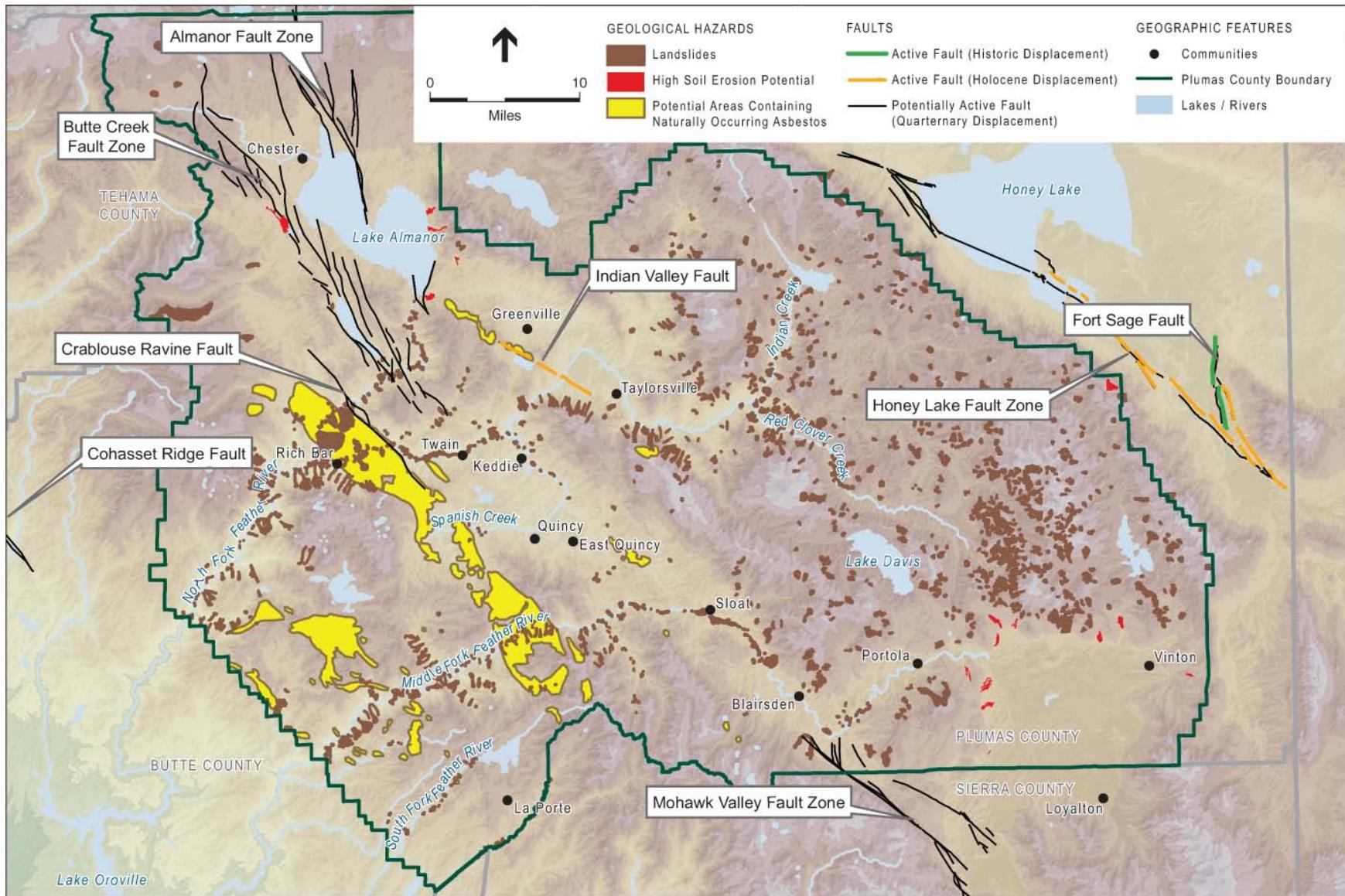


Figure 26. Geologic Hazards in Plumas County. ESA 2011

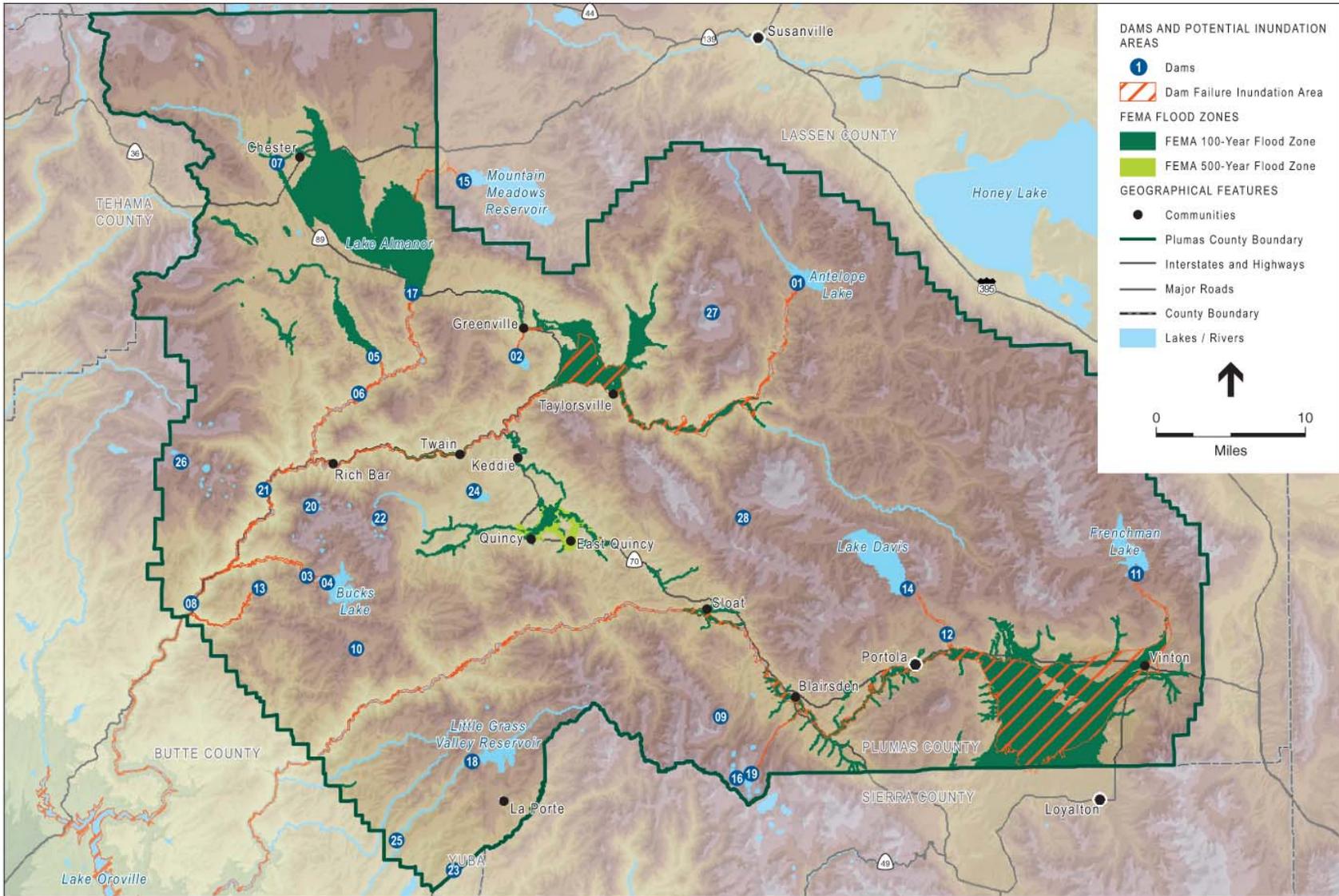


Figure 27. Dams and Potential Inundation Areas Within Plumas County. ESA 2011

Hazardous Wastes

Hazardous wastes or materials can take a variety of forms in Plumas County. Common products such as gasoline, paint solvents, household cleaning products and refrigerants are categorized as hazardous materials and are present throughout the County. Industrial operations, often employing hazardous substances, may leave behind contaminating underground storage tanks and/or residual pollutants that can infiltrate the County's natural resources. Within Plumas County, manufacturing or storage facilities (including lumber processing and bulk fuel storage facilities) within the more densely populated areas of Quincy, Portola and Chester account for the majority of hazardous materials use.

Transportation-related public health and safety issues also have the potential to occur along the major thoroughfares of the County. The highest potential for transportation-related incidents exists along the County's main east-west thoroughfare, State Route 70, and along State Routes 36 and 89. The majority of hazardous materials shipped through and within the County consists primarily of petroleum products, such as heating fuels, gasoline, diesel and propane. The County's railroad corridors, both the Union Pacific Railroad and Burlington Northern Santa Fe, are an additional public safety concern since freight trains also carry bulk containers of hazardous materials such as petroleum.

Locally, the Plumas County Environmental Health Division (EHD) manages the County's hazardous materials management program. The EHD maintains the Hazardous Materials Business Plan and Inventory Program. The program enforces the State "right-to-know" laws passed in 1984 and requires local businesses to provide public access to information about the types and amounts of chemicals being used on their property. Businesses must plan and prepare for a chemical emergency through the preparation of a Hazardous Materials Inventory that is certified annually, a Hazardous Materials Business Emergency Response Plan that is certified annually and an inventory of hazardous materials updated annually. EHD also regulates the use, storage and treatment of hazardous wastes and above-ground storage tanks.

Airport Hazards

Three public-use airports are located in the County: Nervino Airport in Beckwourth, Rogers Field Airport in Chester and Gansner Field Airport in Quincy. Potential safety issues associated with airports include aircraft accidents and noise impacts to surrounding land uses. Airport operation hazards include the development of incompatible land uses, power transmission lines, wildlife hazards, such as bird strikes, existing obstructions such as timbered hillsides, and tall structures in the vicinity of these airports. Airport safety zones are established to minimize the number of people subjected to noise and potential aircraft accidents through limitations on the type of development allowed around airports. Local Airport Land Use Compatibility Plan zoning regulations provide specific detail for the established airport safety zones. Emergency Operations Management and Planning

The Plumas County Office of Emergency Services (OES) is responsible for coordinating the County government's role in preparation and response to a disaster or large-scale emergency within Plumas County. The Office of Emergency Services works closely with other emergency management operations in the City of Portola and various special districts, authorities and joint-power authorities within County boundaries. In the event of an emergency, the Office of Emergency Services is charged with responding to the

unincorporated areas of Plumas County, providing support to jurisdictions within Plumas County.

Emergency evacuation is an integral component of the County emergency management system. The Office of Emergency Services also conducts ongoing evaluation of potential evacuation routes, including capacity and condition of roadways and potential barriers to the use of roadways, such as flooding. There are no set evacuation routes; rather, they are established for particular events based on circumstances at the time. The main focus is on three operational concerns: 1) Local/community evacuation; 2) Area-wide evacuation; and 3) Large-scale traffic management during regional evacuations. Primary state and local arterial and secondary ground transportation routes have been identified and are included in general preparedness and response planning efforts.

Legal Basis and Relationship to Other General Plan Elements

The County's Public Health and Safety Element addresses the various natural and man-made hazards that are considered when applying the policies and land-use designations of the Land Use Element. For example, lands subject to recurring flooding or extreme wildfire potential are planned for open-space uses such as agriculture wherever practical. Health and safety issues related to noise generation are described in the Noise Element.

State law [Section 65302(g) of the Government Code] mandates that the safety element address several key topics. The primary purpose of the Public Health and Safety Element is to establish policies and programs to protect the County from risks associated with seismic, geologic, flood and wildfire hazards. It is the intent of this section to craft programs and policies that reduce the risk of death, injury, property damage, and the economic and social dislocation related to the above hazards. This element has also included policies that address the goal of sustaining healthy communities.

This element meets the requirements of State law with the following exceptions:

- Tsunamis – As defined in the General Plan Guidelines, this phenomenon is a large ocean wave generated by an earthquake in or near the ocean. Plumas County has no coastline nor is it proximate to the ocean, and, therefore, the General Plan does not address this particular type of event.
- Military Installations and Operations Area – Plumas County has no military installations or facilities, however Military Operations Areas and Military Training Routes cross through significant portions of the County and are addressed in this Plan.
- Minimum Road Widths – This topic is more appropriately addressed in the Circulation Element.

Although not specifically required by State planning law, this element also considers a variety of issues related to healthy and livable communities.

Definitions

The following key terms are used throughout this element to describe health and safety issues:

Alquist-Priolo Fault Zone: The Alquist-Priolo Earthquake Fault Zoning Act, passed in 1972, requires the State Geologist to identify zones of special study around active faults. Plumas County is not mapped by the State Geologist.

Base Flood: In any given year, a 100-year flood that has a one percent likelihood of occurring, and is recognized as a standard for acceptable risk.

Fault: A fracture in the earth's crust that is accompanied by displacement between the two sides of the fault. An active fault is defined as a fracture that has shifted in the last 10,000 to 12,000 years (Holocene Period). A potentially active fault is one that has been active in the past 1.6 million years (Quaternary Period). A sufficiently active fault is one that shows evidence of Holocene displacement on one or more of its segments or branches.

Federal Emergency Management Agency (FEMA): The Federal agency that regulates floodplains and manages the flood insurance program.

Fire Hazard Zone: An area where, due to slope, fuel, weather, or other fire-related conditions, the potential loss of life and property from a fire necessitates special fire protection measures and planning before development occurs.

Flood, 100-Year: The magnitude of a flood expected to occur on the average every 100 years, based on historical data. The 100-year flood has 1/100, or one percent, chance of occurring in any given year.

Floodplain: Land adjacent to a stream, slough or river that is subject to flooding or inundation from any source. That part of the floodplain subject to a one percent chance of flooding in any given year is designated as an "area of special flood hazard" by the Federal Insurance Administration.

Floodway: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the "base flood" without cumulatively increasing the water surface elevation more than one foot. No development is allowed in floodways.

Hazardous Materials: Defined by the California Code of Regulations (CCR) as a substance that, because of physical or chemical properties, quantity, concentration or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible or incapacitating illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or deposited of (CCR, Title 22, Division 4.5, Chapter 10, Article 2, § 66260.10).

Special Flood Hazard Areas: Identified by the Federal Emergency Management Agency (FEMA) through the designation of approximate flood hazard areas as the land in the flood plain within the County subject to a one percent chance or greater chance of flooding in any given year, also known as the 100-year flood plain or flood hazard area. Some areas in the County have been mapped with Base Flood Elevation data. These areas are shown as AE zones on the FEMA Flood Insurance Rate Maps (FIRM).

Values and Issues

The Sierra is the third fastest growing region in California, and that growth has occurred in the high to extreme fire hazard areas of the Sierra. The combination of population growth and climate change in these fire-prone areas is putting more people and homes at a greater risk from catastrophic wildfire. Land Use planning in Plumas County can mitigate some of the risks by directing new development to be located within existing fire districts or adjacent to areas where fire protection can efficiently be extended. During the Working Group sessions and the public workshops both professional fire protection experts and community members identified fire safe communities as a goal

that should be included in the General Plan. With approximately five percent of Plumas County residents living outside of a fire protection district, and approximately six percent of the parcels created since 1985 located outside of a fire protection district, there is a need to develop policies that both address fire safe patterns for new development and address solutions for improving fire safety for existing communities and rural places.

Plans and Planning

The following local and regional plans, programs and organizations are among those that affect or are involved in the implementation of public health and safety protection in Plumas County:

- Plumas County Hazardous Materials Response Plan
- Plumas County Airport Land Use Compatibility Plan
- Plumas County Emergency Operations Plan
- Plumas County Multi-Hazard Mitigation Plan
- Plumas County Integrated Waste Management Plan
- Plumas County Community Wildfire Protection Plan (Plumas County Fire Safe Council)
- Almanor Basin Community Wildfire Protection Plan (Almanor Basin Fire Safe Council)

Goals

GOAL 6.1 General Policies

PHS 6.1	To protect local communities from injury and damage resulting from natural catastrophes and man-made hazardous conditions.
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Policies

PHS

6.1.1 Development Constraints

The County shall limit the density and intensity of development in areas to the levels needed to reduce hazards to public health and safety.

PHS

6.1.2 Building and Code Updates

Except as otherwise noted by State law, the County shall ensure that all new structures intended for human habitation are designed in compliance with the latest adopted editions of the California Building Standards Code.

PHS

6.1.3 Hazard Awareness and Public Education

The County shall continue to promote awareness and education among residents regarding possible natural hazards, including soil conditions, landslides, earthquakes, flooding, wildfire hazards and emergency procedures.

PHS

6.1.4 Public Safety Programs

The County shall promote all applicable public safety programs, including neighborhood-watch programs, hazards materials disposal, public awareness and prevention of wildfire hazards, and other public-education efforts.

GOAL 6.2 Geological and Seismic Hazards

PHS 6.2	To identify and prevent development in “areas of unstable geologic conditions,” which include: active faults, landslides and areas of potential ground failure such as liquefaction, mudslides and subsidence.
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Policies

PHS

6.2.1 Maintenance of Updated Geologic and Seismic Hazard Information

The County shall maintain updated geologic, seismic and avalanche hazard maps and other hazard inventory information in cooperation with the State Office of Emergency Services, California Department of Conservation—Division of Mines and Geology, United States Forest Service, California Department of Transportation and other agencies as this information is made available.

PHS

6.2.2 Design Measures

The County shall require earthquake resistant designs consistent with the requirements of the California Building Standards Code for all critical structures, such as fire stations, emergency communication centers, private schools, high occupancy buildings, and non-highway bridges.

PHS

6.2.3 Seismic Retrofitting

The County shall support and encourage seismic upgrades to older buildings that may be structurally deficient. Upgrades shall consider any applicable historic building preservation requirements.

PHS

6.2.4 Development on Slopes

The County shall not allow development on slopes 30 percent or greater, unless the applicant can sufficiently mitigate the inherent problems associated with developing on steep slopes.

PHS

6.2.5 Avalanche, Landslide and Mudflow Hazards

The County shall prohibit new subdivisions in high risk areas of known avalanche, landslide or mudflow hazards.

PHS

6.2.6 Naturally Occurring Asbestos

The County shall work with the Northern Sierra Air Quality Management District to map locations of naturally occurring asbestos and to mitigate potential hazards from development.

PHS

6.2.7 Development Requirements

The County shall continue to address seismic standards of dam safety as required by the State Division of Safety and Dams.

GOAL 6.3 Wildland Fire Hazards and Fire Protection

PHS 6.3	To minimize the possibility of the loss of life, injury, damage to property, and loss of habitat and natural resources as a result of fire.
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Policies

PHS

6.3.1 Defensible Space

The County shall review and update its Fire Safe ordinance to attain and maintain defensible space through conditioning of tentative maps and in new development at the final map and/or building-permit stage.

PHS

6.3.2 Limitations in Fire Hazard Areas

The County shall consult the current Fire Hazard Severity Zone Maps during the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated with a high or very high fire hazard rating. Intensive development in areas with high or very high fire hazard rating shall be discouraged.

PHS

6.3.3 Structural Fire Protection

All developments within the service boundaries of an entity which provides structural fire protection may be required to make contribution to the maintenance of the existing level of structural service proportionate to the increase in demand for service structural fire protection and Emergency Medical Services resulting from the development.

PHS

6.3.4 New Development Requirements

As a requirement for approving new development, the County must find, based on information provided by the applicant and the responsible fire protection district that, concurrent with development, adequate emergency water flow, fire

access and fire-fighting personnel and equipment will be available in accordance with applicable State, County, and local fire district standards.

PHS

6.3.5 *Emergency Access*

As a requirement of new development, the applicant must demonstrate that adequate emergency access exists or can be provided to ensure that emergency vehicles can access the site and that private vehicles can evacuate the area.

PHS

6.3.6 *Fire Protection and Roadside Maintenance*

As a condition of development, the County shall require the long-term maintenance of private roads, including roadside vegetation management, to the standards of original improvements.

PHS

6.3.7 *Rural Fire Protection Water System*

The County shall research the feasibility of a countywide rural fire protection water system that provides a cost-effective, adequate water supply.

PHS

6.3.8 *Fire Protection Facility Upgrades*

The County shall encourage the upgrading of facilities within existing fire protection districts and encourage expansion of existing districts where warranted by population density allowed under the General Plan.

PHS

6.3.9 *Fuel Modification*

The County shall require new development within high and very high fire hazard areas to designate fuel break zones that comply with defensible space requirements to benefit the new and, where possible, existing development.

PHS

6.3.10 *Prescribed Burning*

The County shall encourage the use of prescribed burning as a management tool for hazardous fuels reduction, timber management purposes, livestock production and enhancement of wildlife habitat. The County shall support removal of fuels and chipping and onsite distribution of chipped materials as an alternative to burning.

PHS

6.3.11 *Regional Cooperation*

The County shall cooperate with Federal, State, community fire safety groups and other fire protection entities in fire prevention programs and in identifying opportunities for hazardous fuel reduction projects in zones of high and very high fire hazard either prior to or as a component of project review.

PHS

6.3.12 Fire Prevention Education

The County, in cooperation with Federal and State agencies, community fire safety groups and local fire protection districts, shall educate the public about the hazards of wildfires, methods to reduce the potential for fires to occur, and mitigation measures, including reducing fuel loads, to lessen the impacts of wildfires.

PHS

6.3.13 Landscape-Scale Fuel Modification

The County shall support fuel modification across public and private forestlands to reduce the potential for catastrophic wildfires, with the highest priority directed toward reducing hazardous fuel levels in the wildland-urban interface.

GOAL 6.4 Flood and Dam Inundation Hazards

PHS 6.4	To minimize the loss of life, injury or damage to property as a result of floods in Plumas County.
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Policies

PHS

6.4.1 Coordination with Federal Emergency Management Agency, United States Army Corps of Engineers and Department of Water Resources Division of Flood Management

The County shall continue participation in the Federal Emergency Management Agency’s National Flood Insurance Program, utilizing the Flood Insurance Rate Maps and the County’s floodplain ordinances that implement Federal and State flood management standards. The County shall continue to utilize floodplain management and flood control information provided by the Department of Water Resources Division of Flood Management and the United States Army Corps of Engineers and coordinate with these agencies when undertaking updates to the County’s floodplain ordinances and policies.

PHS

6.4.2 Development in Floodways and Dam Inundation Areas

The County shall prohibit the development of new critical or high-occupancy structures within the floodway of any river, stream or other body of water. Similar structures should not be located within the inundation area resulting from failure of dams identified by the State Department of Water Resources Division of Safety of Dams.

PHS

6.4.3 New Parcels in Floodplain

The County shall strongly discourage the creation of new residential parcels which lie entirely within Special Flood Hazard Areas as identified on the most current version of the Flood Insurance Rate Maps provided by the Federal Emergency Management Agency.

Proposals for new parcels that are partially located within designated Special Flood Hazard Areas must be evaluated to determine if sufficient land is available outside the Special Flood Hazard Area to support residential development and that potential flood impacts can be sufficiently mitigated.

PHS

6.4.4 Floodplain Development Restrictions

The County shall ensure that riparian areas and drainage areas within floodplains are free from development that may adversely affect floodway capacity or characteristics of natural/riparian areas or natural groundwater recharge areas.

PHS

6.4.5 Multi-Purpose Flood Control Measures

The County shall encourage multi-purpose flood control projects that incorporate recreation, resource conservation, preservation of natural riparian habitat and scenic values of the County's waterways.

PHS

6.4.6 Flood Control Design

The County shall avoid flood control projects involving further channeling, straightening or lining of waterways until alternative multi-purpose modes of treatment, such as wider berms and landscaped areas in combination with recreation amenities, are studied.

PHS

6.4.7 Limit Surface Runoff

The County shall review development projects to determine that such development can be permitted without alteration of off-site historical flood patterns or contribution to flooding hazards for downstream users. Each project with the potential to create off-site drainage shall be required to submit a plan showing how the impacts of such drainage will be addressed, both on-site and off-site.

PHS

6.4.8 Storm Water Retention/Detention and Groundwater Infiltration

As appropriate, the County shall require development to incorporate storm-water retention/detention ponds to encourage groundwater recharge and to make efficient use of storm water.

GOAL 6.5 Hazardous Wastes

PHS 6.5	To protect the community from hazardous materials through safe and efficient use, storage, transport and disposal.
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Policies

PHS

6.5.1 *Hazardous Materials*

The County Environmental Health Division, as the Certified Unified Program Agency (CUPA), shall strive to ensure hazardous materials are used, stored, transported and disposed of in a safe manner in compliance with local, State and Federal safety standards.

PHS

6.5.2 *Hazardous Materials Studies*

The County shall ensure that a site investigation, undertaken by a person with State-recognized credentials, shall be submitted to the County for any subdivision or parcel that is located on a known or suspected contaminated site included in a list as provided by applicable State and Federal agencies. The recommendations of these site investigations will be implemented prior to development of the specific site.

PHS

6.5.3 *Transportation of Hazardous Wastes*

The County shall continue to coordinate with the California Highway Patrol (CHP) and railroad operators to establish procedures for the movement of hazardous wastes and explosives within the County.

PHS

6.5.4 *Contamination Prevention*

The County shall require new developments to protect soils, air quality, surface water and groundwater from hazardous material contamination associated with site development and construction activities.

PHS

6.5.5 *Incompatible Land Uses*

The County shall review project applications to prevent incompatible land uses near properties that produce or store hazardous waste.

PHS

6.5.6 *Hazardous Materials Databases*

The County shall continue to maintain maps or databases that identify known or suspected contaminated sites which include active, abandoned or closed mines; closed landfills; leaking underground tanks; or other areas where soils may have become saturated or otherwise contaminated with toxic or hazardous materials.

PHS

6.5.7 *Increase of Public Awareness*

The County shall work to educate the public about household hazardous waste and proper methods of disposal.

PHS

6.5.8 Hazardous Materials and Waste Management

The County shall ensure the safe and effective management of hazardous materials and hazardous wastes generated within the county. Primary management strategies include waste minimization, waste reduction and recycling. Should applications for the treatment, processing or disposal of hazardous wastes or materials be received, such facilities shall be located in a manner consistent with State law as well as criteria established in the State-approved Plumas County Hazardous Waste Management Plan approved by the County.

PHS

6.5.9 Hazardous Materials Remediation

The County shall work with project applicants to actively promote clean-up or remediation of properties contaminated by mine waste or other hazardous materials and shall not grant any discretionary or ministerial land-use approvals to develop or change boundaries or reconfigure parcels believed to be contaminated unless and until the nature, extent, type and location of contamination is determined and satisfactory arrangements are made for clean-up or remediation, in accordance with Plumas County standards and state regulations.

GOAL 6.6 Airport Safety

PHS 6.6	To protect the community from the risks associated with airport operations and to protect airports from the economic impacts of encroachment from incompatible land uses.
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Policies

PHS

6.6.1 Consistency with the Airport Land Use Compatibility Plan

The County shall review all development proposals near county airports to ensure consistency with the current ALUCP’s height, noise and safety policies and land use criteria set forth in the Plumas County ALUC’s statement of Policies, Rules and Regulations, and each ALUCP. When required, development proposals shall be referred to the ALUC for review and recommendations.

PHS

6.6.2 Compliance with Federal Aviation Administration (FAA) Regulations

The County shall ensure that development within the airport approach and departure zones is in compliance with Part 77 of the FAA Regulations.

GOAL 6.7 Emergency Operations Management and Planning

PHS 6.7	To provide effective emergency response to natural or human-made hazards and disasters.
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Policies

PHS

6.7.1 Emergency Response Services Coordination with Government Agencies

The County shall coordinate emergency response with local, State and Federal governmental agencies, community organizations, volunteer agencies and other response partners during emergencies or disasters utilizing the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS).

PHS

6.7.2 Mutual Aid Agreement

The County shall participate in established local, State and Federal mutual aid systems. Where necessary and appropriate, the County shall enter into agreements to ensure the effective provision of emergency services, such as mass care, heavy rescue, hazardous materials or other specialized functions.

PHS

6.7.3 Maintenance of Emergency Evacuation Plans

The County shall continue to create, revise and maintain emergency plans for the broad range of natural and human-made disasters and response activities that could be foreseen to impact Plumas County. This shall include, but not be limited to, flooding, dam failure, extreme weather, evacuation/transportation, mass care and shelter, and animal evacuation and sheltering. Emergency Planning projects shall be in line with the County’s Emergency Operations Plan and incorporate current guidance and initiatives from State and Federal Emergency Management Agencies.

PHS

6.7.4 Streets and Highways Upgrades

The County shall evaluate and strive to upgrade vital streets and highways to an acceptable level for emergency services and for public safety.

PHS

6.7.5 Search and Rescue

The County should continue to provide search and rescue operation capabilities through the Plumas County Sheriff’s Department.

PHS

6.7.6 Joint Exercises

The County shall encourage fire, law enforcement, emergency medical services, resource management, public health and other governmental and non-governmental response partners to periodically conduct joint training exercises with the goal of developing the best possible coordinated action and effective response times in the event of a natural or human-made disaster across all local jurisdictions.

GOAL 6.8 Healthy Communities

PHS 6.8

To support the community values for healthy lifestyles and access to health care facilities among residents of Plumas County through the built environment and land-use decisions that play an important role in shaping the pattern of community development and in promoting good health and food security for visitors and County residents.

Policies

PHS

6.8.1 Promotion of Healthy Communities

To the maximum extent feasible, the County shall strive through its land-use decisions to promote community health and safety for all neighborhoods in the County by encouraging patterns of development that are safe and influence crime prevention, promote a high-quality physical environment and encourage physical activity by means such as sidewalks and walking and biking paths that discourage automobile dependency in existing communities.

PHS

6.8.2 Walkable Communities

The County shall require where feasible the development of parks, open space, sidewalks, and walking and biking paths that promote physical activity and discourage automobile dependency in all towns and communities.

PHS

6.8.3 Support for Local, Organic and Grass-Fed Agriculture

The County shall encourage and protect a variety of local ecologically sound agricultural practices as a way to increase on-farm income, diversify Plumas County agricultural production, provide a healthy, secure food source for local supply and complies with accepted public health and safety standards.

PHS

6.8.4 Promotion of Small-Scale Agricultural Production

The County shall encourage small-scale or community garden row crop production that contributes to local food security on appropriate sites throughout the County and complies with accepted public health and safety standards.

PHS

6.8.5 Community Food Security

Encourage countywide nutrition self-reliance and resiliency. Direct the development of policy that creates robust and just food systems in the County.

Public Health and Safety Element Implementation Measures

Work Plan/Implementation Measures

The following table documents the implementation measures included with the General Plan to implement the goals and policies included in this element.

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
1. The County shall update and maintain geologic, flooding and natural hazards mapping (including avalanche hazard zones) that are within areas of existing or potential development. The County shall use these maps during the development review process to evaluate a proposed project's potential exposure or impacts to hazardous areas and conditions.	6.1.1	Planning Department Public Works Department				
	6.1.3					
	6.2.1					
	6.2.2					
	6.2.3					
	6.2.4					
	6.2.6					
	6.3.1					
	6.3.2					
	6.3.4					
	6.3.5					
	6.3.9					
	6.4.1					
	6.4.2					
	6.4.3					
	6.4.4					
	6.4.5					
	6.4.6					
	6.4.8					
	6.5.1					
6.5.2						
6.5.3						
6.5.4						
6.5.5						
6.5.6						
6.5.8						
6.5.9						
2. County shall maintain countywide hazard land-use planning data—such as fire district boundaries, hazard areas and associated educational materials on the County's website.	6.1.1	Planning Department, GIS Department				
	6.1.3					
	6.1.4					
	6.2.1					
	6.2.2					
	6.2.3					
	6.2.4					
	6.2.6					
	6.3.1					
	6.3.2					
	6.3.4					
	6.3.5					
	6.3.9					
	6.3.12					
	6.4.1					
	6.4.2					
	6.4.3					
	6.4.4					
	6.4.5					
	6.4.6					
6.4.8						
6.5.1						
6.5.2						
6.5.3						

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
	6.5.4 6.5.5 6.5.6 6.5.8 6.5.9 6.7.1 6.7.2 6.7.3 6.8.1					
3. The County shall require a geotechnical analysis for construction in areas with potential geological hazards and/or for purposes of environmental analysis. Recommendations of the geotechnical analysis shall be implemented.	6.2.1 6.2.2 6.2.4	Planning Department Public Works Department				
4. The County shall work with appropriate fire protection agencies to develop community fire plans to identify the desired level of service and methods for delivering such services.	6.3.3 6.3.4 6.3.5 6.3.7 6.3.8	Planning Department Public Works Department				
5. The County shall research the feasibility of a county-wide rural fire protection water system that provides a cost-effective and adequate water supply for emergency protection.	6.3.2 6.3.3 6.3.7	Planning Department Public Works Department				
6. During the review of development proposals, the County shall require appropriate building setbacks and fuel modification requirements within fire hazard zones, as appropriate to each specific hazard zone	6.3.1 6.3.2 6.3.4 6.3.9	Planning Department Public Works Department				
7. County staff shall review wildfire safety policies, codes and ordinances and report the findings to the Board of Supervisors at regular intervals, every three years, and will consider new wildfire safety codes and ordinances to meet the County's Fire Safe needs.	6.3.1 6.3.2 6.3.3 6.3.4 6.3.5 6.3.7 6.3.8 6.3.9	Planning Department				

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
8. County public safety facilities shall be included in the County's development impact fee program to provide for new facilities or upgrading of existing facilities necessary to serve new development.	6.3.3 6.3.4	Planning Department				
9. The County shall adopt all appropriate California Building Standards Code revisions.	6.1.1 6.1.2 6.2.1 6.2.2 6.2.3 6.2.4 6.3.1 6.3.2 6.3.4 6.3.9 6.4.1 6.4.2 6.4.3 6.4.4 6.4.5 6.4.6 6.4.8 6.5.4 6.5.5 6.5.8	Building Department				
10. The County shall continue to participate in the National Flood Insurance Program and utilize the Flood Insurance Rate Maps and the County's floodplain ordinances that implement Federal and State flood management standards.	6.4.1 6.4.2 6.4.3 6.4.4 6.4.5 6.4.6 6.4.8	Planning Department Public Works Department				
11. The County shall develop regulations for the placement of hazardous waste sites and develop standards for types of uses which would be compatible. Existing hazardous waste development requirements shall be enforced.	6.5.1 6.5.2 6.5.3 6.5.4 6.5.5 6.5.6 6.5.7 6.5.8 6.5.9	Plumas County Environmental Health Division				
12. The County shall maintain a Plumas County Emergency Operations Plan to meet current Federal and State emergency requirements.	6.7.1 6.7.2 6.7.3	Plumas County Office of Emergency Services				

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
13. The County shall develop a healthy community checklist for new residential, commercial, office and public developments that lists standards for land use, transportation, street design, parks, and open space.	6.8.1 6.8.3 6.8.4	Planning Department				
14. Encourage Countywide food security by allowing a limited backyard small animal husbandry, including chickens, rabbits and miniature livestock, for home-scale food production based on appropriate zoning.	6.8.1 6.8.3 6.8.4	Planning Department				
15. Create a resiliency plan that address community needs county-wide in the event of a major natural disaster or long term disruption of food and fuel transportation into the county.	6.8.1 6.8.2 6.8.3 6.8.4	Planning Department				
16. The County shall promote the continued effectiveness and public awareness of the Plumas County Emergency Operations Plan.	6.1.3 6.1.4					
17. The County shall promote the public's awareness of the programs available through the Federal and State agencies, community fire safety groups, and local fire protection districts.	6.1.3 6.1.4					
18. Emergency access to new developments shall be in accordance with county wildfire safety policies, which are certified in lieu of Public Resources Code Section 4290, or as may be modified and recertified in compliance with Public Resources Code Section 4290.	6.3.5					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
19. The County shall cooperate with Federal, State and Local agencies, community fire safety groups and other fire protection entities in developing fire prevention programs and facilities.	6.3.8					
20. Develop codes and standards to address drainage.	6.4.8					
21. The County shall require emergency backup systems in county emergency facilities to enable uninterrupted continuous operations as required by the California Essential Facilities Act.	6.7.3					
22. The County shall encourage sustainable timber and biomass production and harvesting along with more intensive forest management practices to protect watershed quality, productive forests and forested lands and habitats and to reduce the potential of catastrophic wildfires.	6.3.13					
Also Implementation Measure from the Water Element:	6.3.3					
	6.3.4					
	6.3.7					
6. The County shall work with and encourage water agencies and fire protection agencies to conduct a county-wide assessment of fire-flow requirements as they relate to compliance with fire protection standards.						

CONSERVATION AND OPEN SPACE ELEMENT (7)

Introduction

The County’s Conservation and Open Space Element combines two of the seven required elements of a General Plan: the Conservation Element, which is required to address the conservation, development, and utilization of specific natural resources, such as air quality, soils, mineral resources, and wildlife habitats, and the Open Space Element, which is required to address open space lands used for a variety of uses, including recreational pursuits.



Figure 28. Middle Fork, Feather River
Photo Credit: Carol Dobbas

You will not find policies directly pertaining to water quality and quantity, forest resources and agriculture within the Conservation Element. This update of Plumas County’s General Plan elevates the importance of these resources and presents them in two separate additional elements; Water (Element 9) and Forestry and Agriculture (Element 8).

The Conservation and Open Space Element is comprised of the following key sections:

- Open Space (7.1)
- Biological Resources (7.2)
- Soil Resources (7.3)
- Mineral Resources (7.4)
- Cultural and Historic Resources (7.5)
- Scenic Resources (7.6)
- Parks and Recreation (7.7)
- Trails and Bikeways (7.8)
- Air Quality (7.9)
- Climate Change (7.10)
- Energy Conservation (7.11)

Plumas County is committed to protecting its communities in a manner that also addresses climate change. As part of the “Goals” section of this element, policies and implementation measures related to climate change are denoted with the symbol:



Setting / Existing Condition

With a majority of land associated with agricultural activities, forestry, or other managed resource uses, approximately 94% of the total County area, the primary land use in Plumas County is considered an open space use. Additionally, many of these lands are managed for a combination of resource values, including but not limited to recreation, mining, timber production, and cultural and historic resources. This section briefly summarizes important environmental setting information that serves as the basis for the development of the various goals, policies, and implementation measures provided in this element.

Biological Resources

Plumas County is comprised of a range of habitat types many of which influence the water quality and quantity of the Feather River Watershed. These habitats, or vegetation communities, provide food, shelter, movement corridors, and breeding opportunities for a variety of wildlife species, many unique to the Feather River Watershed and the larger Sierra Mountain region. As shown in Figure 7-1, Conifer, including Mixed Conifer, habitat types comprise approximately 72% of land coverage in

the County and are habitats commonly found at higher elevations. Plants characteristic of this habitat include a variety of pines and firs. As one gets farther away from the higher elevation Sierra regions of the County, the pines and firs give way to sagebrush, annual grasslands, and the freshwater emergent wetland habitat types more common at lower elevations.

Plumas County and the larger Feather River Watershed area contain a variety of aquatic habitats. Within the watershed, two types of fisheries are found: cold water river/stream species and warm water lake/ reservoir species. Historically, the watershed was habitat to Chinook salmon and steelhead. Special-status species are plants or animals that are legally protected under the State and/or federal Endangered Species Acts (ESAs) or other regulations, and species that are considered by the scientific community to be sufficiently rare to qualify for such listing. The California Department of Fish and Game has documented habitat for over 90 different species of special concern in the County. These include several amphibians, such as the red-legged frog, bald eagles, osprey, several mammals, and plant/wildlife species associated with wetland habitats.

Soil Resources

Plumas County is located in an area of varying topography and slopes, with elevations ranging from approximately 1,800 feet in the Feather River Canyon to 8,300 feet near the summit of Mount Ingalls. Rates of erosion are contingent on a number of factors, including the type of soil material and structure, slope, water runoff, and levels of human activity. Overall, the County is characterized as having a moderate potential for soil erosion (see **Table 7-1**). Areas classified as having a low and high potential for erosion are also found in the County, with a fairly significant portion of the County unclassified or not mapped.

TABLE 7-1. SOIL EROSION POTENTIAL IN PLUMAS COUNTY

Soil Erosion Potential*	Acres in the County
High	2,040
Moderate	1,178,600
Low	31,590
Not Mapped	460,240

*Erosion potential is based on k factor, which is an indication of a soil's inherent susceptibility to erosion, absent of slope and groundcover factors.

Source: California Department of Conservation Division of Mines and Geology, 2001.

Mineral Resources

Plumas County has a rich history, and since the European settlement first began in the mid 1800s, has remained largely a resource-based economy, exporting gold, timber, copper, aggregate and water to benefit the surrounding regions. Although the significance of the mining industry has been declining over the past several decades, gold and copper mining speculation contributes to the County's economy.

Cultural and Historical Resources

As glaciers receded from the Sierra Nevada and the Cascades, humans migrated into the foothills and higher elevations' protected valleys. Humans have been utilizing the Sierra and Cascade ranges for thousands of years, and have been an integral part of its ecology for 2,000 to 5,000 years. This is particularly apparent through documented use of fire to facilitate propagation and gathering of plant species preferred for foodstuffs, basketry materials, medicinal uses and other needs. Harvesting extraction and

processing of stone, acorn, pine nut, basketry fiber, and other resources by native peoples resulted in alterations to the land resources in many locations across Plumas County

The Mountain Maidu is the tribal group whose people were present in Plumas County when European migrants started to settle. Depending on what source is relied upon, the Mountain Maidu people have lived in various locations in Plumas County from hundreds to thousands of years and still do today. Other tribes, such as the Washoe, and the Paiute most likely utilized the area while not settling permanently. When weather permitted, the Maidu maintained permanent villages along the timbered edges of glacial valleys. From early Spring to late Fall, smaller groups traveled to upper Sierra ridge tops and valleys, setting up open air brush shelters. Villages were occupied during winter months and relied mostly on stored and preserved food. The Mountain Maidu people most likely existed in small, scattered, familial groups in the valleys of Plumas County.

Their existence was suddenly disturbed in the spring of 1850 when a flood of gold-seeking miners poured into the canyons and valleys of the region in search of a fabled “Gold” Lake. Overnight, mining camps sprang to life. Rivers were turned from their beds, ditches were dug to bring water from distant sources to the diggings and the land was turned upside down.

As agricultural areas were later established in Plumas County, Mountain Maidu dispersed to live on portions of ranch properties and, in many cases, adopted the name of the ranching family associated with the ranch on which they resided. While there were no official extermination programs in the Plumas County area during the European Settlement period, the population of Maidu declined significantly due to illness.

A sizable Chinese population took up residence here and remained until the early 1900s when, with the decline in mining, most left the area.

The North, Middle and South forks of the Feather River were named in 1821 by Captain Luis Arguello as the Rio de las Plumas (“River of Feathers”) after the Spanish explorer saw what looked like bird feathers floating in the water. “Plumas”, the Spanish word for “feathers”, later became the name for the county. The river and its forks were the primary sites of early mining activity, with many smaller camps located on their tributaries. Over the next five decades gold mining remained the main industry of the county.

Ranching operations in the area also began during the Gold Rush years, with several large ranches established in the valleys of Plumas County. Dairies provided milk, butter, and cheese to the gold fields and later provided dairy products to the silver mining operations in northern Nevada. Many of the Swiss and Italian families who settled and worked the local meadows and valleys have third and fourth generations living and ranching their agricultural lands in the county today.

In 1850, the famous mountain man James P. Beckwourth, discovered the lowest pass across the Sierra Nevada and the following year navigated a wagon trail for California-bound emigrants from western Nevada, through Plumas County, to the Sacramento Valley.

Several years later, in March of 1854, Plumas County was formed from the eastern and largest portion of Butte County with the town of Quincy chosen as the county seat after a heated election. In 1864, a large part of northern Plumas County was carved off to form present day Lassen County. Following this, Plumas County annexed a small portion of Sierra County, which included the town of La Porte.

A favorite winter activity of miners was competitive skiing on 12 to 14 foot "longboards" or "snowshoes," the name first given to skis. Beginning around the gold towns of Johnsville, La Porte and Onion Valley, these activities are now documented as the first competitive downhill skiing events in the world.

Approximately 1862, Greenville came into existence as a mining and farming community at the head of Indian Valley; Chester, near Lake Almanor, was born as a result of damming Big Meadows and the lumber potential from the timber stands blanketing the area. Soon after the turn of the century, and with the construction of the Western Pacific Railroad in 1910, Portola came into existence.

With the railroad for transportation, the timber industry began to emerge as the primary economic force in the county. Until that time lumber was milled strictly for local use. Finished lumber could now be shipped nationwide from Plumas forests. Realizing the importance of the area's forests, President Theodore Roosevelt established the Plumas National Forest in March 1905, with boundaries that roughly encompassed the branches of the Feather River. The national forests produced significant timber for the nation from around World War II up to the 1980s. The private timber industry contributed enormously to the growth and prosperity of Plumas County and continues to do so to this day.

Along with the railroad's construction up the Feather River Canyon came some of the earliest tourists to the county. Resorts and lodges popped up at intervals along the "Feather River Route" to accommodate fishermen, hikers and sightseers. The last passenger train ran in 1970, and the line is now devoted to freight traffic only. In 1937, the Feather River Highway, touted as an "all weather route", was completed through the Feather River Canyon from Oroville to Quincy, linking Plumas County year-round to the Sacramento Valley. Although railroads are no longer a key component of the local transportation infrastructure, they have left a legacy of notable bridges and other railway features in the area.

Hydroelectric power was first brought to the Feather River Canyon in 1908 when the Big Bend Powerhouse was built by the Eureka Power Company. This powerhouse is now under Lake Oroville. Steps to gain control of land and water rights, and smaller power companies, to create Lake Almanor took several years. By 1912, Great Western Power had secured title to the necessary lands for this project. Construction took until 1914 to complete and, in another four years, Lake Almanor was initially filled. Additional hydropower projects would be completed elsewhere in Plumas County and on the North Fork of the Feather River in a network known as the "Stairway of Power".

Scenic Resources

Plumas County residential areas are generally clustered in or near small towns established as part of historic commercial activities that occurred in these locations. The history of the valleys and towns of Plumas County has influenced the built environment and, therefore, contributes to community character. These resources are largely visible from many local scenic roads and designated scenic highways including State Routes 49, 70, 89 and 284. Open space, forested areas, views of mountain peaks and ridgelines, water bodies such as lakes, streams, and rivers, ranch home sites, barns and associated grazing lands also contribute to local community character. The 1984 General Plan established scenic areas in meadows and along peaks and waterways as a method of continuing the pattern of open space and scenic vistas. These Scenic Areas, whose names also reflect the rich history of the County, included the following:

- Grizzly Creek
- Rocky Point
- Charles Valley
- Beckwourth Peak
- Adams Neck
- Little Last Chance Creek Canyon
- Frenchman Lake
- Little Last Chance
- Ramelli
- Indian Creek Canyon
- Indian Valley
- Feather River Meadows
- Warner Valley
- Soldier Meadows
- Humbug Valley
- Keefer Ranch Meadows
- Lake Almanor
- Johnson Fields-North Causeway
- Feather River Canyon
- Thompson Valley
- American Valley
- Butterfly Valley
- Spring Garden
- Johnsville
- Meadow Valley-Spanish Ranch
- Long Valley
- C-Road
- Mohawk Valley
- South Mohawk Valley
- Middle Fork of the Feather River

The communities in Plumas County have been influenced by local history resulting in building styles and designs that are reflective of that history. The layout or plan for many of its communities is considered traditional with streets organized in a grid pattern, with on-street parking and public gathering spaces. A mix of residential, commercial and public service facilities are typically located within walking distance of town centers. Parts of Plumas County have existing conditions that have contributed to a blemished community character. Strip development, blighted areas, boarded up/vacant buildings, unpermitted signage and highway design issues detract from community character in some areas.

Parks and Recreation Areas

With a majority of the County consisting of an open space land use, the County provides a variety of opportunities for recreational activities. Park and recreation facilities include both public and privately managed facilities, with several key parks, recreation areas, and wildlife viewing areas identified in Figure 7-2. Additionally, local year-round arts and culture contributes significantly to Plumas County's character. On-line listings of events include live theater performances, art walk events, and cultural and historic themed festivals such as Railroad Days in the City of Portola. Arts related events include performing arts, music, literary events and opportunities to view visual art. Residents and visitors alike enjoy a range of festivals, picnics, concerts and events related to local history throughout the year.

Air Quality

Plumas County's topography greatly influences its climate, which results in disproportionate levels of precipitation throughout the County. More commonly known as the rain shadow effect, this condition is created by the Sierra Nevada Crest which acts as a barrier to storm systems between the western and eastern portions of the County. Consequently, while the western side of the Sierra Nevada range receives over 90 inches of rain annually, areas east of the Sierra Crest receive only 11 inches, with the majority occurring from October to April. Throughout the year, average temperatures, as measured at Portola, can range over 80 degrees Fahrenheit (F) during the summer months to 18 degrees F during the winter months.

Plumas County is located within the Mountain Counties Air Basin, which is a relatively large air basin located entirely within the Sierra Nevada Mountains. Within this basin the Northern Sierra Air Quality Management District (NSAQMD) regulates air quality conditions in Plumas County. Plumas County is in attainment or unclassified for all federal Ambient Air Quality Standards (AAQS); however, the U.S. Environmental Protection Agency is considering designating the Portola Valley as being in non-

attainment for PM_{2.5}, which consists of dust/particulate matter 2.5 microns in diameter or smaller, based on federal standards. Plumas County is currently designated as non-attainment for PM_{2.5} and PM₁₀ based on state standards administered by the CARB. Recorded trends are likely to continue because the primary causes of PM₁₀, such as road dust, and wildfires, are not expected to decrease. These designations are based on annually collected data from three air quality monitoring stations located in the County. The County's largest sources of Particulate Matter are unpaved road dust, prescribed burning and residential fuel. Primary activities contributing to these pollutant emissions include wildfires, use of woodstoves, forestry management burns, residential open burning, vehicle traffic and windblown dust. The varying topography of the air basin also contributes to localized air quality issues within valley areas.

Energy Conservation

The main sources of energy production in Plumas County include thirteen power plants, which produce about 666 megawatts (MW) of electricity as of September 2009. The facilities include one biomass plant, one oil/gas plant, and eleven hydroelectric plants. Energy consumption in Plumas County is almost entirely electricity use because there are no natural gas service lines within the County although some residents and businesses use propane tank services. In 2007, the total non-residential consumption was 109 megawatt hours (MWhs) and residential consumption equaled 105 MWhs for a total of 214 MWhs. This is a decrease from 2006 when the total electricity consumption in the County was 224 MWhs. The lower consumption in 2007 was driven by a fall in non-residential consumption. Therefore, in Plumas County the total supply of electricity produced in the County exceeds the demand for electricity.

Potential for additional hydroelectric power generation in Plumas County may be limited because of the 30 megawatt capacity limit for "small" hydroelectric plants and the requirement that the water travel through existing man-made conduits. The County does have potential for additional solar energy production. According to the California Energy Commission staff paper entitled California Solar Resources, the photovoltaic potential of Plumas County is estimated to be 71,626 megawatts. A report from the Center for Economic Development indicates that Plumas County has very little potential for large scale geothermal production. Plumas County's greatest asset for renewable energy production lies in the County's forests, where bio-fuels proliferate and where vegetation management for forest fire hazard reduction has potential to create an ongoing source of fuel for power generation plants.

Numerous policies in the Energy Section of the Economic Element have direct relationships to economic development, because they address the further development of the energy industry in Plumas County, or they address energy-related aspects of how other industries can operate in Plumas County, including those formerly identified as:

- ECON - 5.9.9 Telecommuting
- ECON - 5.11.2 Energy Efficiency in Economic Development Efforts
- ECON - 5.13.1 Identify Renewable Energy Resource Potentials
- ECON - 5.13.2 Develop of Renewable Resources
- ECON - 5.13.5 Protect Future Opportunities for Biomass Utilization
- ECON - 5.14.1 Establish Thresholds and Define Processes for Consideration (of energy facility applications)
- ECON - 5.14.4 Maximize Use of Existing Transmission Facilities
- ECON - 5.14.7 Protect Natural Resource Areas

Relationship to Other Elements

This element contains provisions for the conservation and protection of soils, minerals, habitats and species, cultural resources, and open space. State planning law provides a detailed description of open space lands and the topics that must be addressed in both the Conservation and Open Space Elements or addressed in an optional element approach. These topics and the specific location where these topics are addressed in the County’s updated General Plan are identified below in Table 7-2.

TABLE 7-2. CONSERVATION AND OPEN SPACE POLICY SUMMARY

Policy Direction	General Plan Elements – Location Addressed
<p>Open Space for the Preservation of Natural Resources: areas required for the preservation of plant and animal life, such as habitat for fish and wildlife and areas required for ecological and other scientific study (for example: rivers, streams, bays and estuaries, coastal beaches, lakeshores, riverbanks, and watersheds).</p>	<p>Conservation and Open Space Element (Section 7.1 – General Open Space Policies)</p> <p>Conservation and Open Space Element (Section 7.2 – Biological Resources)</p> <p>(However, the County has no coastal areas and therefore this and related topics are not addressed further in the General Plan)</p>
<p>Open Space for the Managed Production of Resources: lands (including forest lands, rangelands, agricultural lands) and areas of economic importance for the production of food or fiber; areas required for recharge of ground water basins; areas that are important for the management of commercial fisheries; and areas containing major mineral deposits.</p>	<p>Conservation and Open Space Element (Section 7.1 – General Open Space Policies)</p> <p>Conservation and Open Space Element (Section 7.3 Soil Resources and 7.4 Mineral Resources)</p> <p>Agriculture and Forestry Element</p> <p>Water Resources Element</p> <p>(However, the County does not directly support a commercial fishery and therefore this topic is not addressed further in the General Plan)</p>
<p>Open Space for Outdoor Recreation: areas of outstanding scenic, historical, and cultural values; areas suited for park and recreational purposes (for example: access to lake shores, beaches, rivers, and streams); and areas that serve as links between major recreation and open-space reservations such as highway corridors, trails, and utility easements.</p>	<p>Conservation and Open Space Element (Section 7.1 – General Open Space Policies and Section 7.7 Parks and Recreation)</p> <p>Conservation and Open Space Element (Section 7.5 Cultural and Historic Resources and Section 7.6 Scenic Resources)</p> <p>Transportation and Circulation Element</p>
<p>Open Space for Public Health and Safety: areas that require special management or regulation because of hazardous conditions such as earthquake fault zones, floodplains, high fire hazard areas, and areas required for the protection of air and water resources; areas designed for fuel breaks, fire access, and fuel reduction zones; and historical natural hazard boundaries (for example: inundation areas, landslide paths, debris flows, and earthquake faults).</p>	<p>Conservation and Open Space Element (Section 7.1 – General Open Space Policies and Section 7.9 Air Quality)</p> <p>Public Health and Safety Element (Section 6.2 Geologic and Seismic Hazards, Section 6.3 Wildland Fire Hazards and Fire Protection, and Section 6.4 Flood and Dam Inundation Hazards)</p> <p>Water Resources Element</p>
<p>Open Space in Support of the Mission of Military Installations: areas adjacent to military installations and military training routes; and areas underlying restricted military airspace.</p>	<p>Land Use Element</p> <p>Economics Element</p>
<p>Open Space for the Protection of Native American Resources: areas that include sanctified cemeteries; places of worship; religious or ceremonial sites; sacred shrines; historic, cultural or sacred sites; historic or prehistoric ruins; burial grounds; archeological or historic sites; inscription sites; rock art.</p>	<p>Conservation and Open Space Element (Section 7.1 – General Open Space Policies)</p> <p>Conservation and Open Space Element (Section 7.5 Cultural and Historic Resources)</p>

Definitions

The following terms are used throughout this element to describe conservation and open space issues.

Ambient Air Quality Standards: These standards measure outdoor air quality. They identify the maximum acceptable average concentrations of air pollutants during a specified period of time. These standards have been adopted at a State and federal level.

Carbon Dioxide (CO₂): A naturally occurring gas, and also a by-product of burning fossil fuels and biomass, as well as land-use changes and other industrial processes. It is the principal anthropogenic GHG that affects the Earth's radioactive balance. It is the reference gas against which other GHGs are measured and therefore has a Global Warming Potential of 1.

Carbon Monoxide (CO): Carbon monoxide is an odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels and is emitted directly into the air (unlike ozone).

Carbon Sequestration: The process of carbon capture and storage, where carbon dioxide is removed from the atmosphere through biological, chemical, and physical processes.

Climate Change: Climate change refers to a statistically significant variation in either the mean state of the climate or in its variability, persisting for an extended period (typically decades or longer). Climate change may be due to a number of factors including persistent changes in the composition of the atmosphere or in land use.

Conservation: The management of natural resources to prevent waste, destruction, or neglect.

Critical Habitat: Critical habitat is the natural environment designated by the U.S. Fish and Wildlife Service (USFWS), as required for the conservation of a federally listed species. These habitats are specifically protected under the Federal ESA (16 USC 1532, 50 CFR 424.02). The designation of a critical habitat is a formal process that involves the posting of a draft proposal in the federal register of the critical habitat designation, a public comment period, and a final determination.

Cultural Resources: Cultural resources consist of tangible or observable evidence of past human activity, found in direct association with a geographic location, including tangible properties possessing intangible, traditional cultural values. Cultural resources may include buildings, structures, objects, sites, areas, places, records, or manuscripts which are historically or archaeologically significant.

Global Warming: Global warming is an average increase in the temperature of the atmosphere near the Earth's surface and in the troposphere, which can contribute to changes in global climate patterns. Global warming can occur from a variety of causes, both natural and human induced. In common usage, "global warming" often refers to the warming that can occur as a result of increased emissions of GHGs from human activities.

Greenhouse Effect: Trapping and build-up of heat in the atmosphere (troposphere) near the earth's surface. Some of the heat flowing back toward space from the earth's surface is absorbed by water vapor, carbon dioxide, ozone, and several other gases in the atmosphere and then reradiated back toward the earth's surface. If the atmospheric

concentrations of these GHGs rise, the average temperature of the lower atmosphere will gradually increase.

Greenhouse Gas (GHG): Any gas that absorbs infrared radiation in the atmosphere. GHGs include, but are not limited to, water vapor, CO₂, CH₄, N₂O, HCFCs, ozone (O₃), PFCs, and SF₆.

Historic Places: These are official National, State, and local historic preservation sites. These identify and acknowledge places of important historical, cultural, and/or architectural importance.

Mineral Resources: Mineral resources are defined as naturally occurring materials in the earth that can be utilized for commercial purposes.

Mining Resource Production Areas: An area where accessibility, surrounding land uses, and environmental setting will permit extraction of materials without major adverse environmental impacts. Mining Resource Production areas include geothermal resources. Visual impacts of the operation will be a consideration in identifying mining resource production areas.

Mobile Source: A mobile emission source is a moving object, such as on-road and off-road vehicles, boats, airplanes, lawn equipment, and small utility engines.

Mountain Counties Air Basin (MCAB): An air basin is a geographic area that exhibits similar meteorological and geographic conditions. California is divided into 15 air basins to assist with the statewide regional management of air quality issues. The MCAB includes several Eastern Sierra mountain counties including Plumas, Sierra, Nevada, Amador, Calaveras, Tuolumne, and Mariposa counties. The air basin also includes the non-Lake Tahoe Basin areas of Placer and El Dorado counties.

Natural Landscapes: An expanse of naturally-formed scenery that contribute to the visual beauty of Plumas County.

Northern Sierra Air Quality Management District (NSAQMD): The NSAQMD is the regulatory agency responsible for developing air quality plans, monitoring air quality, and reporting air quality data for Plumas, Sierra and Nevada Counties.

Ozone Precursors: Chemicals such as non-methane hydrocarbons and oxides of nitrogen, occurring either naturally or as a result of human activities, which contribute to the formation of ozone, a major component of smog.

Paleontological Resources: Paleontological resources are any fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on earth, with the exception of materials associated with an archaeological resource [as defined in Section 3(1) of the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470bb[1]), or any cultural item as defined in Section 2 of the Native American Graves Protection and Repatriation Act (25 U.S.C. 3001)].

Particulate Matter 2.5 Micrometer (PM_{2.5}): The federal government has recently added standards for smaller dust particles. PM_{2.5} refers to dust/particulates that are 2.5 microns in diameter or smaller.

Particulate Matter 10 Micrometers (PM₁₀): Dust and other particulates exhibit a range of particle sizes. Federal and State air quality regulations reflect the fact that smaller particles are easier to inhale and can be more damaging to health. PM₁₀ refers to dust/particulates that are 10 microns in diameter or smaller.

Reactive Organic Gas (ROG): A photochemically reactive chemical gas, composed of non-methane hydrocarbons, that may contribute to the formation of smog. Also sometimes referred to as Volatile Organic Compounds (VOCs).

Recreation Area: Any public or private space set aside or primarily oriented to recreational use.

Riparian: The interface between land and a flowing surface water body. They are typically characterized by hydrophilic vegetation and are often subject to flooding. Riparian zones are significant in ecology, environmental management, and civil engineering due to their role in soil conservation, their biodiversity, and the influence they have on aquatic ecosystems. Riparian zones occur in many forms including grassland, woodland, wetland, or even non-vegetative.

Scenic Landscapes: Scenic landscapes include agricultural lands, woodlands, forestlands, watercourses, mountains, meadows, structures, communities, and other types of scenery that contribute to the visual beauty of Plumas County.

Sensitive Habitat: A sensitive habitat is especially diverse, regionally uncommon, or of special concern to local, State, and Federal agencies. Elimination or substantial degradation of such a community would constitute a significant impact under CEQA. The California Department of Fish and Game (CDFG) monitors the condition of some sensitive natural communities in its Natural Diversity Database (NDDDB).

Sensitive Natural Community: A sensitive natural community is a biological community that is regionally rare, provides important habitat opportunities for wildlife, or is of special concern to local, State, or Federal agencies. The California Environmental Quality Act identifies the elimination or substantial degradation of such communities as a significant impact (CERES 2004). Based on Federal and State regulations, wetlands and critical habitat are examples of sensitive natural communities.

Sensitive Receptors: Sensitive receptors are defined as land uses that typically accommodate sensitive population groups such as long-term health care facilities, rehabilitation centers, retirement homes, convalescent homes, residences, schools, childcare centers, and playgrounds.

Sensitive Population Groups: Sensitive population groups are a subset of the general population that are at greater risk than the general population to the effects of air pollution. These groups include the elderly, infants and children, and individuals with respiratory problems, such as asthma.

Stationary Source: A stationary emission source is a non-mobile source, such as a power plant, refinery, or manufacturing facility.

Surface Mining and Reclamation Act (SMARA): The SMARA (Public Resources Code, Division 2, Chapter 9, Section 2710 et seq.) contains provisions for the inventory of mineral lands in the State of California. The State Geologist, in accordance with the State Board's Guidelines for Classification and Designation of Mineral Lands, must classify Mineral Resource Zones (MRZ).

Sustainability: Community use of natural resources in a way that does not jeopardize the ability of future generations to live and prosper.

Sustainable Development: Development that maintains or enhances equity, economic opportunity, and community well-being while protecting and restoring the natural environment upon which people and economies depend. Sustainable development

meets the needs of the present without compromising the ability of future generations to meet their own needs.

Viewshed: An area of land, water, or other environmental features that is visible from a fixed vantage point. Viewshed areas tend to be areas of particular scenic or historic value that are deemed worthy of preservation against development or other change. The preservation of viewsheds is typically the goal in the designation of open space areas, and green belts.

Wetlands: The Federal government defines wetlands in Section 404 of the Clean Water Act as “areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support (and do support, under normal circumstances) a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3[b] and 40 CFR 230.3). The definition of wetlands requires three wetland identification parameters are present: wetland hydrology, hydric soils, and hydrophytic vegetation. The United States Army Corps of Engineers (ACOE) is the responsible agency for regulating wetlands under § 404 of the Clean Water Act, while the EPA has overall responsibility for the Act (ACOE, 2002).

Wildlife Habitat: Wildlife habitats are those areas within the geographic range that provide one or more of a species essential components of survival, including food, water and shelter, in amounts sufficient to sustain the population.

Wood-burning Devices: Wood-burning devices are designed to burn “solid fuels” such as cordwood, pellet fuel, manufactured logs, or any other non-gaseous or non-liquid fuels.

Plans and Planning

The following local and regional plans, programs, and organizations are among those that affect or are involved in the implementation of conservation and open space protection in Plumas County:

- Feather River Coordinated Resource Management.
- Feather River Watershed Management Strategy.
- Upper Feather River Watershed Integrated Regional Water Management Plan.

Goals

GOAL 7.1 Conservation and Open Space



COS 7.1

The conservation and utilization of natural resources, including water and its hydraulic force, forests, soils, rivers and other waters, fisheries, wildlife, minerals and other natural resources and protection of open space land for the continuation of the County's rural character; scenic beauty; recreation; the protection of natural and cultural resources; and as consideration of open spaces as an important factor in the County's quality of life.

Policies

COS

7.1.1 Open Space Land Use Definition

The County's General Plan land use map shall include designations that indicate the available inventory of lands which serve as the "open space land". The following General Plan designations are considered open space lands: Resort and Recreation, Agriculture and Grazing, Agricultural Preserve, Mining Resource, Timber Resource, Lake, Open Space-Significant Wetlands, Scenic Area, and Historic Area.

COS

7.1.2 Conservation and Open Space Program

The County shall inventory its open space lands through the mapping of land use designations that qualify for designation as defined in COS 7.1.1. The open space land will be protected through the administration of policies found in the Land Use, Conservation and Open Space, Agriculture and Forestry, and Water Resources Elements. These Elements in turn will be implemented through applicable zoning districts and other mechanisms including stream and watercourse restrictions, wetland restrictions, natural hazards constraints and planned development dedications.

7.1.3 Collaborative Open Space Land Use Management

The County will promote collaborative resource management among land management agencies, including State and Federal agencies and private entities, monitor the resource quality over time, and engage in public processes with management agencies to advance the County's interest in land management in those processes.

COS

7.1.4 Conservation Easements

The County shall encourage private and public conservation easement programs that protect natural resource and open space lands that generate economic returns to the landowners along with continued resource production, in exchange for permanent protection of natural resource and open space values.

GOAL 7.2 Biological Resources



COS 7.2

Conserve and protect the County's biological resources.

Policies

COS

7.2.1 *Habitat Protection*

The County shall protect areas that have significant habitat and wetland values, including riparian corridors, wetlands, grasslands, and creeks and rivers, from incompatible rural development. The County shall also support their protection as a method to provide carbon sequestration for GHG emissions under applicable State programs.

COS

7.2.2 *Species and Habitat Avoidance*

The County shall require new development projects to avoid or minimize adverse impacts to threatened, rare, or endangered species and critical, sensitive habitat, as defined by appropriate local, state, and federal agencies, through proper project location and design. In the event that avoidance is not feasible, the County shall require a “no-net-loss” of these sensitive natural plant or habitat communities. Wildlife habitat will be preserved and managed in a manner that will not lead to the listing of additional species as threatened and endangered or negatively impact listed threatened or endangered species.

COS

7.2.3 *Land Use Management*

The County shall restrict the density and intensity of development in wildlife habitat areas to the extent needed to avoid significant interference with the habitat. These restrictions shall include, but not necessarily be limited to, maintenance of large parcel sizes, increasing building setback lines, limiting building and fencing, and designating open space corridors.

COS

7.2.4 *Stream Corridor Development*

The County shall only permit new development within stream corridors when there is no lesser environmentally damaging feasible alternative and where the best feasible mitigation measures have provided to minimize adverse environmental effects. This policy is not intended to affect the cleaning of stream channels to avoid the flooding or erosion of existing developed lands, stream restoration projects or permitted mining operations consistent with CEQA and the SMARA.

COS

7.2.5 *Fishery and Stream Corridor Inventories*

The County shall cooperate with the California Department of Fish and Game in inventorying streams and lakes with spawning and rearing habitat, evaluating those streams’ existing and potential habitat value, and determining current and potential fish population levels.

COS

7.2.6 *NoNet-Loss of Wetland Habitats*

The County shall require new development that is subject to review under the California Environmental Quality Act to achieve a “no-net-loss” of wetland habitat through avoidance or appropriate mitigation in consultation with the appropriate resource protection agencies.

COS

7.2.7 *Wetland and Riparian Habitat Buffers*

The County shall require new development that is subject to review under the California Environmental Quality Act to identify wetlands and riparian habitat areas and designate a buffer zone around each area sufficient to protect these habitats from degradation, encroachment, or loss. The County shall continue to identify areas as Open Space and Significant Wetlands as an ongoing process when those areas are identified.

COS

7.2.8 *Vehicle and Wildlife Conflicts*

The County shall coordinate with the California Highway Patrol, United States Forest Service, California Department of Fish and Game and other resource and public safety agencies to reduce conflicts between vehicles and wildlife on major roadways in the County.

COS

7.2.9 *Wildlife Fencing*

The County shall discourage the use of fencing in rural areas that is exclusionary or dangerous to wildlife, except when necessary for property protection, human safety, crop protection, or domestic animal containment through its discretionary project review and implementation process.

COS

7.2.10 *Lake Davis Area*

Within the Lake Davis Deer Fawning Area, the County shall establish a 20-acre minimum parcel size until a compensating area is provided, whether naturally or artificially, within the Lake Davis subunit range.

COS

7.2.11 *Density Transfers*

The County shall permit density transfers and other TDRs as a means of protecting wildlife migration routes and habitats where such transfers will not adversely affect the adjacent wildlife area due to spill-over effect.

COS

7.2.12 Habitat Protection and Monitoring

The County shall continue to cooperate with land trusts, organizations, and local, State, and Federal agencies to ensure that adequate on-going protection and monitoring occurs within or adjacent to sensitive habitat areas.

COS

7.2.13 Biological Resource Maps

The County shall maintain and consult biological resource maps during the discretionary permit review process in order to identify habitat concerns and guide mitigations that will reduce biological resource impacts.

COS

7.2.14 Natural Landscapes in Site Design

The County shall encourage the integration of natural landscapes, such as rivers streams, lakes, ponds, wetlands, and riparian areas, into new development in such a way as to enhance the aesthetic and natural character of individual sites while avoiding the destruction, disturbance, and fragmentation of these natural landscapes.

COS

7.2.15 Use of Native Plant Species for Landscaping

The County shall encourage the use of native plant species in landscaping plans and projects, where feasible.

COS

7.2.16 Controlled Fuel Management

The County shall support the use of controlled fuel management where feasible and appropriate as a natural ecosystem process, to reduce the threat of catastrophic wildfire and promote healthy forest environments and habitats.

COS

7.2.17 Private Land Management

The County shall support private land owners or organizations that acquire land in order to provide habitat protection for the maintenance of sensitive habitats and/or rare, threatened, or endangered plant/wildlife species.

COS

7.2.18 Inter-Agency Coordination

The County shall consult with appropriate State, Federal, and trustee agencies during the environmental review process when special status species and/or sensitive habitats may be affected by a project.

GOAL 7.3 Soil Resources



COS 7.3

Conserve and protect the County's soil resources.

Policies

COS

7.3.1 Sensitive Soils and Mapping

The County shall encourage the Natural Resource Conservation Service (NRCS) to maintain soil survey data, publish soil survey data, and to digitize all soils mapping units on the Geographic Information System (GIS). Additionally, the County shall maintain and consult sensitive soil data as part of the development review process. Sensitive soils areas shall be designated on the basis of erosion potential and/or high groundwater levels and/or lack of suitability for septic tank usage where community sewers are not available.

COS

7.3.2 Soil Erosion and Vegetation Protection

For development projects that require earthwork and grading, including cut and fill for roads, the County shall require the developer to minimize erosion and sedimentation, conform to natural contours, maintain natural drainage patterns, minimize impervious surfaces, and maximize the retention of natural vegetation wherever feasible. Specific standards for minimizing erosion and sedimentation shall be incorporated into the Zoning Ordinance.

COS

7.3.3 Soil Limitations and Sewage Disposal

The County shall require low-density residential development in areas where soils have moderate or severe limitations for sewage disposal, unless infrastructure exists for a public sewer system.

COS

7.3.4 Erosion Control Plan

The County shall require the preparation of a runoff evaluation and erosion control plan by an engineer for erosion potential areas. The runoff evaluation and erosion control plan shall provide mitigations which preclude hazards to public health, safety and general welfare and ensure maintenance of water quality and fish and wildlife habitat.

COS

7.3.5 Soil Improvement Practices

The County shall encourage agricultural property owners to use practices that reduce soil erosion and increase soil productivity.

GOAL 7.4 Mineral Resources

COS 7.4

To encourage the production and conservation of minerals, while preserving the values related to recreation, water resources, air quality, agriculture and timber resources, aesthetics and wildlife and fisheries habitat protection.

Policies

COS

7.4.1 Mineral Resource Area Identification

The County shall use appropriate sources to identify mineral resource areas in the County for future extraction while considering the conservation of other natural resources and minimizing land use incompatibility. Towns and Community Planning Areas may develop special management areas to identify planning considerations addressing mineral extraction.

COS

7.4.2 Mining Resource Production Areas

The County shall identify “mining resource production areas.” These are defined as those areas where accessibility, surrounding land uses, and environmental setting will permit extraction of materials without major adverse environmental impacts. Mining resource production areas include geothermal resources. Visual impacts of the operation and proximity to residential and recreational areas will be a consideration in identifying mining resource production areas. Extraction of mineral resources including geothermal resources and hydraulic forces of water shall not necessarily be limited to mining resource production areas.

COS

7.4.3 Resource Permitting

The County shall permit the extraction of materials and geothermal development from mining resource production areas through a permit process that provides for a case-by-case administrative review. The administrative review process may involve public notice, and shall contain conditions of approval necessary to mitigate adverse environmental impacts. Visual impacts of the operation will be a consideration in identifying mining resource production areas.

COS

7.4.4 Mineral Resource Preservation

The County shall preserve future use areas with potentially important mineral resources by limiting residential or other uses that are considered incompatible with mining operations.

COS

7.4.5 Mineral Resource Operations

The County shall ensure that mineral extraction operations are performed in a manner compatible with land uses on the site and surrounding area and do not adversely affect the surrounding environment. The County shall ensure that,

upon the completion of mining activities, the site is restored to conform to SMARA requirements.

COS

7.4.6 Mining Site Reclamation

The County shall ensure that resource operators implement SMARA requirements related to reclamation activities occur concurrently with extraction activities rather than after extraction has been completed. The County shall also ensure that reclamation is achieved in a manner that will protect public safety and enable lands to be put to a subsequent beneficial use.

COS

7.4.7 Location and Maintenance of Resource Transportation Routes

The County shall require new mineral resource transportation routes to avoid incompatible areas such as landslides, highly erodible soils, residential areas, recreation areas, and schools.

GOAL 7.5 Cultural and Historical Resources

COS 7.5	To protect and preserve historic and prehistoric sites, structures, features, objects, and properties important in Native American history for their aesthetic, historical, scientific, educational, and cultural values.
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Policies

COS

7.5.1 Cultural and Historical Resource Preservation

The County shall encourage historic preservation within all sectors, private and public, in such a manner as to promote economic development, enhance recreation, maintain quality of life, provide educational opportunities, as well as to provide revitalization of housing and business sections of existing communities.

COS

7.5.2 Evaluation of Cultural and Archaeological Resources

The County shall participate in and support efforts to identify its significant cultural and archaeological resources using appropriate State and Federal standards and sources.

COS

7.5.3 Resource Protection with Potential State, Federal, and Local Designations

The County shall support the registration of cultural resources in appropriate landmark designations such as the California Register of Historic Places, National Register of Historic Places, California Historical Landmarks, Points of Historical Interest or Local Landmark. Such sites may be of nationwide, statewide or local significance and have architectural, engineering, scientific, economic, agricultural, educational, social, political, military, cultural or other values.

COS

7.5.4 Protection of Potentially Important Historic Sites

Demolition permit applications on designated or potentially important historic sites shall be subject to County discretionary review.

COS

7.5.5 Assessment of Impacts to Cultural and Historical Resources

The County shall encourage cultural resource preservation and ensure that new development does not adversely impact important resources. Discretionary projects involving ground disturbance shall have evaluations to determine cultural and historical significance. The County shall ensure that individuals conducting inventory and evaluation of cultural and historical resources consult with the Northeast Information Center in advance of any such assessments or studies and that those individuals undertaking such activities meet minimum standards. Any archaeological or paleontological resources discovered on a development project site shall either be preserved in their sites or adequately documented as a condition of removal. When a development project has sufficient flexibility, avoidance and preservation of the resource shall be the primary mitigation measure.

COS

7.5.6 Cultural Resource Education Programs

The County shall support local, State, and national education programs on cultural and archaeological resources. As a local resource, the County shall strive to support the programs and activities administered by the Plumas County Museum and ensure that records continue to be made available to the public and to cultural resource professionals.

COS

7.5.7 Cooperation of Property Owners

The County shall encourage the cooperation of property owners to treat cultural resources as assets rather than liabilities, and encourage general public support for the preservation of these significant cultural resources.

COS

7.5.8 Local Native American Coordination

The County shall respect Native American culture and planning concerns.

The County shall collaborate with local Native American tribes, organizations and interests to preserve, rehabilitate, restore and interpret cultural and natural resources important in tribal culture, as per statutes such as SB 18. The County shall consult with local tribes when actions undertaken by the County or as a result of the permitting process may affect traditional cultural values. The County shall meet in good faith with local tribes as warranted and appropriate to incorporate the tribal viewpoint into County activities and policies.

COS

7.5.9 Confidentiality of Archaeological Information

The County shall, within its power, maintain confidentiality regarding sensitive cultural resource and archaeological information in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts or other inappropriate uses.

COS

7.5.10 Community Character

The County shall promote the appropriate preservation and or achievement of community character building design, exterior modifications, and public space improvements in areas where the community has expressed the need for improved community design and enhancement. Proposed building designs shall be developed to preserve the unique historic nature of each individual community. Where community plans are developed, these plans shall include scenic resources to be protected or preserved.

GOAL 7.6 Scenic Resources

COS 7.6	To preserve the visual aspects of the environment which are of particular importance to the maintenance of the rural and natural character of the County. These include, but are not limited to, views of meadowlands and waterways from highways and populated areas.
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Policies

COS

7.6.1 Scenic Areas

The County shall identify important scenic areas. Each designated scenic area shall include a statement defining the qualities of the area which are to be protected or preserved.

COS

7.6.2 Development in Identified Scenic Areas and Viewsheds

Within identified scenic areas, the County shall ensure that new development shall be consistent with and subordinate to natural contours including slopes, visible treelines and hilltops, bluffs, and rock outcroppings. Visible disturbance shall be minimized to the extent feasible. Additionally, the County shall establish development standards which provide incentives to the property owner to preserve the scenic qualities identified. The development standards may include limiting the density and intensity of development within important scenic areas, and establishing architectural review standards and procedures. Where community plans are developed, these plans shall include scenic resources to be protected or preserved.

COS

7.6.3 Scenic Roadway Protection

The County shall protect the scenic quality of roadways for the enjoyment of natural and scenic resources, landmarks, or points of historic and cultural interest.

COS

7.6.4 Community Design

The County shall identify Design Review Areas where the community has expressed the need for improved community design and enhancement.

COS

7.6.5 Scenic Impacts of Off-premise Permanent Advertising Signs and Billboards

The County shall prohibit the location of permanent off-premise advertising signs and billboards along all roadways. The County shall develop and implement policies and ordinances that allow localized business signage in existing downtown areas and in community plan areas that serves to facilitate business district economic development without causing adverse scenic impacts.

GOAL 7.7 Parks and Recreation

COS 7.7	To maintain an equitable and quality system of parks, recreation areas, multi-use trail systems, and access to local, state, and federal recreation opportunities within Plumas County.
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Policies

COS

7.7.1 Recreation and Open Space Network Corridor

The County shall support the development of a network of recreational facilities and open space network corridors that highlight unique resources and recreational opportunities for a variety of users.

COS

7.7.2 Ecotourism

The County shall create and support opportunities for ecotourism.

COS

7.7.3 Recreation Use along Waterways

The County shall encourage increased public access and recreational uses along waterways wherever feasible and where it does not conflict with adjacent landowner rights.

COS

7.7.4 *Encourage Private Outdoor Recreation Opportunities*

The County shall encourage the development of recreational uses in areas where necessary facilities and services can be provided. The County shall permit recreational uses of all land, including appropriate support facilities, where the proposed use does not conflict with other identified uses or have the potential to cause negative environmental impacts.

COS

7.7.5 *County and Recreation District Facilities*

County parks, local district facilities, trails and other recreation facilities are important to the residents of the County and to visitors to the County. The County recognizes the continuing crucial role of the Recreation and Park Districts and Community Service Districts in providing recreation facilities to the public in order to serve the present and future needs of county residents. The County shall strive to continue to maintain county parks and to provide assistance to these other local districts, including support for additional recreational facilities and opportunities while considering the long-term capabilities for the maintenance of all facilities and opportunities.

COS

7.7.6 *Park Dedication Requirements*

The County shall require the dedication of land and/or payment of fees in conjunction with new development, in accordance with local authority and State law, as deemed necessary, to ensure funding for the acquisition and development of public and private recreation facilities.

COS

7.7.7 *Park Design*

The County shall make efforts to involve community members in the design and development of all park facilities.

COS

7.7.8 *Collaboration with State and Federal Land Managers*

The County shall collaborate with public agencies and federal land managers to provide access to recreational areas and trails that are aesthetic and consistent with multiple community needs.

COS

7.7.9 *Recreation Area Organization and Management*

The County shall consider the use of existing entities, such as Recreation and Park Districts and Community Services Districts, or the creation of other types of districts to generate funds for the acquisition and development of parkland and/or historical properties as development occurs in the County.

COS

7.7.10 Joint User Agreements

The County shall encourage the development of parks near public facilities such as schools, community halls, libraries, museums, prehistoric sites, and open space areas and shall encourage joint-use agreements whenever possible to augment recreational activities and services to reduce costs.

COS

7.7.11 Community Access to Recreation Areas

When acquiring recreational lands or considering the acceptance of a parkland donation, the County shall give first priority to sites that would serve a mix of users from within the county at a reasonable cost, or are located adjacent to or close to developed areas, or are adjacent to or close to schools.

COS

7.7.12 Recreation Uses for All County Residents

The County shall focus efforts on the acquisition and management of recreation areas that serve a broad range of County's residents from varying age groups, economic situations, and physical abilities.

COS

7.7.13 Native Planting for Recreation Areas

The County shall emphasize the use of native grasses, shrubs, and trees as the primary focus of restoration within resource parks and other open space areas.

COS

7.7.14 Conservation of Environmental Resources

The County shall promote the conservation of environmental resources in new and existing park and open space facilities.

GOAL 7.8 Trails and Bikeway



COS 7.8	To update and develop a countywide multiuse trail and bikeway system that is protective of private property interests and public resources and consistent with federal land management objectives.
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Policies

COS

7.8.1 Regional Trail Network

The County shall consider development of a connected system of recreational trails to link communities and recreation areas throughout the county.

COS

7.8.2 Planning for Multiuse Trail Needs within the County

The County shall strive to prepare a Trail and Bikeway Master Plan in collaboration with other local, state and federal land managers that addresses countywide and individual community trail and bikeway needs. The plan shall evaluate the feasibility of a variety of alternative modes of transportation and trail types.

COS

7.8.3 Prioritize Trail Development

In developing new trail projects, the County shall consider as the highest priority those trail or bikeways that are on lands owned by the county or by cooperating State, Federal and private entities, or are located in public rights of way. Additional priorities will include those trail projects that complete a trail corridor, where only small portions are missing.

COS

7.8.4 Public Safety

The County shall ensure that future public access trails are integrated into individual community areas and minimize impacts to surrounding property owners, agricultural operations, timber production areas, and sensitive receptors. Future trail planning and design activities will be conducted to ensure public safety and minimize public nuisance concerns.

COS

7.8.5 Trail Signage

As part of future trail projects, the County shall ensure that adequate trail signage is included as part of trail design to help identify permitted trail uses, provide directions to relevant public areas, and address safety and public nuisance concerns to trail users and adjacent private property owners.

COS

7.8.6 Trail Fencing

As part of future trail projects, the County shall ensure that adequate trail fencing is included as part of trail design to discourage trespass onto neighboring land and to protect sensitive resources as necessary.

GOAL 7.9 Air Quality



COS 7.9	To maintain good air quality in Plumas County.
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Policies

COS

7.9.1 Cooperation with Other Agencies

The County shall cooperate with other local, regional, Federal, and State agencies in developing and implementing air quality plans to achieve State and federal Ambient Air Quality Standards. The County shall partner with the NSAQMD, CARB, the United States Forest Service, and other agencies, as appropriate, to achieve better air quality conditions locally and regionally.

COS

7.9.2 Air Quality and Sensitive Receptors

The County shall ensure that new facilities in which sensitive receptors are located, such as schools, child care centers, playgrounds, retirement homes, and hospitals, are sited away from significant sources of air pollution and no new sources are sited near sensitive receptors.

COS

7.9.3 Dust Suppression Measures

The County shall require developers to implement dust suppression measures during excavation, grading, and site preparation activities as required by the NSAQMD.

COS

7.9.4 Vehicle Trip Reduction Measures

The County shall encourage new developments that reduce the length and frequency of vehicle trips through land use and transportation decisions that encourage mix-use developments and compact development patterns in areas served by public transit and alternative modes of travel.

COS

7.9.5 Street Design

The County shall promote street design that provides an environment which encourages transit use, biking, and pedestrian movements within planning areas.

COS

7.9.6 Wood Burning Fireplaces

The County shall regulate wood-burning fireplaces and stoves in all new development. EPA-approved stoves and fireplaces burning wood, natural gas or propane are allowed. The County shall discourage the use of non-certified wood heaters and fireplaces and develop plans for their ongoing replacement as practicable.

COS

7.9.7 Purchase of Low Emission/Alternative Fuel Vehicles

The County shall encourage County departments and agencies to replace over time existing vehicles with low emission/alternative fuel vehicles as feasible.

COS

7.9.8 Public Education

The County shall develop and implement a public awareness campaign to educate community leaders and the public about the causes and effects of Plumas County air pollution and about ways to reduce air pollution.

GOAL 7.10 Climate Change



COS 7.10

To address climate change and manage its effects by pursuing programs and strategies in order to meet or exceed state requirements for reductions in GHG emissions.

Policies

COS

7.10.1 Inventory and Monitor GHG Emissions

The County shall inventory and monitor GHG emissions in County operations and in the community consistent with Northern Sierra Air Quality Management District and/or State guidelines.

COS

7.10.2 Develop a Climate Change Strategy

The County shall integrate climate change planning and program implementation into County decision making by developing a climate change strategy that implements requirements adopted by the California Air Resources Board and/or the Northern Sierra Air Quality Management District. Components of the strategy may include the establishment of a GHG emissions qualitative and quantitative threshold of significance, establishment of GHG reduction targets and, wherever feasible and appropriate, incorporation of SB 375 Sustainable Communities Strategy measures.

COS

7.10.3 Support Statewide Climate Change Solutions

The County shall monitor and support the efforts of CAL EPA, CARB, and the NSAQMB, under AB 32 (Health and Safety Code §38501 et seq.), to formulate mitigation strategies, if any, that may be implemented by local government, and further require the County to ultimately consider any such strategies once they become available and are appropriate for rural adaptation.

COS

7.10.4 Forest Sequestration and Biomass Energy

The County shall investigate providing incentives for increased carbon sequestration on forest lands and encourage the use of forest biomass for sustainable energy generation.

COS

7.10.5 Sustainable Business Practices

The County shall encourage all businesses to take the following actions as appropriate for each business: replace high mileage fleet vehicles with hybrid and/or alternative fuel vehicles, increase the energy efficiency of facilities, transition to the use of renewable energy instead of non-renewable energy sources, adopt purchasing practices that promote emissions reductions and reusable materials and increased recycling.

COS

7.10.6 Sustainable Agricultural Practices

The County shall promote GHG emission reductions by encouraging carbon efficient farming methods, such as no till farming, crop rotation, cover cropping, installation of renewable energy technologies, protection of grasslands, open space, riparian, and forest lands from conversion to other uses, and development of energy-efficient structures.

COS

7.10.7 Public Awareness and Education

The County shall work to increase public awareness regarding climate change and encourage County residents and businesses to become involved in activities and lifestyle changes that will aid in the reduction of GHG emissions.

GOAL 7.11 Energy Conservation



COS 7.11	To ensure that the extension of electrical power supply is sufficiently mitigated to reduce impacts to a level of insignificance, preventing irreversible changes to significant environmental features.
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Policies

COS

7.11.1 Alternative Energy Design

The County shall encourage all new development, including rehabilitation, renovation, and redevelopment, to incorporate energy conservation and green building practices to maximum extent feasible. Such practices include, but are not limited to: building orientation and shading, landscaping, and the use of active and passive solar heating and water systems.

COS

7.11.2 Local Energy Alternatives

The County shall amend the Zoning Code to streamline permitting for the production of biofuels, biomass, and other energy alternatives to reduce dependency on fossil fuels.

COS

7.11.3 Energy Efficient Appliances

The County shall encourage the use of Energy Star certified appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units, in all new developments.

COS

7.11.4 Solar Energy

The County shall continue to support the provision and enhancement of incentives for the installation of solar energy and other alternate conservation measures in all development approvals.

COS

7.11.5 Landscape Practices

The County shall encourage the use of ecologically based landscape design principles that can improve local air quality by absorbing CO₂, producing oxygen, providing shade that reduces energy required for cooling, and filtering particulates. These principles include, but are not limited to, the incorporation of parks, landscaped medians, and landscaping within development.

COS

7.11.7 Utility Transmission Lines

The County shall review the establishment of overhead transmission lines through an administrative review process. The administrative review process may involve public notice. The review shall be to ensure that the establishment of transmission lines respects and protects the integrity of the opportunity, constraint and policy areas it affects.

COS

7.11.8 Electric Vehicle Support

The County shall encourage and provide incentives for commercial and residential design that supports the charging of electric vehicles.

Conservation and Open Space Element Implementation Measures

Work Plan/Implementation Measures

The following table documents the implementation measures included with the General Plan to implement the goals and policies included in this element.

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
1. The County shall incorporate provisions into development regulations that in the event archaeological resources are discovered during site excavation, grading or construction, work on the site will be suspended until the significance of the features can be determined by a qualified archaeologist. If significant resources are determined to exist, the archaeologist shall make recommendations for protection or recovery of the resource.	7.5.2 7.5.5 7.5.8	Planning Department Public Works Department				
2. Human remains discovered during implementation of public and private development projects shall be treated with dignity and respect. Such treatment shall fully comply with the federal Native American Graves Protection and Repatriation Act and other appropriate laws.	7.5.2 7.5.5 7.5.8	Planning Department				
3. If human remains are located during any ground disturbing activity, work shall stop until the County Coroner has been contacted, and, if the human remains are determined to be of Native American origin, the Native American Heritage Commission and most likely descendent have been consulted.	7.5.2 7.5.5 7.5.8	Planning Department				
4. The County shall establish and maintain a Cultural and Historical Resources Advisory Panel. This panel should include archaeological and historical experts. Activities of the panel shall include: a. Develop specific criteria necessary to determine	7.5.2 7.5.3 7.5.4 7.5.8	Planning Department				

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>resource sensitivity and significance. Apply criteria in the CEQA Guidelines and develop local criteria for historical resources such as Historic Roads and Historic Buildings.</p> <p>b. Act as an advisory group to the Board of Supervisors and the Planning Commission to make recommendations for inclusion in the historical resource inventory.</p> <p>c. Review and comment on development proposals involving re-use of historic sites and demolition permits for any listed structure with the potential for listing as an historical resource.</p>						
<p>5. The County shall maintain copies of the historical resource inventory in the Northeast Information Center, the Plumas County Museum, and the Plumas County Planning Department.</p>	<p>7.5.3 7.5.4 7.5.6 7.5.7 7.5.8</p>	<p>Planning Department</p>				
<p>6. Where warranted and feasible, the County shall establish "special plan-historical areas" and provide for an architectural and historical review process to ensure that alterations to the exterior of existing buildings and construction of new buildings preserve the historical qualities and character of the area and are not detrimental to the building's integrity.</p>	<p>7.5.1 7.5.2 7.5.3 7.5.4 7.5.10</p>	<p>Planning Department</p>				
<p>7. The County shall consult with the Northeast Information Center, the Cultural and Historical Resources Advisory Panel, and appropriate historic and preservation professionals prior to the issuance of a demolition permit for any listed structure or structure with the potential for listing as an historical resource. The County shall develop Zoning Ordinances to ensure that demolition permit applications</p>	<p>7.5.1 7.5.2 7.5.3 7.5.4 7.5.5</p>	<p>Planning Department</p>				

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
on potentially important historic sites are subject to discretionary review.						
8. The County shall support the registration of cultural resources in appropriate landmark designations, such as the California Register of Historic Places, National Register of Historic Places, California Historical Landmarks, Points of Historical Interest, or Local Landmark. The County shall assist private citizens seeking those designations for their property.	7.5.1 7.5.2 7.5.3	Planning Department				
9. The County shall support the efforts of private individuals, organizations, local tribes or agencies in their efforts to preserve, protect, restore and continue use of cultural and historic properties through incentives such as tax relief, low-cost loans, land use strategies, the State Historic Building Code, or other measures deemed suitable and practical.	7.5.1 7.5.2 7.5.3 7.5.4 7.5.7 7.5.8	Planning Department				
10. The County shall establish Design Review Committees to develop specific design guidelines for evaluating building design, exterior modifications and public space improvements. Establish a review process to ensure compliance with the design guidelines.	7.5.4 7.5.10 7.6.4	Planning Department				
11. The County shall develop a program of coordinated protection for local and regional scenic roadways with other public and private entities.	7.6.3	Planning Department, Public Works Department, Caltrans				
12. The County shall strive to prepare and maintain a Trails and Bikeways Master Plan as necessary to implement the goals, policies, and actions of the Conservation and Open Space Elements.	7.8.1 7.8.2 7.8.3 7.8.4 7.8.5 7.8.6	Public Works Department				

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
13. The County shall investigate the implementation of a Conservation and Recreation Easement Program.	7.7.1	Planning Department				
14. The County shall consider the establishment of and adjust, as appropriate, a recreation area/trail development impact fee based on a level of service to provide for funding that meets the actual cost, park acquisition, and development.	7.7.1 7.5.5 7.7.6 7.8.1 7.8.2 7.8.3	Planning Department and Public Works Department				
15. County staff shall pursue State and Federal grant funding, as staffing levels allow, for the acquisition and maintenance of recreational facilities, trails, and other programs consistent with the General Plan.	7.7.1 7.7.5 7.8.1 7.8.2 7.8.3	Planning Department and Public Works Department				
16. During the environmental review of discretionary projects, the County shall evaluate new sources of air quality emissions using analytical methods and significance criteria used or recommended by the NSAQMD. The County shall continue to implement the District's rules in the approval of discretionary projects.	7.9.1 7.9.2 7.9.3 7.9.4 7.9.5	Planning Department				
17. The County shall require development proposals that introduce sources of toxic air pollutants to prepare a health risk assessment and establish appropriate land use buffers around those uses generating the pollutants.	7.9.1 7.9.2	Planning Department				
18. As part of the County's Climate Change Strategy, the County shall develop a Plan for the County to identify its emission sources, its reduction potential, economic and social adaptation to the effects of climate change, and its potential regional carbon sequestration potential. Development of the plan shall include the following steps:	7.10.1 7.10.2 7.10.3 7.10.4 7.10.5 7.10.6 7.10.7	Planning Department Public Works NSAQMD City of Portola				
a. conduct a baseline analysis of						

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
GHG emissions for 1990 or the most appropriate baseline year.						
b. Adopt an emissions reduction target.						
c. Develop strategies and actions for reducing emissions.						
d. Develop strategies and actions for adaptation to climate change.						
e. Implement strategies and actions.						
f. Monitor emissions and verify results a minimum of every five years starting in 2015.						
19. The County shall continue to monitor and update the General Plan and Zoning Code, as appropriate, to reflect the County's Plan that identifies strategies for increasing energy efficiency, carbon sequestrations, GHF emissions reductions, and land use and transportation strategies that are consistent with the State of California's Global Warming Solutions Act and new State laws and regulations for GHG emissions as they become available.	7.10.1 7.10.2 7.10.3 7.10.4 7.10.5 7.10.6 7.10.7	Planning Department				
20. The County shall use development agreements to secure commitments from developers of new projects to increase the energy efficiency.	7.11.1 7.11.2 7.11.3 7.11.4 7.11.5 7.11.8	Planning Department				
21. The County shall develop criteria to identify and map areas in the County for exclusion of certain size mineral extraction operations. The intent is to identify areas based on resource sensitivity and land use incompatibilities for mineral extraction operations of a certain size.	7.4.2					
22. Review existing designated scenic areas for needed adjustments and updates.	7.6.1					

AGRICULTURE AND FORESTRY ELEMENT (8)

Introduction

Plumas County is committed to protecting its communities in a manner that also addresses climate change. As part of the “Goals” section of this element, policies and implementation measures related to climate change are denoted with the symbol:



Figure 29. Indian Valley Harvesting Hay.
Photo Credit: Mike Lydon

Setting / Existing Condition

In Plumas County, forest and agriculture lands are a fundamental component of the rural character, historic use, and way of life. It is the intent of this element to encourage and promote the sustainable use of agriculture and forest resources in order to maintain an active and profitable agriculture and forest product industry in Plumas County.

Agriculture Resources

Agriculture plays a significant role in the income and history of the County as well as in the current landscape. Agriculture provides not only local food production, agricultural lands make up open space and scenic vistas that are an intrinsic part of the Plumas County environment.

In 2008, the Plumas County Agricultural Commissioner’s Annual Crop Report (the most recent available) indicates that a total of 159,200 acres of land were used for agriculture. This represents ten percent of the County’s total land area, and is the single largest use of land within the County after timber production.

Livestock-raising, hay production and pasture uses dominate agriculture in Plumas County. Other crops such as Nursery, Apiary, Seed, Fruit, Potatoes, and Grains make a very small contribution to the overall agriculture receipts. A segment of the industry that seems to be on the rise, though still accounts for less than one percent of the acreage, is organic farming and ranching. Records are not consistent in tracking specific products, the number of producers nor the acres involved, however, crop reports between 2000 and 2005 reflected an increase in acreage producing organically from 4 acres to just over 1,852 acres.

Total acreage dedicated to agriculture production changes from season to season and year to year. However, the land that is zoned as Agriculture Preserve and under Williamson Act contracts and Important Agriculture Areas combined totals 109,658 acres. The Williamson Act has allowed agriculture land owners to sign contracts in order to maintain property in production and, in exchange, the land owners receive property tax reductions. Historically, the state backfilled the property tax reductions to the County. This Act has provided an incentive to land owners for almost five decades to maintain land in agriculture. Due to State of California budget crisis, the future of this incentive program is unknown at this time.

Climate change could have a significant effect on farming and ranching in Plumas County. It has the potential to effect amount and timing of precipitation, length of

season, and optimum growing temperatures for some crops. Water availability for Plumas County farmers and ranchers could be at odds with downstream demands for environmental flows to improve the Delta ecosystem and support greater water exports to the San Joaquin Valley and Southern California.

Sustainable farming and ranching practices and the employment of best management practices along with restoration projects are reducing erosion, improving water quality, providing ecological benefits to the watershed and improving or restoring other ecosystem services; ecosystem services that will be important components in the adaptation and mitigation strategies that will be needed to adjust to climate change.

Forest Resources

Forest management is the application of business methods and forestry principles to the operation of a forest property for the purpose of maintaining forest resources and producing a continuous supply of forest and wood products. Forest management is based on sound silviculture practices. Silviculture is the theory and practice of controlling the establishment, composition, and growth of forests.

Land dedicated to commercial forest management provides building materials, wood byproducts, energy, carbon sequestration, firewood, County revenue for roads and schools, and employment opportunities, but also wildlife habitat, recreational opportunities, aesthetic enjoyment, and watershed services. Maintaining timber operations, maintaining timberlands, encouraging value-added wood products, supporting a stable supply of feedstock to encourage biomass utilization for energy production, and recreational uses are important to the economic base and the natural resource values of Plumas County.

Forestlands in Plumas County total approximately 1.4 million acres of which 1.0 million acres are National Forest System lands . Timber production is the primary forest product generated on public and private lands within the county, which totaled almost 113 million board feet in 2010 with a value of over \$10 million. The contribution of timber from National Forest System lands was 38 percent.

Timber products have played important cultural and historic roles to the people of Plumas County. Timbers were hewn as supports for sweat lodges for the Maidu tribe, for mining starting in the 1850s, for home construction materials, and for a variety of other uses. Although timber products remain the highest value forest product, gains have been made towards valuing ecosystem services from timberlands. Carbon markets and increasing utilization of biomass for energy production are also gaining in value. As a greater diversity of economic opportunities from management of timberlands is realized, tracking of the products, values, and contributions made will be needed.

The main disturbances affecting the timber resources within the County include wildfire, bark beetles and the effect of climate change. In coming years, the emphasis on management to increase forest health, i.e. resiliency of the forest to wildfire and beetle outbreak, will require greater partnering among the jurisdictions managing timber lands. The Herger-Feinstein Quincy Library Group Pilot Project is an innovative group, established in 1992, participating in collaborative management of National Forest System lands. Continuing and expanding such collaborative partnerships that strategically identify opportunities to utilize forest products from sustainably managed forests will better position the County to effectively take advantage of future opportunities.

TABLE 8-1. PUBLIC/PRIVATE LAND OWNERSHIP ACRES

Ownership	Reserved Status*		Total
	Not reserved	Reserved	
National Forest	1,014,960	17,140	1,032,100
National Park Service	--	6,966	6,966
Bureau of Land Management	5,797	--	5,797
State	--	6,966	6,966
Undifferentiated private	346,118	--	346,118
Totals:	1,366,874	31,073	1,397,947

*Reserved is considered unavailable for timber production, for example wilderness source. Plumas County GIS

Many of the opportunities in sustaining a timber-based economy in the County are interrelated. Management of the forest for current and emerging market opportunities will require merging the improvement of watershed quality, wildfire hazard reduction, carbon sequestration, and wildlife habitat improvement. Given the number of Federal and State regulations affecting the management of forests, an emphasis on providing landowners with assistance to achieving timber management goals is needed.

Values and Issues

Plumas County’s Agriculture and Forestry Element of the General Plan will lead, direct, and guide the sustainable use and management of the lands designated as Agriculture and Timber resources which support the local communities, the local and state economy and environment. The people of Plumas County who have participated in one or more public workshops and sessions leading up to the development of this General Plan to date have all been in agreement that the agriculture and timber resources contribute to the reason they live in Plumas County. They agree that these resources constitute the working landscape that is important to the maintenance of local economies, sense of place, recreational values and also for the ecosystem services that are important to the Feather River watershed and the State of California.

Legal Basis and Requirements

State law offers flexibility to go beyond the mandatory elements of the general plan. Section 65303 enables a county or city to adopt “any other elements or address any other subjects, which, in the judgment of the legislative body, relate to the physical development of the county or city.” Once adopted, an optional element carries that same legal weight as any of the seven mandatory elements and must be consistent with all other elements as required by Subsection 65300.5. Plumas County has chosen to emphasize in this General Plan update the importance of agriculture and forestry resources to the economic, social, environmental and aesthetic well being of the County. By exercising the option to develop a separate Agriculture and Forestry Element, the County has the ability to provide more detail and, therefore more direction and guidance to support the long term sustainability of these land uses. The goals, policies and implementation measures listed in the Agriculture and Forestry Element provide the high level, long range context for more detailed, short range and or site specific actions.

Relationship to Other Elements

The general policy direction for land use decisions on lands identified for agriculture or forestry is expressed in the Land Use Element. The County’s Land Use Element addresses the general concept of land use and provides specific guidance related to the issues of compatibility and sustainability as they relate to existing and future development patterns across the landscape. **Table 8-2** lists the policy direction described in the Goals and Policies and the relationship cross reference with other elements in the General Plan.

TABLE 8-2. RELATIONSHIP TO OTHER ELEMENTS SUMMARY

Policy Direction	General Plan Elements – Location Addressed
Protect agriculture and timberland as a productive use of resource lands: protect lands of economic importance for their production of food, or fiber or forest products; as areas that recharge of ground water basins, for their protection of scenic, natural and recreational resources.	Land Use Element (Section 1.1, 1.2 and 1.6) Economic Element (Section 5.1, 5.2,) Water Element (Section 9.1 and 9.2)
Protect and Promote a healthy farm, ranch forest products economy: direct use policies that support agriculture and forestry by allowing compatible uses that are accessible and convenient, recognize and protect needed infrastructure, mitigate conflicts between agriculture and forestry and non agriculture and forestry uses.	Land Use Element (Section 1.1) Conservation & Open Space Element (Section 7.1, 7.3, 7.4, 7.14) Economic Element (Section 5.1, 5.2)
Identify all Timberland with the land use designation Timber Resource: Describe the location, type, amount, and ownership of land and timber resources subject to timberland production zoning.	Land Use Element (Section 1.1) Conservation & Open Space Element (Section 7.1, 7.3, 7.4, 7.14) Economic Element (Section 5.1, 5.2,)
Protect and Promote sustainable food systems: identify uses that compliment and promote the expansion of sustainable foods produced in the County, identify appropriate locations for processing facilities.	Land Use Element (Section 1.1) Economics Element (Section 5.1, 5.2) Conservation and Open Space (Section 7.14)

Definitions

The following key terms are used throughout this element to describe Agriculture and Forestry goals, policies, implementation and issues:

Agriculture: Agriculture is defined as the planting, raising, harvesting and production of agricultural, horticultural, aquaculture and forestry crops; the breeding, raising, husbandry of, pasturing, grazing, and small scale slaughter and processing of livestock; the breeding, raising, harvesting and production of bees, fish, poultry and other fowl; and the associated support services and value added services, such as agritourism, necessary for the economic viability of agriculture.

Agriculture and Grazing Lands: These are areas identified by considering soil type, water availability, length of growing season, and the pattern of large parcel sizes. This includes range lands with a suitable carrying capacity as well as irrigable lands. Agriculture and Grazing Lands shall not include lands identified as suitable for inclusion within the Williamson Act.

Agriculture Preserves: Lands that qualify for inclusion under a Williamson Act contract or lands under a Williamson Act contract.

Animal Unit Month (AUM): As a unit of measurement, the animal unit month (AUM) is the most widely used way to determine the carrying capacity of grazing animals on

rangelands. The AUM provides the approximate amount of forage a 1000 lb cow with calf will eat in one month. This AUM is established to be 800 lbs of forage on a dry weight basis. This allows managers to match the number of animals with the amount of available forage.

Compatible Uses: Uses that are capable of existing together without conflict. In terms of the California Timberland Productivity Act of 1982, a compatible use is defined as any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber. In terms of the California Land Conservation Act of 1965 (the Williamson Act), a compatible use is any use determined by the County to be compatible with the agricultural, recreational, or open-space use of the land within the Agricultural Preserve and subject to the Williamson Act contract.

Conversion: To change from one use type to another. As in: to convert agricultural lands to secondary suburban residential use. Clustering of homesites or parcels in Agricultural Preserve or Agriculture and Grazing lands is not defined as “conversion”.

Dunning Timber Site Classification System: A site classification system for mixed-conifer forests of the Sierra Nevada. The system is based on the production capacity (height-age relationship measurement) of a site. Dunning uses a numerical classification system that ranges from class 0 (non-forest) through class V with class I being the most productive and V being the least.

Farmland Security Zones: Farmland security zone contracts run for twenty years, twice as long as the standard Williamson Act contract term of ten years. Property within a farmland security zone is taxed at 65% of its agricultural value or 35% less than the tax rate of a standard Williamson Act contract. Cancellation is not allowed. Non-renewal is the only way to terminate a farmland security zone contract. Once the contract is non-renewed, it takes twenty years to expire.

Prime Agricultural Land: Any of the following: 1) All land that qualifies for rating as class I or class II in the Natural Resource Conservation Service land use capability classifications, 2) Land which qualifies for rating 80 through 100 in the Storie Index Rating, 3) Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture, 4) Land planted with fruit- or nut-bearing trees, vines, bushes or crops which have a nonbearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than two hundred dollars (\$200) per acre, 5) Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than two hundred dollars (\$200) per acre for three or the previous five years.

Right to Farm: The right of agricultural and timber operations to avoid nuisance claims, if the operations are lawful and utilize accepted or best management practices.

Silviculture: Silviculture is the theory and practice of controlling the establishment, composition, and growth of forests.

Storie Index: A numerical system (0-100) rating the degree to which a particular soil can grow plants or produce crops, based on four factors: soil profile, surface texture, slope, and soil limitations.

Timber: Trees of any species maintained for eventual harvest for forest products purposes, whether planted or of natural growth, standing or down, on privately or publicly owned land, including Christmas trees, not including nursery stock.

Timberlands: Timberlands include all private lands that are mapped as Timber Resource Lands on the General Plan Land Use map. These are lands primarily devoted to commercial timber management activities and other compatible uses.

Timberland Conversion: Within non-Timberland Production Zone (TPZ) lands, transforming timberland to a non-timber growing use through timber operations where future timber harvests will be prevented or infeasible because of land occupancy and activities thereon. Within Timberland Production Zone (TPZ) lands, a conversion is an immediate rezoning, whether timber operations are involved or not.

Timber Production Zone (TPZ): The California Forest Taxation Reform Act placed values on bare land that are related to its ability to grow trees, and it substituted a percent tax on the value of timber at the time of harvest (“yield” tax) for the annual property tax on the trees. In exchange for this tax benefit, landowners are required to dedicate their timberland to timber growing and compatible uses for a period of at least ten years. Unless terminated by the county or landowner, these ten years renew each year, thus creating a rolling minimum or self-perpetuating ten-year commitment. Lands zoned in this manner are called Timberland Production Zone. Total acres of TPZ indicate land that is committed to timber growing and compatible uses, thus forming the long term productive base of the State’s privately owned forestland base.

Williamson Act: The California Land Conservation Act of 1965--commonly referred to as the Williamson Act--enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value. The Williamson Act contract is an enforceable restriction on land and is binding on successors to both the landowner and the local government. The minimum term for a contract is ten years, and the contract is automatically renewed annually, unless either party gives advance notice on non-renewal. Contracts may also be canceled immediately, terminating the restriction to agricultural uses, only if the local legislative body finds that it would be consistent with the Act and in the public interest.

Plans and Planning

The following local and regional plans, programs, and organizations are among those that affect or can contribute to the implementation of the Agriculture and Forestry Element:

- Regional Transportation Plan (2009)
- Feather River Coordinated Resource Management.
- Feather River Watershed Management Strategy.
- Integrated Regional Water Management Plan (2005)
- Herger-Feinstein Quincy Library Group Forest Recovery Act

Goals

GOAL 8.1 Protect Agriculture as a Productive Use of Resource Land



**AG/
FOR
8.1**

Protect and Support agriculture as a productive use of resource lands, for the continuation of a diversified economy, for the maintenance of the County's rural character, for the protection of scenic, natural, and recreational resources, and as a defining characteristic of the County’s quality of life.

Policies

AG/FOR

8.1.1 Broad Range of Agricultural Uses

Support and promote a healthy and competitive agriculture industry by allowing for a broad range of agricultural uses, agricultural support services and agricultural products.

AG/FOR

8.1.2 Maintain Land in Agricultural Use

Support private and public owners of lands that have traditionally been used for agriculture to keep land in agricultural production by continuing existing agricultural use, developing compatible uses, and/or leasing lands to agricultural users.

AG/FOR

8.1.3 Local Food Supply

Encourage the development of new small scale agricultural production on non-agricultural lands where uses are compatible, in order to provide for a fresh, local supply of food.

AG/FOR

8.1.4 Right to Farm

The County shall maintain and support a right to farm ordinance.

AG/FOR

8.1.5 Public and Private

The agricultural polices identified in this document shall reflect the County's vision for the management of public land as well as private land.

GOAL 8.2 Prevent Conversion to Non-Agricultural Uses



AG/ FOR 8.2

The County will strive to protect Agricultural lands, strongly discourage conversion to non-agricultural uses, and prohibit uses that are incompatible with long-term agricultural production.

Policies

AG/FOR

8.2.1 Maintain Agricultural Production

Maintain agricultural production as the primary use on agricultural lands by limiting non-agricultural use development to that which is compatible with agriculture.

AG/FOR

8.2.2 *Agricultural Preserve and Agriculture and Grazing Areas*

Maintain parcel sizes outside of the planning area boundaries large enough to sustain viable agriculture and avoid conversion to non-agricultural uses.

AG/FOR

8.2.3 *Clustering of Farm Dwellings*

Locate farm dwellings in a manner that protects both on-site and off-site agricultural practices. All dwellings in agriculturally zoned areas shall be encouraged to be clustered where the parcel is less suitable for agricultural use.

AG/FOR

8.2.4 *Maintain Large Lot Zoning*

Maintain large lot zoning in agricultural areas to support large scale agricultural production, such as grazing and timber harvest.

AG/FOR

8.2.5 *Conversions*

Allow the conversion of agricultural lands to other use designations such that there is no net loss of same type agricultural lands. Clustering of homesites or parcels in Agricultural Preserve or Agriculture and Grazing lands is not defined as conversion.

Allow the conversion of Timber Resource lands to other land use designations such that there is no net loss of same type of Timber Resource lands.

Conversions of Timber Resource lands within Planning Area Boundaries is not defined as conversion.

AG/FOR

8.2.6 *Non-Agriculture Uses*

Limit non-agricultural development in agricultural areas to residential and accessory uses compatible or complimentary with agricultural production.

AG/FOR

8.2.7 *Limit Extension of Services and Infrastructure*

Protect agriculture lands from non-compatible encroachment by limiting the extension of services facilities and infrastructure.

AG/FOR

8.2.8 *Historic Ranches and Farms*

Encourage the maintenance, rehabilitation and, where practical, the restoration of historic era ranches and farms in order to maintain historical character while continuing to engage in productive agricultural activities.

GOAL 8.3 Healthy and Competitive Farm, Ranch and Forestry Economy

**AG/
FOR
8.3**

Promote the enhancement of a healthy and competitive farm and ranch economy to expand the base and viability of agriculture in the County.

Policies

AG/FOR

8.3.1 Agriculture District Overlay

Establish an Agricultural District Overlay designation to enhance and aggressively promote the distinctive agricultural and recreational character of the unique regions within the County, such as organic farming, specialty crops, agritourism, historic farming, ranching and logging resources.

AG/FOR

8.3.2 Uses that Support Agriculture and Timber Resources

Allow compatible uses that support agriculture and timber, such as but not limited to agricultural commercial uses, agricultural industrial uses, direct product sales, processing, farm-based tourism, overnight hut system back-country ski touring and snowshoeing, destination hunting, fishing, and wildlife viewing, agricultural research and farm worker housing on agricultural land, subject to appropriate design review and development standards.

AG/FOR

8.3.3 Protect Agriculture and Timber Resources Infrastructure

Recognize and maintain appropriate agricultural infrastructure, such as farm-to-market routes, water diversion and conveyance structures, fertilizer and chemical sales, airfields, processing facilities, research and development and farm worker housing.

GOAL 8.4 Sustainable Food Systems



**AG/
FOR
8.4**

Promote sustainable food systems within the County.

Policies

AG/FOR

8.4.1 Healthy Local Food Supply

Encourage and protect local, organic, grass-fed and/or ecologically sound agricultural practices to increase on-farm income and provide for a healthy local supply of food.

AG/FOR

8.4.2 Promote Use of Local Foods and Products

Promote the use of foods and products from Plumas County to strengthen the local economy, improve health, reduce source to market shipping distances and connect residents with the agricultural community. Ensure the County Zoning Ordinance allows licensed farmers' markets in unincorporated locations and farm stands in agricultural areas.



GOAL 8.5 Preserve, Protect and Conserve Water Supply and Quality

AG/ FOR 8.5	Protect the supply and quality of the County's water resources, by maintaining the proper ecological function of watersheds, including sediment transport groundwater recharge and filtration, biological processes, flood mitigations, and maintaining enough water for local and agricultural needs and uses.
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Policies

AG/FOR

8.5.1 Water for Agricultural Uses

Protect sustainable supplies of water for agricultural uses.



GOAL 8.6 Protection of Resources to Ensure Agriculture's Sustainability

AG/ FOR 8.6	Protect the natural resources needed to ensure that agriculture remains an essential part of Plumas County's future.
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Policies

AG/FOR

8.6.1 Groundwater Recharge Areas

Protect areas identified as significantly contributing to groundwater recharge from uses that would reduce the ability to recharge or would threaten the quality of the underlying aquifers.

AG/FOR

8.6.2 Preserve Water Resources

Ensure that adequate water resources for agriculture are secure, both in quantity and quality, before water allocations are dedicated to developments, mitigation banks, and/or interests from outside of the County.

AG/FOR

8.6.3 Conservation of Productive Agricultural Lands

Support high value and intensive farming practices on appropriate agricultural soils and historically viable areas. Prime agricultural lands and other productive agricultural land outside of planning areas shall be preserved wherever feasible.

AG/FOR

8.6.4 Soil Conservation

Promote participation in programs that reduce soil erosion and increase soil productivity. Work with appropriate local, State and Federal agencies to conserve, study, and improve soils.

AG/FOR

8.6.5 Habitat Protection

Encourage habitat protection and management that does not preclude or unreasonably restrict on-site agricultural production.

AG/FOR

8.6.6 Habitat Enhancement

Support the use of effective mechanisms to protect farmers and ranchers potentially impacted by adjoining habitat enhancement programs, such as “safe harbor” programs by providing buffers within the habitat area.

AG/FOR

8.6.7 Agriculture’s Role in Mitigating Climate Change

Recognize the valuable role that agriculture plays in mitigating the effects of climate change, including permanent crops that sequester carbon for long periods of time and the use of farming methods that reduce the use of fossil fuels and pesticides.

AG/FOR

8.6.8 Renewable Energy from Agricultural Byproducts

Support legislation to allow growers to use non-food agricultural byproducts, including wood waste products, for renewable energy.

GOAL 8.7 Education and Awareness

AG/ FOR 8.7	Support education to ensure continued public recognition of the important role that agriculture plays in Plumas County.
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Policies

AG/FOR

8.7.1 Value of Working Landscapes

Promote educational programs aimed at informing the general public about agriculture and forestry and the value of working landscapes in Plumas County.

AG/FOR

8.7.2 Creating Partnerships

Work with Natural Resources Conservation Service, Resource Conservation Districts, University of California Cooperative Extension, Farm Bureau and similar organizations to increase awareness of actions that may affect farming, ranching and forestry including the involvement of agricultural and forestry issues in K-12 and Feather River College curriculum.

AG/FOR

8.7.3 Creating Partnerships

Encourage and support ongoing public education programs by such organizations as the Agricultural Commissioner's Office, University of California Cooperative Extension, Farm Bureau, 4-H clubs, Future Farmers of America and other related organizations.

GOAL 8.8 Maintain Healthy Productive Forest



AG/ FOR 8.8	Maintain a healthy and sustainable forest that provides the raw materials necessary for continued timber production while limiting intrusion of incompatible uses and activities.
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Policies

AG/FOR

8.8.1 Commercial Timber Production Lands

Identify existing and potential Timber Resource lands for commercial timber production.

AG/FOR

8.8.2 Avoiding Adverse affects on Timber Production

Where feasible avoid locating federal, state, or local public improvements and utilities in Timber Production Zones where the project or land acquisition will have a significant adverse affect on the production of timber.

AG/FOR

8.8.3 Protect Timberlands from Incompatible Uses

Protect Timberlands from incompatible adjacent land uses which adversely impact forest management activities.

AG/FOR

8.8.4 Support Innovative Forest and Rangeland Programs

Support development of innovative forest and rangeland programs that facilitate production and conservation goals. Support timber management and wood

product certification and foster development of markets for new timber products and services; including using bio-mass for energy and carbon storage.

AG/FOR

8.8.5 Support Innovative Forest and Rangeland Programs

Setbacks, if necessary for the preservation of timber production and forest and rangeland maintenance activities, will be identified in the Zoning Ordinance and shall be delineated on all newly recorded parcel or subdivision maps. Projects located within a designated rural community shall maintain the minimum setbacks designated in that community.

AG/FOR

8.8.6 Inclusion of New Lands into Timber Resource Lands

Provide for the inclusion of new lands into Timber Resource lands.

GOAL 8.9 Protection of Timber Resource Land for Commercial and Resource Values



AG/ FOR 8.9	Protect and conserve timber resource lands identified as suitable for commercial timber production that are important to local forest product industries, and potential future industries, and forest lands that serve other values such as recreation, hydropower, grazing, mineral resources, watershed values, wildlife habitat and carbon sequestration.
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Policies

AG/FOR

8.9.1 Minimum Parcel Size for Timber Resource Lands

The minimum parcel size for Timber Resource lands shall be 40 acres. Timber Resource Lands include those lands identified as General Forest and as Timberland Production Zone. Limitations provided by the zoning include a restriction of the allowable density of dwelling units in the Timberland Production Zone. Only parcels 160 acres in size or greater are allowed a residence or structure.

AG/FOR

8.9.2 Multiple Use Purpose for Timber Resource Lands

Timber Resource lands are reserved for multiple use purposes that are compatible with timber production, other wood products, bio-mass, mineral resource extraction, grazing, recreation, carbon sequestration and wildlife habitat.

AG/FOR

8.9.3 Utilization of Wood Waste

The County shall encourage and promote the utilization of wood waste produced in the County.

AG/FOR

8.9.4 Forest Thinning and Fuels Management

The County shall encourage and promote forest thinning programs on both public and private lands, along strategic fuel break locations, in high fire risk areas, urban wild land interface areas, and areas with extensive rural residential development for purposes of maintaining the health of the forest, reducing catastrophic carbon emissions, and reducing the risk of fire, while improving wildlife habitat and protecting watershed functions.

AG/FOR

8.9.5 Community Stability

The County shall encourage and promote the full implementation of the Heger-Feinstein Quincy Library Group Forest Recovery Act (HFQLG) that promotes ecologic and economic health for Federal lands and communities in the Sierra Nevada. The HFQLG statute requires that strategic systems of defensible fuel profile zones be created. The goal of these projects includes: stabilizing the economy; preserving jobs; protecting the environment; reducing the threat of fire; and generating forest receipts to support county schools and roads. Regardless of whether the pilot project authorized by HFQLG continues or sunsets, the objectives and strategies of HFQLG must continue to be pursued, particularly efforts to develop economically self-sustaining forest management projects that are not subject to financial support from ongoing federal appropriations.

GOAL 8.10 Efficient and Sustainable Forest Product Production



AG/ FOR 8.10	Promote sustainable and efficient forest production while minimizing constraints inhibiting efficient forest production and maintaining forest health.
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Policies

AG/FOR

8.10.1 Forestland Management Policies and Coordination

Support fewer, more effective and lower-cost forest management regulations as a strategy to maintain timber and other wood product production as the primary use of forestlands.

GOAL 8.11 Forest Management and GHG Emissions



AG/ FOR 8.11	Promote the utilization of forested lands to address GHG emissions.
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Policies

AG/FOR

8.11.1 Forestlands as Locations for Carbon Sequestration

The County shall work through the CEQA process to comply with GHG reductions as set forth in AB 32 to create policies that encourage utilization of forestlands to serve as locations for carbon sequestration.

AG/FOR

8.11.2 GHG Emissions Mitigation

The County shall determine impacts of development projects on GHG emissions and require enforceable mitigation measures. If, after analyzing and requiring all reasonable and feasible on-site mitigation measures for avoiding or reducing GHG-related impacts, the lead agency determines that additional mitigation is required, the agency shall consider additional off- site mitigation. Priority for off-site mitigation shall be given to agricultural and forested lands serving as locations for carbon sequestration.

GOAL 8.12 Timber Resource Lands and Development Entitlements



AG/ FOR 8.12	Provide for the efficient consideration of development entitlements on Timber Resource lands.
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Policies

AG/FOR

8.12.1 Development Application Findings for Timber Resource lands

The County shall evaluate discretionary development applications involving identified Timber Resource lands and parcels adjoining those lands. Prior to granting an approval, the approving authority shall make all of the following findings:

- a. The proposed use will not significantly detract from the use of the property for, or inhibit, growing and harvesting timber on that parcel or to adjoining parcels for long-term timber resource production value or conflict with timber resource production in that general area,
- b. The proposed use will not intensify existing conflicts or add new conflicts between adjoining proposed uses and timber production and harvesting activities,
- c. The proposed use will not create an island effect wherein timber production lands located between the project site and other non- timber production lands are negatively affected,
- d. The proposed use will not hinder timber production and harvesting access to water and public roads or otherwise conflict with the continuation or development of timber production harvesting, and

- e. The proposed use will not significantly reduce or destroy the buffering effect of existing large parcel sizes adjoining timber production lands.

8.13 Infrastructure to Support Forest Industries

**AG/
FOR
8.13**

Protect the public infrastructure needed to support forest industries within the County.

Policies

AG/FOR

8.13.1 Resource Transportation Routes

Resource Transportation Routes are those roads which provide primary access to timber and mining resource areas. Protect resource transportation routes by requiring development to provide alternate access routes, limited access or otherwise ensure continued access to resources.

AG/FOR

8.13.2 Land Available for Forest Products Manufacturing

Maintain a sufficient inventory of industrial property to support forest products manufacturing.

AG/FOR

8.13.3 Fire Protection Programs

Support both State and Federal wildland fire protection programs and local Fire Safe programs that reduce the risk of wildland fires and the loss of timber on private and public property.

Agriculture and Forestry Element Implementation Measures

Work Plan/Implementation Measures

The following table documents the implementation measures included with the General Plan to implement the goals and policies included in this element.

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
1. Develop and maintain the Agricultural Commissioner position whose role will focus exclusively on agricultural issues and provide support within budgetary and staff constraints to guide on-going efforts in the agricultural community to develop new techniques, practices, approaches and technologies.	8.1.1					
2. a. Establish a mandatory set of findings that must be met for the reclassification of lands from agricultural uses to other uses. b. Facilitate agricultural protection by encouraging contractual protections including Farmland Security Zones, Williamson Act Contracts, and conservation easement agreements.	8.2.2					
3.a. Require that lot line adjustments in Agricultural Preserve, Agricultural and Grazing, and Timber Resources land use designations result in underlying parcels that are consistent with underlying land use designation, including minimum parcel size. Enlargement of a legally existing non-conforming parcel by lot line adjustment, which results in a continuing non-conforming parcel size, on Agricultural Preserve, Agricultural and Grazing, and Timber Resource designated lands is permitted when no additional nonconforming parcels are created. Legally existing non-conforming parcels located in Agricultural Preserve, Agricultural and Grazing, and Timber Resource designated lands, including	8.2.4					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>those lands located within the same Williamson Act Contract, shall not be adjusted to a size smaller than the smallest parcel's current acreage, unless the adjustment is needed to address a building site or correct a physical improvement that is found to encroach upon a property line.</p> <p>b. Develop standards for the issuance of development permits on substandard sized parcels under Williamson Act contract.</p> <p>c. The County shall designate a minimum parcel size for areas adjacent to mineral resource zoning areas.</p> <p>d. Develop standards for the transfers of land within the agricultural zoned areas for transfer to lands outside the agricultural zoned areas which result in no net loss of like kind agricultural lands.</p>						
<p>4. a. Develop ordinance language that requires a mitigation ratio of no less than 1:1 for the conversion of agricultural lands.</p> <p>b. Develop an ordinance that identifies the necessary findings to support the conversion of identified agricultural, timber and/or open space lands. Such as:</p> <ul style="list-style-type: none"> • There is a public need or net community benefit derived from the conversion of the land that outweighs the need to protect the land for long-term agricultural use, • There are no feasible alternative locations for the proposed project that are either designated for non-agricultural land uses or are less productive agricultural lands, and • The use would not have a significant adverse effect on existing or potential agricultural 	8.2.5					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
activities on the surrounding lands designated for agriculture.						
<p>5. a. Work with interested parties to identify adaptive uses of agricultural properties, including the accommodation of agritourism.</p> <p>b. Develop criteria for the transfer of density within parcels, or within single land ownerships, to allow for clustered development of residential structures to minimize conflicts over compatibility of uses with agricultural production. If a transfer of development rights policy is adopted, this Policy shall be made consistent with the transfer of development rights policy.</p>	8.2.6					
6. Work with the Local Agency Formation Commission (LAFCO) on issues of mutual concern including agricultural preservation policies and establishment and maintenance of logical boundaries for service districts that support existing and planned growth.	8.2.7					
<p>7. a. Develop agricultural permit processing procedures that are rapid and efficient.</p> <p>b. Collaborate with the Plumas-Sierra Farm Bureau, Resource Conservation Districts, the California Cattlemen’s Association, and agricultural interests, agencies and interested parties, to devise strategies to improve economic viability of agriculture.</p> <p>c. Consider the establishment of an Agricultural Permit Coordinator position (“Farm Buds Man”) to assist farmers and ranchers with the permitting process, including assistance with agricultural permitting and standards to</p>	8.3.1					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
facilitate and expedite promising value-added agricultural projects.						
<p>8. a. Promote markets for locally and regionally grown and or prepared food and other products and services.</p> <p>b. The County shall encourage agriculture support businesses and value-added food processing operations, including USDA animal processing facilities and local commercial kitchens and food processing facilities, in order to increase the viability and economic impact of local agricultural industries and increase the supply of locally produced foods.</p> <p>c. Encourage neighborhood grocery stores, farmers markets, community gardens and food assistance programs to increase their use of locally grown/prepared goods.</p> <p>d. Encourage institutions, such as schools, hospitals, colleges, government agencies, businesses, and private food outlets such and grocery stores and restaurants, to provide foods produced locally and in the region.</p> <p>e. Create an advisory Food Policy Council to recommend the creation and implementation of agricultural marketing programs and policy recommendations that create a robust and just food system in the County.</p> <p>f. Create an effective Farm-to-School program to bring fresh locally grown/produced food to school meals and provide farm education programs.</p> <p>g. The County shall encourage value-added manufacturing of products based on sustainable wood production and wood byproducts.</p> <p>h. The County shall encourage</p>	8.4.2					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>sustainable timber and biomass production/harvesting along with more intensive forest management practices to protect watershed quality and reduce danger of catastrophic wildfires.</p>						
<p>9. a. Protection of watersheds will be given a high priority through the implementation of required considerations in land use decisions.</p> <p>b. Support watershed protection and restoration efforts by coordinating policy with the Upper Feather River Integrated Regional Water Management Plan, the Feather River Coordinated Resource Management Group, Almanor Basin Watershed Advisory Committee, and other groups.</p> <p>c. Simplify permit processes for watershed restoration and enhancement projects.</p> <p>d. Require the use of Best Management Practices identified by the Natural Resource Conservation Service and Low Impact Development Standards as defined by the State Water Quality Resources Board in watershed lands as means to prevent erosion, siltation, and flooding.</p> <p>e. Establish water conservation programs that encourage the use of drought tolerant landscaping and water efficient building design and provide incentives for those who voluntarily implement them.</p> <p>f. The County shall investigate the development of an ordinance to allow for and encourage the use of domestic gray water for landscaping and irrigation purposes.</p> <p>g. Support the development of specific strategies defining and improving agricultural resource stewardship.</p>	<p>8.5.1</p>					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>10. a. Facilitate partnerships between agricultural operations and habitat conservation efforts to create mutually beneficial outcomes.</p> <p>b. Encourage farmers and ranchers in coordination with other appropriate entities to develop risk management scenarios to address global climate change issues</p>	8.6.3					
<p>12. Lands suitable for timber production shall be mapped and designated as Timber Resource on the land use map. The General Forest and Timber Production zone districts will implement the Timber Resource land use designation. New lands may be designated if qualified upon application by the landowner. These lands shall be maintained for the purposes of protecting and encouraging the production of timber, other wood products and compatible uses.</p>		8.8.1				
<p>13. a. Conservation of timberland shall be achieved by the use of the Timber Resource land use designation. This designation shall be applied to lands as follows:</p> <p>i. Lands now within a TPZ in accordance with the Forest Taxation Reform Act (hereinafter Act).</p> <p>ii. Lands which may be eligible to enter into a Timber Production Zone in accordance with the Act.</p> <p>iii. Lands not contained within either of the above categories which are suitable for timber production as shown on the adopted land use maps.</p> <p>iv. Timber producing lands which are sold or traded to a private landowner by a federal or state agency.</p> <p>b. Timberlands within a Timber</p>	8.8.3					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>Production Zone shall be regulated as to use and subdivision as set forth in the Act. In addition to the permitted uses listed in the Act, other related and compatible uses may be conditionally permitted under applicable provisions of the Zoning Ordinance.</p>						
<p>14. a. The County shall set forth a procedure to evaluate the suitability of forestlands for timber production. The procedure shall be developed using accepted and current scientific data and protocols approved by the Board of Supervisors. Revisions to the procedure shall not constitute a General Plan amendment. The procedure shall be used in the following instances:</p> <ul style="list-style-type: none"> i. To evaluate commercial forestry and timberlands within appropriately identified General Plan land use map areas for their timber production values. ii. To evaluate lands outside existing forestry use areas for their timber production values and potential inclusion in forestry use areas. <p>b. Based on accepted and current scientific data and protocols the County shall assess lands to determine their suitability for timber production. Lands considered suitable for timber production shall be based on the following criteria:</p> <ul style="list-style-type: none"> i. Lands designated for timber production use in the General Plan, ii. Soils identified as suitable timber production soils as defined in the California Forestry Handbook, iii. Lands used for commercial forestry/timber or associated wood products, 	<p>8.8.6</p>					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<ul style="list-style-type: none"> iv. Lands that possess topographical features that make them suitable for timber production, and v. Avoidance of incompatible land uses or development densities in the vicinity. 						
<p>15. In order to protect Timber Resource lands uses from incompatible land uses, lands being divided in areas designated residential and that adjoin lands designated for full-time Timber Resource uses, shall comply with one of the following:</p> <ul style="list-style-type: none"> i. If outside a designated Town, Community, Rural Center or Master Planned Community planning area, the minimum parcel size shall be 40 acres or more depending on other policies and standards. Residential building sites shall be located, to the extent feasible, to avoid negative impacts on the adjacent land uses. ii. If within a designated Town, Community, Rural Center or Master Planned Community planning area, the minimum parcel size shall be 10 acres or more depending on other policies and standards. Residential building sites shall be located, to the extent feasible, to avoid negative impacts on adjacent land uses. iii. If it can be shown that topographic or man-made features will sufficiently separate the uses, the above-mentioned standards may be modified. 	8.9.2					
<p>16. Maintain an Inventory existing active and non-active industrial sites within the County that can support forest products manufacturing.</p>	8.13.2					
<p>17. Amend the Zoning Code to address the use of ministerial permitting of agricultural</p>	8.3.2					

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
support uses.						

WATER RESOURCES ELEMENT (9)

Introduction

Consistent with direction from various key stakeholders in Plumas County, including working group members and representatives of other public and private interests, the County has decided to include a separate Water Resources Element for inclusion in its updated General Plan. Given the importance of this resource to both County residents and the various users throughout the larger State of California, the County has included this optional element as a means of ensuring that Plumas County's water resources are protected and sustained for the future. To achieve this overall objective, the Water Resources Element provides a holistic look at water resources management. Consequently, this element is comprised of the following key sections:



Figure 30. Headwaters Feather River at Steel Bridge.
Photo Credit: Katy J

- Section W9.1: Groundwater Management
- Section W9.2: Water Quality
- Section W9.3: Climate Change Adaptation
- Section W9.4: Watershed Management and Water Exports
- Section W9.5: Public Water Supply
- Section W9.6: Wastewater Management
- Section W9.7: Stormwater and Flood Management
- Section W9.8: Water Use Efficiency and Conservation
- Section W9.9: Interagency Coordination
- Section W9.10: Public Education

Plumas County is committed to protecting its communities in a manner that also addresses climate change. As part of the “Goals” section of this element, policies and implementation measures related to climate change are denoted with the symbol:



Plumas County is also committed to being diligent in protecting its “Area of Origin” water rights.

Setting / Existing Condition

Plumas County contains a number of rivers, lakes and reservoirs, which provide important habitat, recreational, water supply and economic functions for County residents and nonresidents alike. This section provides an overview of the existing surface and groundwater resources in the County and the associated regulatory environment and identifies several key issues for consideration.

The amount of precipitation received throughout the watershed varies but greatly contributes to the significant amount of water available in the County and throughout the region. The Sierra Crest, centrally located within Plumas County, acts as a barrier to storm systems between the western and eastern portions of the County. The western side of the Sierra Nevada Mountains receives over 90 inches of precipitation annually while the area east of the Sierra Crest receives only 11 inches. Snowpack levels in the

County's higher elevation areas serve as natural water reservoirs for surface water that becomes available as the snow melts and drains into the regional waterway system.

As shown in Figure 9-1, the Upper Feather River watershed covers a majority of the County (98%), which is about 72% of the watershed. The tributaries of the Upper Feather River watershed drain over 2 million acres of land in the Sierra Nevada Mountains, flowing southwest into Lake Oroville in neighboring Butte County. The Upper Feather River watershed is divided into four main branches with respective watersheds: the West Branch, the North Fork, the Middle Fork and the South Fork of the Feather River. The North Fork Feather River drainage area is the largest drainage area in the watershed covering approximately 1.4 million acres and contributing a yearly average flow of over 2.3 million acre-feet of water to Lake Oroville. The South Fork Feather River drainage is the smallest of the four drainage areas and contributes an average of over 189,000 acre-feet to Lake Oroville each year. The Upper Feather River watershed serves as an important supply of surface water resources. Water has been a valuable export from Plumas County since the State Water Project (SWP) located its main storage facility fed by the Feather River at Lake Oroville. This watershed supplies 3.2 million acre-feet per year for downstream urban, industrial and agricultural use as part of the State Water Project and delivers water to 29 agencies. The State Water Project also operates three reservoirs in Plumas County, Antelope Lake, Frenchman Lake and Lake Davis, which flow into Lake Oroville.

The main stems of the Upper Feather River watershed in addition to many of the tributaries exhibit some level of degradation, primarily due to human activities. The east side of the County experiences much more erosion than the west side, which greatly affects surface water quality. Timber harvesting, water diversion, irrigation practices, road and railroad construction, grazing and mining have all contributed to in-stream water quality issues, such as increased sediment transport, that impact aquatic life and riparian vegetation.

Plumas County contains fourteen groundwater basins, which are primarily located in the valleys on the east side of the Sierra Crest. These groundwater basins are also shown in Figure 30. Sierra Valley is the largest groundwater basin, covering 125,250 acres, and underlies the Middle Fork of the Feather River. The smallest groundwater basin identified in the figure is Yellow Creek Valley Groundwater Basin covering 2,310 acres. Some of the County's groundwater basins have been depleted as a result of high extraction rates and slow recharge. For example, the Sierra Valley groundwater basin has experienced significant declines due to human activity and agricultural practices.

Groundwater quality is currently monitored in nine of the County's groundwater basins. Groundwater quality in the County varies by basin. Water quality in the Sierra Valley basin is primarily affected by geothermal activity which causes the groundwater to contain high concentrations of boron, fluoride, iron and sodium. Some wells within the Sierra Valley Sub-Basin also exhibit high levels of arsenic and manganese. Localized groundwater quality has been influenced in some areas by the use of septic systems.

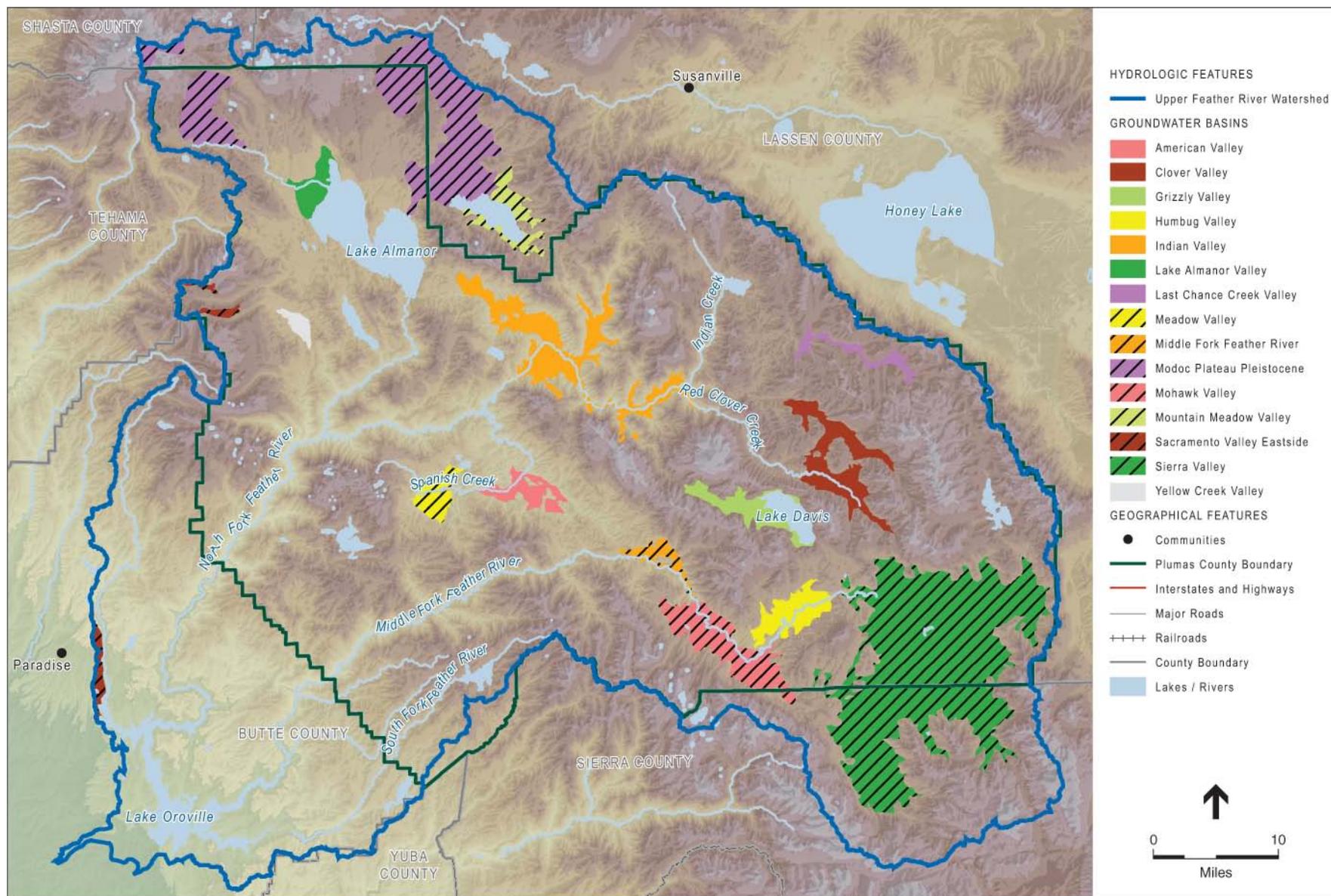


Figure 31. Hydrologic Features Within Plumas County. ESA 2011.

Relationship to Other Elements

The County's Water Resources Element has been developed to be consistent with the other elements of the General Plan. While several key water topics are addressed in this element, several related issues are addressed throughout the General Plan. For example, the Conservation and Open Space Element addresses riparian corridors, wetlands, fishery resources, other biological resources issues, water-dependent recreation and open-space uses. The Public Health and Safety Element addresses wildfire suppression and flood-plain management issues.

Definitions

Acre-foot: The amount of water needed to cover one acre with one foot of water, or approximately 325,851 gallons. In the course of a year the average three-person household uses 0.538 acre-feet of water based on the national average daily per capita water usage of 160 gallons.

Appropriative Right: The right to put to reasonable beneficial use a quantity of water subordinate to the use thereof by prior appropriators and defined riparian diverters.

Aquifer: A geologic formation that stores water underground and yields significant quantities of water to wells or springs.

Groundwater Basin: A groundwater reservoir, defined by an overlying land surface and the underlying aquifers that contain water stored in the reservoir. In some cases, the boundaries of successively deeper aquifers may differ and make it difficult to define the limits of the basin.

Groundwater Overdraft: The condition of a groundwater basin in which the amount of water withdrawn (by pumping) exceeds the amount of water that recharges the basin.

Groundwater Recharge: The natural or intentional infiltration of surface water into the zone of saturation (i.e., into groundwater).

Regional Water Management Group: The Feather River Regional Water Management Group was formed in 2009 by a group of more than 30 local, State and Federal agencies and non-governmental organizations to coordinate water and watershed management in the Upper Feather River watershed and serve as the local organization responsible for implementing California's Integrated Regional Water Management (IRWM) program.

Safe Yield: The maximum dependable draft that can be made continuously on a source of groundwater supply during a period of years during which the probable driest period or period of greatest deficiency in water supply is likely to occur.

Safe Drinking Water Act (SDWA): Administered by the U.S. Environmental Protection Agency (U.S. EPA) in coordination with the states; the chief Federal legislation that regulates drinking-water quality.

State Water Project (SWP): Authorized in 1960, the SWP facilities include 20 dams, 662 miles of aqueduct, and 26 power and pumping plants. Major facilities include the multi-purpose Oroville Dam and Reservoir on the Feather River, the California Aqueduct, South Bay Aqueduct, North Bay Aqueduct, and a share of the State-Federal San Luis Reservoir.

Plans and Planning

The following local and regional plans, programs and organizations are among those that affect or are involved in the implementation of water resources and open-space protection in Plumas County:

- Feather River Coordinated Resource Management.
- Feather River Watershed Management Strategy.
- Upper Feather River Watershed Integrated Regional Water Management Plan.

Goals

GOAL 9.1 Groundwater Management

W 9.1	To manage groundwater as a valuable and limited resource and to ensure its sustainability as a reliable water supply sufficient to meet the existing and future needs of Plumas County.
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Policies

W

9.1.1 *Groundwater Management*

The County shall support the development and implementation of a regional groundwater management plan and shall work with water resource agencies, such as the Sierra Valley Groundwater Management District, water users and other affected parties to develop basin-specific plans for high priority groundwater basins to ensure a sustainable, adequate, safe and economically viable groundwater supply for existing and future uses within the County. As appropriate, the groundwater management plans should include the following:

- Computer models of groundwater recharge, storage, flows, usage and sustainable yield;
- Assessment of water quality contaminants;
- Analysis of resource limitations and relationships to other users for wells serving public supply systems and other large users;
- Opportunities for changing the sources of water used for various activities to better match the available resources and protect groundwater;
- Possible funding sources for monitoring, research, modeling and development of management options; and
- Provisions for applicant fees and other funding of County costs.
- Groundwater elevation monitoring to address the requirements of the California Statewide Groundwater Elevation Monitoring Program (CASGEM)
- Groundwater quality monitoring to address the requirement of the Irrigated Lands Regulatory Program.

W

9.1.2 *Groundwater Recharge Area Protection*

The County shall require new development projects to adequately protect groundwater recharge areas.

W

9.1.3 *Groundwater Demand Reductions*

The County shall encourage the use of alternate sources of water supply as appropriate and to the maximum extent feasible in an effort to reduce demand on key groundwater resources in the county.

GOAL 9.2 Water Quality

W 9.2

To protect, restore and enhance the quality of surface and groundwater resources to meet the needs of all reasonable beneficial uses.

Policies

W

9.2.1 *Participation in Water Quality Objectives*

The County shall support and assist in the development of reasonable and prudent Total Maximum Daily Loads (TMDLs) for the impaired water bodies and pollutants of concern identified by the Central Valley Regional Water Quality Control Board (RWQCB) to achieve compliance with adopted Total Maximum Daily Loads. Work with the Central Valley Regional Water Quality Control Board to develop and implement measures consistent with the adopted TMDLs. The County shall also work closely with the Central Valley Regional Water Quality Control Board, the City of Portola, public water supply purveyors and other interested parties in the development and implementation of water quality plans and measures.

W

9.2.2 *Background Water Quality*

The County shall encourage the use of water management strategies, biological remediation and the best available technology to address naturally occurring water quality problems.

W

9.2.3 *County Facilities*

The County shall design, construct and maintain County buildings, roads, bridges, drainage and other facilities to minimize sediment and other pollutants in stormwater flows.

W

9.2.4 *Wildfire and Water Quality Controls*

The County shall, in cooperation with wildfire management agencies, such as Cal Fire, United States Forest Service and local fire protection agencies, develop a variety of land-use planning, site design and vegetation management techniques to reduce the risk of wildfires. This risk reduction shall also include post-fire erosion, sedimentation and water-quality conditions.

W

9.2.5 Wastewater Standards and National Pollutant Discharge Elimination System (NPDES)

The County shall support wastewater agencies' efforts to meet applicable NPDES permit requirements and waste discharge requirements in compliance with the Federal Water Pollution Control Act and California's Porter-Cologne Water Quality Control Act.

W

9.2.6 Erosion and Sediment Control Measures

The County shall ensure that Best Management Practices to control erosion and sediment will be incorporated into development design and improvements.

W

9.2.7 Wastewater Application Management

The County shall approach all wastewater applications, both individual on-site and community systems, in a manner that supports Federal, State and local wastewater regulations to ensure the protection of public health and the environment.

GOAL 9.3 Climate Change Adaptation



W 9.3	To ensure that the County proactively develops and supports programs and policies for forest and watershed management to counteract trends in declining snowpack storage, accelerated Spring runoff, and declining overall runoff that threaten both larger flood events and diminished late-season water supplies.
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Policies

W

9.3.1 Water Resource Adaptation

The County shall encourage water purveyors to develop plans for responding to potential changes in weather patterns resulting from climate change effects, the sharing of water resources to improve water supply reliability and the allocation of water supply to priority users. Climate patterns will also be monitored for their ability to affect existing drainage patterns and their resultant effects to flood-prone areas.

W

9.3.2 Forest Management

The County shall support plans and projects to improve the conditions of overstocked forestlands, especially around communities-at-risk, to reduce the potential adverse impacts from wildfires, to protect watersheds, habitats and reduce excessive evapotranspiration losses.

GOAL 9.4 Watershed Management and Water Exports



W 9.4

To maintain sound management of the water resources in Plumas County's diverse watersheds and assure that any proposals for surface and groundwater exports are stringently reviewed to ensure that they do not undermine the County's ability to sustain an adequate supply of high-quality water for all its water users and dependent natural resources.

Policies

W

9.4.1 Watershed Protection

The County shall require new development projects to mitigate potential impacts on surface water, recreation areas, agriculture and wildlife habitat areas.

W

9.4.2 In-stream Flow Rate Management

The County shall support reasonable in-stream flow standards to protect aquatic habitat and fisheries while balancing water supply needs and protecting water rights within the Feather River watershed.

W

9.4.3 Watershed and Community-Based Efforts

The County shall support the efforts of local community-based watershed groups to protect water resources and work with local groups to ensure decisions and programs take into account local opinions, priorities and needs.

W

9.4.4 Regional Water Management

The County shall support regional efforts through the Upper Feather River Integrated Regional Water Management Plan (UFRIRWMP) to ensure coordination and adaptive management between statewide water resource planning efforts, regional priorities and local needs. The goals and objectives of the UFRIRWMP shall be considered in establishing County water resource priorities and policies.

W

9.4.5 Watershed Program Funding

The County shall support efforts to obtain grant funding for locally sponsored watershed programs, planning efforts and projects that enhance and protect the Feather River Watershed.

W

9.4.6 Water Export Projects on Plumas County Watercourses

The County, prior to giving its approval and support to export projects on county watercourses, will require the following information to demonstrate the export project's adherence to the requirements of California Water Code Section 10505 protecting development rights and Section 11460 protecting beneficial needs of the watersheds. The analysis of the export project shall include:

- Effects on in-stream flows including flood events;
- Assessment of the environmental impact of the proposed project using appropriate ecological studies by a team of independent experts qualified to conduct such studies, funded by the project sponsor and completed before project authorization;
- Effects on fisheries and native wildlife habitat and restoration efforts; Analysis of the sustainability of any proposed fisheries and wildlife habitat mitigations;
- Impacts to Native American communities, including cultural and archaeological resources, economies, fisheries and water supplies;
- Water supplies necessary to meet the ultimate future development needs of residential, agricultural, municipal, industrial and recreational users and to promote environmental protection and fisheries habitat restoration;
- Cost and benefits to recreation;
- Water quality impacts and provisions for enhancement of any impaired water bodies (Section 303(d) of the federal Clean Water Act);
- Property tax and other fiscal or economic losses to local entities;
- Public infrastructure and service demands and costs including roads and recreation facilities; and
- Public cost and benefits on statewide, regional, county and local scales including the monetized value of impacted ecological services.

W

9.4.7 Minimizing the Effects of Water Exports

The County shall require that exports not damage the County's environmental and economic setting by ensuring that "no unreasonable effect" occurs in the transfer and withdrawal of water resources pursuant to Section 1810 of the State Water Code. County standards for defining "no unreasonable effect" include actions that will not:

- Contribute to a decline in the population of any sensitive or protected plant, fish or wildlife species;
- Reduce water levels in any existing public or private groundwater wells to levels that preclude withdrawal by existing users or would substantially increase the costs or such withdrawal;
- Contribute to any impacts on water quality that reduces water quality below health standards or Federal or State water quality standards;
- Contribute to effects on water quality that would result in a deficiency by the water treatment agency's ability to treat water to appropriate standards;
- Reduce available groundwater or surface water resources to levels that would make access and/or use of these waters uneconomical for development planned in accordance with this General Plan; and
- Directly or indirectly discharge contaminants into surface or groundwater resources.

W

9.4.8 Hydroelectric Project Relicensing

The County shall encourage that dam relicensing projects effectively balance development values, such as electric power, flood control and water supply, with non-developmental values, such as environmental resource protection, recreation, habitat restoration and water quality, and other values that best reflect the public interest. Efforts to mitigate project impacts should not impose redirected impacts on other public or private resources.

GOAL 9.5 Public Water Supply

W 9.5

To encourage public water systems and their sources to provide an adequate supply to meet long-term needs and that is provided in a manner that maintains water resources for other water users while protecting the natural environment.

Policies

W

9.5.1 Adequate Water Supply Facilities and Services

The County shall support water purveyors' plans to develop new reliable future sources of supply, while promoting water conservation and water recycling/reuse. Additionally, through the development review process, the County shall ensure that public water facilities and services will be adequate and operational to serve new development and meet capacity demands when needed. Such needs shall include capacities necessary to comply with public safety.

W

9.5.2 Cooperative Planning for Water Supply

The County shall work with public water supply purveyors to disseminate and discuss information on the limits of available water supplies, how the supplies can be used efficiently, the possible effects of drought conditions, acceptable levels of risk of shortage for various water users, priorities for allocation of the available water supply, conditions for use of limited supplies and limits of alternate sources that could be used or developed..

W

9.5.3 Urban Water Management Plans

The County shall encourage and assist in the preparation of master facilities plans, and urban water management plans where required by State law, for all public water suppliers to design and construct all facilities in accordance with sustainable yields and the planning documents of applicable jurisdictions.

W

9.5.4 Water Supply for New Development

The County shall ensure a sufficient water supply for all new residential/non-residential development. To do this, the County shall enforce Water Code Section 10910 (Senate Bill 610) and Government Code Section 66473.7 (Senate

Bill 221), or more current state code requirements. Where these codes do not apply, the County shall impose conditions similar to Water Code Section 10910 (Senate Bill 610) and Government Code Section 66473.7 (Senate Bill 221), or more current state code requirements, and suitable for the size and scale of the development.

W

9.5.5 *Water Rights Protection*

The County shall support public agencies and private entities within Plumas County in their efforts to protect their water rights and water supply contracts.

W

9.5.6 *Consistent Fire Protection Standards*

The County, in coordination with local water service purveyors, wildfire protection agencies and local fire protection agencies, shall ensure consistent and adequate standards for fire flows and fire protection for new development, with the protection of human life and property as the primary objectives.

W

9.5.7 *Community Water Systems*

The County shall require any new community water system, in the unincorporated area of the county, serving residential, industrial or commercial development to be owned and operated by a public or private entity that can demonstrate to the County adequate financial, managerial and operational resources.

W

9.5.8 *Level of Service Impacts*

The County shall ensure that any new development projects do not create significant adverse impacts on existing water and wastewater infrastructure.

W

9.5.9 *Funding for Water Supply Improvements*

The County shall support water/wastewater purveyors use of all appropriate and equitable financing methods (e.g., grant funding, assessment districts and development fees) to finance public facility design, construction, operation and maintenance.

GOAL 9.6 Wastewater Management

W 9.6	To ensure that wastewater is managed to provide for the long-term protection of public health, safety and welfare of the environment, including support of the logical and progressive expansion of community wastewater systems within the County.
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Policies

W

9.6.1 Adequate Facilities and Services

The County shall ensure, through the development review process, that wastewater facilities and services will be adequate and operational to serve new development and meet capacity.

W

9.6.2 Alternative Wastewater System Approval

The County may approve new development that can demonstrate to the County that sewer service will be provided from an alternative wastewater system with adequate financial, managerial and operational resources, where connection to an approved sewer system is not feasible.

GOAL 9.7 Stormwater Management



W 9.7	To manage stormwater from existing and future development in an efficient manner through methods that maintain natural water quality, enhance percolation for groundwater recharge, reduce potential flooding, support natural wetlands and provide opportunities for reuse.
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Policies

W

9.7.1 Natural Stormwater Drainage Courses

The County shall require that natural drainage courses, including ephemeral streams, be retained and protected from development impacts which would alter the natural drainage courses, increase erosion or sedimentation or have a significant adverse effect on flow rates or water quality. Natural vegetation within riparian and wetland protection zones shall be maintained to preserve natural drainage characteristics consistent with the policies provided in the Conservation Element. Storm-water discharges from outfalls, culverts, gutters and other drainage control facilities that discharge into natural drainage courses shall be dissipated so that they make no contribution to additional erosion and, where feasible, are filtered and cleaned of pollutants.

W

9.7.2 Downstream Peak Flows

For new development, the County shall require that peak stormwater discharge not exceed the capacity limits of off-site drainage systems or cause downstream erosion, flooding, habitat destruction or impacts to wetlands and riparian areas.

W

9.7.3 *Maintenance of Stormwater Runoff Systems*

The County shall maintain its existing stormwater runoff systems to the extent possible, to assure that these systems do not fall into a state of disrepair such that they are causing water quality degradation inconsistent with their original design function.

W

9.7.4 *Runoff Quality*

The County shall require all drainage systems in new development and redevelopment to comply with applicable state and federal non-point source pollutant discharge requirements.

W

9.7.5 *Best Management Practices*

The County shall require best management practices in new development and redevelopment to reduce pollutants from entering natural water bodies while allowing stormwater reuse.

W

9.7.6 *Interagency Cooperation*

The County shall work with the Central Valley Regional Water Quality Control Board and local, other state and Federal flood control and water resources management agencies to adopt effective stormwater management measures.

GOAL 9.8 Water-Use Efficiency and Conservation



W 9.8

To increase the role of conservation and water-use efficiency to help meet domestic or municipal water supply needs.

Policies

W

9.8.1 *Water Conservation*

The County shall work with local water purveyors and managers to implement a variety of water conservation measures appropriate for existing and future needs that comply with state and federal legislation and the California Urban Water Conservation Council. General water conservation measures may consist of the following:

- Increasing water conserving design and equipment in new construction, including the use of design and technologies based on green building principles;
- Educating water users on water conserving landscaping and other conservation measures;
- Encouraging retrofitting with water conserving devices;
- Designing wastewater collection systems to minimize inflow and infiltration; and

- Reducing impervious surfaces to minimize runoff and increase groundwater recharge.

W

9.8.2 *Recycled Water Use*

The County shall encourage new development, redevelopment, and landscape and agricultural irrigators to use recycled water wherever practical and available; this includes striving for the highest possible quality of wastewater treatment to increase the potential use of recycled water for existing and future needs of the county.

W

9.8.3 *Compact Development*

The County shall support and encourage compact forms of development and shall focus new growth within existing community plan areas to help reduce water demands, reduce landscape areas and reduce the costs of water and wastewater infrastructure.

W

9.8.4 *Existing Development*

The County shall promote programs for retrofitting plumbing, providing cost rebates, identifying leaks, changing landscaping, irrigating efficiently and other methods of reducing water consumption by existing users. As appropriate, the County will assist existing users seeking grants or other funding opportunities for such water conservation projects.

W

9.8.5 *County Buildings*

The County shall assess its water use in County buildings and facilities and reduce water consumption to the maximum extent possible.

W

9.8.6 *Agricultural Water Use*

The County shall encourage and support water conservation for agricultural activities that increase the efficiency of water use for crop irrigation and livestock maintenance.

W

9.8.7 *Sustainable Water Practices*

The County shall encourage the use of sustainable, affordable water management practices that meet state and local standards, such as greywater reuse, rainwater capture/harvest, watershed management and stormwater infiltration to reduce demands on potable supply.

W

9.8.8 County Codes

The County shall establish a program to revise County Codes to increase, as appropriate, the use of recycled water for new commercial, residential, industrial and agricultural development.

GOAL 9.9 Interagency Coordination

W 9.9	To promote interagency communication and cooperation between land use and water, wastewater, and flood control entities, so that they may optimize utilization of their resources and provide the highest level of dependable, yet affordable, service, while respecting individual entities' water rights and interests.
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Policies

W

9.9.1 Coordinated Infrastructure Planning

The County shall work with water/wastewater purveyors in the planning and development of future water, wastewater and flood control facilities needed to transmit, treat, store and distribute potable water supplies and to collect, convey, treat and dispose of wastewater pursuant to adopted General Plan policies, urban water management plans, water supply agreements and facility plans.

W

9.9.2 Interagency Coordination

The County shall support cooperative interregional planning efforts that prioritize the protection of existing water rights of local agencies and water users.

W

9.9.3 Funding Source Procurement

The County shall support and work with local agencies and water/wastewater purveyors to pursue alternative funding sources that can be used for projects that improve water reliability and regional watershed opportunities.

W

9.9.4 Information Sharing

The County shall share relevant data and encourage water/wastewater purveyors and flood-control agencies to share data that assist in planning activities.

GOAL 9.10 Public Education

W 9.10	To increase public awareness of water resources and wastewater planning, water quality and water conservation through education and outreach.
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Policies

W

9.10.1 Public Education Materials

The County shall encourage water/wastewater purveyors, flood control districts and other local organizations or individuals to develop and distribute educational material regarding water conservation and water quality protection measures and programs.

W

9.10.2 Water Planning and Public Involvement

The County shall encourage water/wastewater purveyors to involve the public in their water resource and wastewater planning activities.

Water Resources Element Implementation Measures

Work Plan/Implementation Measures

The following table documents the implementation measures included with the General Plan to implement the goals and policies included in this element.

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
<p>1. The County shall work with local water agencies to develop a regional groundwater management plan and basin-specific plans for priority groundwater basins. The plan should include the following:</p> <ul style="list-style-type: none"> • Computer models of groundwater recharge, storage, flows, usage and sustainable yield. • Assessment of water quality contaminants. • Analysis of resource limitations and relationships to other users for wells serving public supply systems and other large users. • Opportunities for changing the sources of water used for various activities to better match the available resources and protect groundwater. • Possible funding sources for monitoring, research, modeling and development of management options. • Groundwater elevation monitoring to address the requirements of the California Statewide Groundwater Elevation Monitoring program. • Groundwater quality monitoring to address the requirement of the Irrigated Lands Regulatory Program. • Provisions for applicant fees and other funding of County costs. 	<p>9.1.1 9.1.2 9.1.3</p>	<p>Flood Control District, Water Districts and Regional Water Management Group</p>				
<p>2. The County shall develop and maintain a grading ordinance that maintains existing terrain and channels vegetation to the extent feasible, in order to minimize the disruption of</p>	<p>9.2.3 9.2.4 9.2.5 9.2.6</p>	<p>Planning Department</p>				

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
natural systems and soil erosion.						
3. The County shall, in consultation with local water/wastewater agencies, develop standards for evaluating and approving the adequacy of financial, managerial and operational resources of proposed community water systems or alternative wastewater systems.	9.6.1 9.6.2					
4. The County shall develop and implement a monitoring system with appropriate water purveyors and other applicable parties to plan for possible changes to existing drainage patterns and water supply resulting from climate change.	9.3.1	Public Works Department, Environmental Health Department				
5. The County shall actively participate in the decision-making process for any future projects that involve the additional export of water or affect flow rates from the Feather River Watershed. Any future project involving water exports should at the minimum evaluate the following: <ul style="list-style-type: none"> • Effects on in-stream flows including flood events. • Assessment of the environmental impact of the proposed project using appropriate ecological studies by a team of independent experts, qualified to conduct such studies, funded by the project sponsor and completed before project authorization. • Effects on fisheries and native wildlife habitat and restoration efforts. Analysis of the sustainability of any proposed fisheries and wildlife habitat mitigations. • Impacts to Native American communities, including cultural and archaeological resources, economies, fisheries and water 	9.4.1 9.4.2 9.4.3 9.4.4 9.4.5 9.4.6 9.4.7 9.4.8	Planning Department, Flood Control District				

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
supplies.						
<ul style="list-style-type: none"> Water supplies necessary to meet the ultimate future development needs of residential, agricultural, municipal, industrial and recreational users and to promote environmental protection and fisheries habitat restoration. Cost and benefits to recreation. Water quality impacts and provisions for enhancement of any impaired water bodies (Section 303(d) of the federal Clean Water Act. Property tax and other fiscal or economic losses to local entities. Public infrastructure and service demands and costs including roads and recreation facilities. Public cost and benefits on statewide, regional, county and local scales including the monetized value of impacted ecological services. 						
6.	The County shall work with and encourage water agencies and fire protection agencies to conduct a county-wide assessment of fire-flow requirements as they relate to compliance with fire protection standards.	9.5.1 9.5.2 9.5.6 9.5.7	Board of Supervisors, Planning Department			
7.	As a condition of approval for discretionary developments, the County shall not issue approval of a final map until verification of payment of fees imposed for water and wastewater infrastructure capacity per the fee payment schedule provided by the appropriate water/wastewater purveyor.	9.5.1 9.5.2 9.5.3 9.5.4 9.5.5 9.5.6 9.5.7 9.5.8 9.5.9 9.6.1 9.6.2	Planning Department, Public Works Department, Environmental Health, Fire Protection Districts			
8.	The County shall develop and maintain a drainage ordinance that regulates stormwater drainage consistent with the	9.7.1 9.7.2 9.7.3 9.7.4	Planning Department			

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
goals and policies of the updated general plan.	9.7.5 9.7.6					
9. The County shall work with interested groups, public agencies and water purveyors to conduct a county-wide water conservation and water-use efficiency study to develop a county-wide water conservation program for new development and to ensure consistency with water conservation efforts across the County.	9.8.1 9.8.2 9.8.3 9.8.4 9.8.5 9.8.6 9.8.7 9.8.8	Planning Department, Public Works Department, Regional Water Management Group				
10. The County shall work with local agencies, nonprofit groups and other interested parties to develop a regional cooperative program to serve as a clearing house for data related to land use and water planning. Possible data categories may include hydrology, water quality, geology, habitat, hydrogeology, geography, land use, and other water/wastewater related information.	9.1.1 9.1.2 9.1.3 9.2.1 9.2.2 9.2.3 9.2.4 9.2.5 9.2.6 9.2.7 9.3.1 9.4.1 9.4.2 9.4.3 9.4.4 9.4.5 9.4.6 9.4.7 9.4.8 9.5.1 9.5.2 9.5.3 9.5.4 9.5.5 9.5.6 9.5.7 9.5.8 9.5.9 9.6.1 9.6.2 9.7.1 9.7.2 9.7.3 9.7.4 9.7.5 9.7.6 9.8.1 9.8.2 9.8.3 9.8.4 9.8.5 9.8.6	Planning Department, Public Works Department, Regional Water Management Group				

Implementation	Implements what Policy	Who is Responsible	2010-2015	2015-2020	2020-2030	On-Going
	9.8.7					
	9.8.8					
	9.9.1					
	9.9.2					
	9.9.3					
	9.9.4					
	9.10.1					
	9.10.2					