

# Current Land Uses and Land Management

## Land Ownership and Land Uses

The diversity in the terrain encompassed by the Butte Creek Watershed has resulted in very diverse landownership and land uses. This section describes ownership and land use patterns and is intended as a reference source for policy development and implementation measures that may be incorporated into the Butte Creek Watershed Management Strategy.

### Land Use Map (see Map Appendix)

The Land Use map identifies the general land uses present in the Butte Creek Watershed. Land use is a term used to describe all aspects of human occupancy or modification of the face of the earth.

The Land Use Map was created by the Geographic Information Center (GIC) at CSU, Chico. In addition to graphically displaying information in the form of maps, the GIC can perform many useful analytical applications with data available from numerous sources including satellite imagery. This geographic analysis is possible through a technology known most commonly as geographic information systems or GIS.

The Land Use map was created with data provided by Butte, Tehama, Sutter, Glenn and Colusa County, as well as DFG. The land use categories used in the Land Use Map resulted from the combination of similar land uses from the various data sources. For example the DFG data identifies a vegetation type as “Flooded Agriculture.” For practicality and ease of use, the term was combined with an existing classification from Butte County data identified simply as “Rice.” The land use designations also broadly describe various types of land uses. For example, the designation “Residential” refers to a range of possible residential development from multi-family housing to rural residential housing. The Land Use Map, therefore, presents numerous generalizations and should be only used in a broad or regional context.

The Land Use map identifies the following land uses:

- Commercial
- Dry Farming
- Field & Row Crops
- Grazing
- Irrigated Pasture
- Industrial
- Miscellaneous Agriculture
- Orchards
- Residential
- Rice
- Riparian Forest\*
- Upland Forest\*
- Unknown

\* Most forests are multiple use including timber harvesting, recreation, wildlife habitat and flood protection.

A mathematical summary of the land uses from the Land Use GIS provides the following acreage for each land use category (see Table 7.1).

**Table 7.1**  
Current Land Uses by Area

<b>Land Use Category</b>	<b># of Acres</b>	<b>% of Butte Creek Watershed</b>
Commercial	3,518.48	<1%
Dry Farming	2,580.65	<1%
Field & Row Crops	24,167.99	5%
Grazing	84,871.37	17%
Irrigated Pasture	1,666.63	<1%
Industrial	1,690.02	<1%
Miscellaneous Agriculture	27,893.64	5%
Orchards	31,254.71	6%
Residential	62,362.34	12%
Rice	158,915.71	31%
Riparian Forest	2,033.56	<1%
Upland Forest	65,708.41	13%
Unknown	59.22	<1%
Total*	509,903.74	~100%

\* The total acreage from the land use database differs from the total watershed acreage (517,848) due to the absence of land use value for things such as roads, rivers and creeks.

Not surprisingly, the land use analysis shows that much of the land in the Butte Creek Watershed is devoted to agricultural production. In fact, if the land use categories that can be associated with agriculture: Dry Farming, Field and Row Crops, Grazing, Irrigated Pasture, Miscellaneous Agriculture, and Orchards are combined; they would comprise nearly 65% of the total land use in the watershed.

### Land Ownership (see Map Appendix)

Land in the upper watershed is owned primarily by Sierra Pacific Industries, USFS and BLM. Land in the canyon reach of the watershed is primarily privately owned with a few parcels of land owned by BLM and DFG. The valley portion of the watershed is made up primarily of private agricultural lands, again with some state and federal ownership.

The Land Ownership Map shows the larger land parcels (over ten acres) and municipal spheres of influence in the Butte Creek Watershed. The Land Ownership Map was developed with data provided by Butte County and DFG. (Data outside Butte County adjacent to the Sacramento River).

The lines on the map represent land parcels from the County of Butte Assessors Parcel Book as of mm\dd\yyyy. By examining the land ownership it becomes apparent that much of the residential development or potential residential development (small polygons) is located adjacent to the urban areas of Chico, Paradise and within the lower canyon area of Butte Creek.

For areas owned by private and public landowners see Tables 7.2 and 7.3, respectively.

**Table 7.2**  
Eleven Largest Private Property Owners

<b>Private Landowner</b>	<b># Acres*</b>
Sierra Pacific Industries	36,135.94
Parrott Investment Co. Inc.	11,724.42
Torrance Heritage Co.	7,472.04
Rancho Esquon Partners	7,245.91
Pacific Realty Associates LP	5,195.39
Nance Canyon Partners LP	4,519.11
Meline Edward & Charlene M IRR	4,435.77
Carmichael Francis L	4,176.39
Lucky Seven Ranch	3,788.20
G&M Ranches	3,407.39
Pacific Gas & Electric Co.	3,294.79
Total Public Land	91,282.59
Total Private Land	418,621.15
Total Butte Creek Watershed*	~509,903

Source: Geographic Information Center, CSU Chico.

\* The total acreage from the land use database differs from the total watershed acreage (517,848) due to the absence of land use value for things such as roads, rivers and creeks.

**Table 7.3**  
Public Landowners

<b>Public Landowner</b>	<b># Acres*</b>	<b>% total</b>
Lassen National Forest	23,674.17	5%
California Dept. Fish and Game	15,180.76	3%
Bureau of Land Management	4,769.25	<1%
California Parks and Recreation	816.50	<1%
Other United States Forest Service	213.76	<1%
State Lands Commission	37.36	<1%
US Fish & Wildlife Service	1,898.99	<1%
Total Public Land	91,282.59	18%
Total Private Land	418,621.15	82%
Total Butte Creek Watershed*	~509,903.74	100%

Source: Geographic Information Center, CSU Chico.

\* The total acreage from the land use database differs from the total watershed acreage (517,848) due to the absence of land use value for things such as roads, rivers and creeks.

## Land Use Policies

### Public Land Use and Management

Several local jurisdictions regulate planning processes over private land use decisions in the Butte Creek Watershed. The local jurisdictions include Butte County and the Cities of Biggs, Chico, Gridley and Paradise. These local governments have each adopted a comprehensive, long-term general plan, as required by California law, for the physical development within their boundaries.

## The General Plan

The General Plan presents a policy framework within which local agencies review proposals for developing their resources. The policy statements contained in the plan must be brought about or implemented through a series of clear statements concerning the standards which must be met prior to development, and programs for financing, operating, and maintaining facilities that service existing and new development. California law provides local governments with a variety of ways to implement general plans. These implementation tools must, however be based upon the policies contained in the plan. Implementation measures most commonly used by cities and counties include: zoning regulations, subdivision regulations, specific plans, capital improvements, building and housing codes, environmental impact procedures, and citizen participation in decision making (with the understanding that final decisions will be made by elected bodies).

All discretionary decisions regarding land use, resource management, development approvals, environmental impact assessment and related matters must be considered by the Board of Supervisors or City Councils in the context of their current General Plan.

## Butte County

The primary regulatory agency for private land use decisionmaking in the Butte Creek Watershed is Butte County. The policy making body for that agency is the Butte County Board of Supervisors with advisory input from the Butte County Planning Commission. The current Land Use Element of the Butte County General Plan was adopted in 1979 in compliance with Government Code Section 65302.

The total land area of Butte County is approximately 1,670 square miles. Most of the Butte Creek Watershed (809 square miles) lies within Butte County boundaries. Small portions of the watershed lie in Tehama, Glenn, Sutter, and Colusa County (see Map Appendix). These areas are relatively small, and except for Tehama County, are located in the lower valley section of the watershed near the Sacramento River.

### **Butte County General Plan Land Use Element/Area Plans**

The Butte County General Plan, as amended by the adoption of the 1979 Land Use Element, consists of 16 "area plans." The area plan concept was designed to refine the designations shown on the countywide Land Use Plan, and to provide policy better tailored to the needs and conditions of the specific areas. Eight areas and communities identified in the Land Use Element are located in the Butte Creek Watershed. Several of these areas do not yet have Area Plans. The Butte County Master Environmental Assessment (BCMEA), 1996, summarizes the existing land uses in these eight areas as follows:

#### **Cohasset-Forest Ranch**

Located in the lower foothills adjacent to Chico and the Mountain areas around Butte Meadows, the Forest Ranch-Cohasset planning area occupies 139,000 acres. Land use in the area is dominated by forestry, livestock, and rural residential development. Forest Ranch and Cohasset are the two small communities in the area and new development is expected to concentrate in these communities, particularly for commuters to Chico. Development constraints in this area include steep slopes, poor erodible soils, limited groundwater, poor access, and high to extreme fire hazard.

#### **Durham-Dayton-Nelson**

Located south of Chico between the Sacramento River and State Route 99, the Durham-Dayton-Nelson planning area occupies 90,900 acres, mostly in agriculture. Urban uses are concentrated in the unincorporated communities of Durham, Dayton, and Nelson. Development constraints include county and city land use poolciies to protect agricultural lands.

The Durham-Dayton-Nelson Area Plan was adopted in 1992. The Plan establishes areawide land use policies that provide less potential for future development than had been allowed under the County's old Durham Area

Plan. In order to separate land use policies for the Durham area from those for the Chico area, the plan also removed approximately 2,200 acres of land from the Chico Area Plan "greenline" policies.

#### Chico

Located in the northern portion of the valley adjoining the foothills, the Chico planning area occupies 22,300 acres. Urban land uses with significant public and regional retail uses predominate the area. Existing policies seek to preserve agricultural land, centralize development, and steer new urban growth to the north, east, and southeast. Development constraints include agricultural lands and poor soils in the foothills area.

The Chico Area Land Use Plan establishes a "greenline," generally around the western portion of Chico, corresponding to the "greenline" established by the City of Chico General Plan. The greenline constitutes the boundary between urban and agricultural uses on the western side of the Chico urban area. The County's area plan states that all land use on the "agricultural side" of the greenline "shall consist solely of Agricultural land uses as provided by the Orchard and Field Crop designation." Agricultural Residential land uses are also permitted on the agricultural side of the greenline, where designated by the Chico Area Plan. The Chico Area Plan further states that land uses on the urban side of the greenline "shall be guided by the policies of the Land Use Element and the applicable urban land use designation contained in the Land Use Element."

The area plan also establishes development policies for the Highway 32 corridor, which extends in an east-west direction through eastern Chico. Land use designations for this area are generally consistent with those of the City of Chico General Plan.

#### Magalia (Upper Ridge)

Located on the ridge above the Town of Paradise, the Magalia area is bounded by Butte Creek Canyon on the West and the West Branch Canyon on the east, covering approximately 13,900 acres. Magalia, an historic community, is characterized by rural residences nestled among the pines. Principal land uses include rural residential, commercial, and timber. Constraints include limitations on septic tank use, conflicts with watershed/water supply, and limited transportation access (only via Skyway).

Magalia has an area plan.

#### Paradise

Located on the major ridge in north Central Butte County, the planning area occupies 14,700 acres. Paradise is the third largest incorporated community in the county. Land use is dominated by residential and commercial uses with a limited number of industrial activities. Constraints include a shortage of flat developable land, no sewer system, and potential water supply limitations.

The Paradise Area Plan, adopted in 1981, prescribes land use for the Upper Ridge and the unincorporated areas adjacent to the Town of Paradise on the lower Ridge (including Lime Saddle). The area plan designates most of the Upper Ridge Area and Lime Saddle Area for residential uses at rural and low densities, and for open space (e.g. Grazing and Open Land and Timber Mountain). Area plan land use designations for the county areas within Paradise's Town limits are generally consistent with those of the Town of Paradise General Plan.

The Land Use Element (pages 82-83) contains a "Paradise Urban Reserve Policy Statement" which establishes further regulations for the "South Paradise Area," the area immediately adjacent to the area plan's southern boundary. The intent of the policy is to regulate future urban/residential development in an area currently devoted to mountain recreation, open space, and rural residential uses. The policy statements establishes an Agricultural-Residential land use designation in this area and calls for its management as an "urban reserve." The policy permits rural residential development on parcels of 1) not less than 40 acres in areas designated by the DFG as "No Development Zones" for protection of critical deer herd winter ranges, and 2) not less than 20 acres on all other properties until they are needed for development and adequate services are available.

### Central Butte

Located south of Paradise and bounded by the Skyway, State Route 99, State Route 70, and the West Branch of the Feather River, the Central Butte planning area occupies 45,500 acres. Principal uses include cattle grazing and rural residential development. Butte College is also located in the area, but population is sparse. Development constraints include shallow soils, fire hazards, poor access, soil erosion, and possible conflicts with livestock operations.

This area has no plan.

### Table Mountain

Located north of Oroville, between Lake Oroville and State Route 70, the Table Mountain planning area occupies approximately 55,500 acres. Livestock operations and rural residential are the main land uses. Development constraints include a lack of public services, poor access, fire hazards and shallow soils.

This area has no plan.

### Gridley-Biggs

Located in the southwestern portion of Butte County, the Gridley-Biggs planning area occupies 129,700 acres. Principal land use is intensive agricultural, with urban uses concentrated in the cities of Gridley and Biggs. Constraints to future development include agriculture preservation policies and lack of capacity of sewer systems.

This area has no plan.

The land Use element of the Butte County General Plan also contains several policies which relate to the protection of the Butte Creek Watershed:

- 1.7.c Encourage development in and around existing communities with public facilities.
- 2.4.a Maintain quantity and quality of water resources adequate for all uses in the County (see Issues and Concerns chapter, # 2 - 8).
- 2.4.c Control development in watershed areas to minimize erosion and water pollution (see Issues and Concerns chapter, # 5 - 8).
- 5.3.d Direct future urban growth away from flood-plain areas (see Issues and Concerns chapter, # 6, 9).
- 6.4.c Encourage compatible land use patterns in scenic corridors and adjacent to scenic waterways, rivers, and creeks.
- 6.5.b Prevent development and site clearance other than bank protection of marshes and significant riparian habitats (see Issues and Concerns chapter, # 8, 9).
- 6.6.a Encourage the creation and expansion of natural and wilderness areas.
- 7.3a Limit development in areas with significant drainage and flooding problems until adequate drainage or flood control facilities are provided (see Issues and Concerns chapter, # 9).

The following policies from the land use element of the Butte County General Plan may be significant in future land use decisions:

- 1.4.a Based upon continuous analysis of population trends, provide plans which allow reasonable “freedom of choice” of sites and facilities for the population growth of the County, both in the County as a whole and in its various sections.
- 2.2.a Maintain extensive areas for primary use as livestock grazing land (see Issues and Concerns chapter, # 6).

- 2.2.b Allow livestock grazing on all suitable sites not needed for development or crop production.
- 4.2a Maintain economic use and value of private property.

### **Butte County General Plan- Other Elements**

Most regulatory or development policy is located in the land use element of general plans. There are, however, several policy statements that might relate to the protection of the Butte Creek Watershed in other elements. In California all elements have equal legal status, and no element may be made subordinate to another. (California Land-Use & Planning Law, Daniel J. Curtin Jr., 1992)

The Open Space Element of the Butte County General Plan was adopted on December 21, 1976. The element addresses concerns about the conversion of agricultural lands into urban uses. The following are some of the *recommendations* listed in the element:

The County should allow urban development only in areas physically suited to such use (see Issues and Concerns chapter, # 9).

The County should not allow urban development of open space land described in this plan (see Issues and Concerns chapter, # 6).

The County should discourage urban development isolated from existing development and urban centers unless such a need can be determined.

Logging, mining, recreational vehicles and other open space uses should be regulated to prevent erosion and protect water resources (see Issues and Concerns chapter, # 4, 5).

The County should not allow any urban development in the Butte Sink area...

The County should permit the creation of residential parcels near large numbers of vacant sites of similar characteristics only if such a need can be demonstrated.

### **Specific Plans**

A Specific plan is a planning tool used by local governments to implement general plan policies. Specific plans offer an opportunity to combine zoning regulations, site development standards, and capital improvements into one document tailored for a particular area.

There are no county-approved specific plans located in the Butte Creek Watershed.

### **Butte County Zoning**

The Butte County Comprehensive Zoning Ordinance. Approved January 1995, provides for a total of 70 zoning districts. Many of these zoning districts provide varying regulations within the same basic zoning district. For example Zoning District A-5 and A-10 are both Agricultural zones but differ according to their prescribed lot size, in this case 5 and 10 acres.

The following is a list of the basic zoning districts in the County of Butte:

- Agricultural Zones
- Timber Mountain Zones
- Foothill Recreation Zones
- Agricultural-Residential Zones
- Suburban Residential Zones
- Residential Zones
- Commercial Zones
- Industrial Zones
- Resource Conservation Zone
- Scenic Highway Zone

TPZ Zone  
PUD Zone  
Mobile Home Park Zone  
Public, Quasi-Public Zone  
Unclassified Zone

## **Zoning Amendments**

Butte County is presently in the process of developing a zoning amendment that would affect 11.2 sq. miles in the Upper Butte Creek Watershed. This Watershed Protection Zone amendment is intended to protect the water quality of the Paradise Reservoir, Magalia Reservoir, and Firhaven Creek. This watershed protection policy was adopted by the Board of Supervisors by resolution. In order to codify the regulations to make them into an Ordinance, it has been necessary to again get the approval of the Butte County Planning Commission and the Board of Supervisors. The Planning Commission approved the amendment unanimously. The Butte County Board of Supervisors passed the Ordinance in June 1998.

The Watershed Protection Zone amendment will prohibit the future division of lots or parcels. It will restrict future zoning changes until studies can show that the zoning changes would have no adverse effects upon the water quality of the watershed. The amendment will also require specific sewage setbacks from streams and waterbodies.

Another proposed watershed protection amendment, the Stream Corridor (-SC) combining zone, was rejected by the Butte County Planning Commission in 1996. This amendment would have specified development standards in the Butte Creek Canyon as far as 300' from the top of the bank of Butte Creek. It would have also created a "No Development Zone" within 100' feet of Butte Creek.

## **New Town Proposals/ General Plan Amendment**

In the past decade there have been several "new town" developments proposed in Butte County. Most recently a new town proposal called Central Buttes proposed to build 6,000 new homes adjacent to Highway 99 and the Durham/Dayton Pentz Road exit.

In order to legally accommodate such an expansive project, a General Plan amendment was proposed that would add a new land use designation. This designation, Agricultural Preserve/Planned Community, would allow for the development of the project while preserving a portion of the land for agricultural use and open space. The Board of Supervisors rejected the proposed General Plan amendment.

## **Incorporated Cities**

The Butte Creek Watershed contains four incorporated cities all within Butte County: Biggs, Chico, Gridley and Paradise. Each city has a General Plan to guide development within the city limits and within the city's larger planning areas (BCMEA).

### **City of Chico**

Located in the valley zone of the Butte Creek Watershed, the City of Chico holds regulatory authority over 80,000 acres within the watershed. The County of Butte has regulatory authority over 22,300 acres of land in adjacent unincorporated areas surrounding the City of Chico.

The City of Chico is Butte County's largest urban community. The City grew rapidly during the 1960's and the first half of the 1970's mostly due to increased student enrollment at California State University, Chico. This growth established the City of Chico as a retail, service, and medical center for the region. According to the City of Chico Planning Department, the City's population as of January 1, 1997 was 50,116. The total population for the Chico urban area was 92,500.

In the non-urban part of the City of Chico, the predominant land use on the valley floor is agriculture, including a variety of crops. Prime agriculture soils are found on the valley floor on the west side of the city.

Generally, soils to the east of the city are suitable only for grazing. In the foothill areas, the predominant uses are low-density housing, marginal agricultural activity, and recreation/open space (BCMEA).

#### General Plan

The City of Chico updated its General Plan with approval on November 16, 1994. The following policies are found in the "Guiding Policies: Growth and Physical Expansion" chapter of the Chico General Plan:

Promote orderly and balanced growth by working with the County and LAFCO to establish long-term growth boundaries for the Planning Area consistent with Plan objectives.

Promote infill development

Ensure that new development is at an intensity to ensure a long-term compact urban form.

Maintain long term boundaries between urban and agricultural use in the west, and urban uses and the hillside in the east, and limit expansion north and south to maintain compact urban form. Multiple approaches to restrict urbanization outside the City's sphere of influence will be used, including large-lot zoning, and possibly acquisition of land for a greenbelt.

The General Plan identifies a portion of land within the Butte Creek Watershed as a Special Development Area. Special Development Areas are intended to "provide direction that adequately reflects the City's concern and the debate that has accompanied Plan preparation" (Chico General Plan 3.11 p. 3-49).

The Special Development Area is identified as "Westside of South Highway 99 - South of Entler Avenue." Two policies guide the development of this area:

#### LU-I-41

Require Manufacturing and Warehousing development designated on the General Plan Diagram on the westside of Highway 99 south of the proposed interchange and Entler Avenue, and development on the East side of Highway 99, east of Peterson Tractor, to be clustered. Provide for transfer of development rights, if necessary, in order to preserve the cottonwood riparian habitat along Highway 99, and biological resources along the southern boundary of the sites.

#### LU-I-42

Retain the existing stand of mature trees along the southern border of the Manufacturing and Warehousing development site.

In addition to the identified special area, the City of Chico General Plan has numerous guiding policies that may pertain to the protection of the Butte Creek Watershed:

#### Community Design

##### CD-G-10

Heighten the Visual prominence of the creek corridors that help to establish a sense of orientation and identity within the City.

##### CD-G-11

Open up creeks to public view and access

##### CD-G-12

Extend the amenity value of creeks

##### CD-I-6

Adopt design guidelines for development adjacent to creeks.

## Parks and Public Facilities and Services

Use the creeks as a framework to provide a network of open space.

## Open Space and Environmental Conservation

### OS-G-5

Protect habitats that are sensitive, rare, declining, unique, or represent valuable biological resources in the Planning Area.

### OS-G-7

Minimize impacts to sensitive natural habitats throughout the Planning Area.

### OS-G-8

Preserve and protect areas determined to function as regional wildlife corridors, particularly those areas that provide natural connections permitting wildlife movements between sensitive habitats and areas being considered for future conservation because of their high value.

### OS-I-18

Explore and implement, where feasible, linking Resource Conservation Areas with interconnecting open space corridors, particularly those which provide access to water sources and enhance overall biological diversity of the resource area.

### OS-I-20

Explore and implement, where feasible, means to minimize or avoid interference with sensitive wildlife on the urban fringe by domestic pets.

### OS-I-21

Ensure that all new developments restrict the use of fencing in locations essential for wildlife movement and place structures so as to minimize interference with wildlife corridors.

### OS-I-22

Ensure that open space corridors along creeks include protective buffers (non-development setbacks) preserve existing riparian vegetation through the environmental review process, and continue to require a minimum of 25-foot dedication and acquisition of 75 feet for a total of 100-foot setback from top-of-bank along creeks.

### OS-I-35

Work with the California Department of Fish and Game to ensure the preservation and enhancement of species of residents and anadromous fish in creeks in the Planning Area.

## Water Quality

### OS-G10

Enhance the quality of surface water resources of the Planning Area and prevent their contamination.

### OS-G-11

Comply with the Regional Water Quality Control Board's regulations and standards to maintain and improve groundwater quality.

#### OS-G-12

Where feasible, given flood control requirements, maintain the natural condition of waterways and flood plains and protect watersheds to ensure adequate groundwater recharge and water quality.

#### OS-I-36

Continue to work with the Central Valley Regional Water Quality Control Board and Butte County Environmental Health Department in the implementation of the Nitrate Action Plan and land use controls for the protection of groundwater quality and the foothill primary recharge area.

#### OS-G-15

Preserve and enhance Chico's creeks and the riparian corridors adjacent to them as open space corridors for the visual amenity, drainage, fisheries, wildlife, habitats, flood control and water quality value.

### Open Space

Maintain hillsides and viable agricultural lands as open space for resource conservation and preservation of views.

#### OS-G-16

Where feasible, integrate creekside greenways with the City's open space system and encourage public access to creek corridors.

#### OS-G-17

Protect aquifer recharge areas needed to maintain adequate groundwater supplies.

#### OS-G-18

Maintain oak woodlands and habitat for sensitive biological resources as open space for resource conservation/resource management.

### Archaeological, Historic, and Paleontological Resources

#### OS-G-26

Protect archaeological, historic, and paleontological resources for their aesthetic, scientific, educational, and cultural values.

#### OS-I-52

Require a records search for any development project proposed in areas of high archaeological sensitivity.

#### OS-I-53

Require that sponsors of projects on sites where probable cause for discovery of archaeological resources (as indicated by records search and where resources have been discovered in the vicinity of the project) retain a consulting archaeologist to survey the project site.

### Safety and Safety Services- Flooding and Dam Inundation

#### S-G-1

Minimize threat to life and property from flooding and dam inundation.

### **Town of Paradise**

In 1960 the Town of Paradise area population was 11,000. Since that time, however, the area has been one of the fastest growing areas in Butte County. The Town's population as of June, 1997 is 26,076.

The town of Paradise is predominantly residential in character with a significant retirement population. The existing agricultural uses, including vineyards, orchards, and grazing land, are located primarily in the southern and southeastern areas of town. Many of the residents of Paradise regularly travel 20 miles to urban services located in Chico.

The Town of Paradise is one of the largest urban areas (in the United States) without a municipal sewer system.

Growth has been constrained since the mid-1980's by the adoption of various sewage disposal ordinances. One ordinance requires approximately 20 to 25 percent more land per dwelling unit for septic-leach field than was previously required. Typically the minimum parcel sized for newly created parcels is greater than 1/3 acre to accommodate a single family on the required septic system and septic system repair area.

#### General Plan

The Town of Paradise updated its current General Plan in 1994. Key policies of the General Plan state the following:

The limitations imposed on the Paradise area by topography, soils, and other physical features shall be recognized in site-specific development design as well as when establishing long-term growth objectives.

The environmental and infrastructure constraints analysis system should be used to determine future zoning classifications, densities and intensities of land use and to evaluate future development projects.

The town should require all development proposals on sites which contain slopes exceeding twenty percent, and/or which border or include significantly important stream courses or natural drainageways, to include programs for replanting and sloop stabilization, erosion control plans, and to incorporate designs which minimize grading and cut-and-fill.

In conjunction with input from Butte County, as soon as feasible the town shall prepare a specific plan for an orderly and balanced development of the secondary planning area south of the town limits which will more precisely determine residential densities, roads, drainage, utilities, and sewage disposal.

The Open Space/Agriculture" land use designation shall be applied to most lands within the Butte County urban reserve area in the southerly secondary planning area as a holding designation to prevent premature conversion to urban uses until such time as a specific plan is adopted and public facilities and services are available.

Development projects should be designed in a manner to accommodate the constraints on a parcel by avoiding them altogether or creating minimal loss or conflict.

#### **City of Biggs**

The City of Biggs is located in the southwest portion of the Butte Creek Watershed. Much of the growth of the City has depended upon agricultural development. Small fruit and field-crop farms and large rice-growing ranches presently occupy a major portion of the immediately surrounding area. Local economic growth is tied to agricultural productivity and the prospects of non-agricultural development appear limited. The population as of January, 1997 in the City of Biggs is 1,721.

The City of Biggs has very little development opportunity given that there is limited supply of vacant land. The City, however is proposing to increase the sphere of influence in order to accommodate more growth. Anticipated freeway improvements are expected to increase the development potential of Biggs and Gridley. It is projected that the growth rate of Biggs will remain at 1.2% where it has been for the last 10 years.

The City of Biggs General Plan was adopted in 1977. Policies in the General Plan call upon the City to:

Provide adequate space for anticipated residential, commercial, industrial, and agricultural growth as well as providing areas for public facilities and open space.

Encourage an orderly, functional and compatible land use pattern resulting in the reduction of land use conflicts

Discourage unnecessary urban sprawl thereby protecting surrounding prime agricultural lands and maintaining and enhancing the natural environmental setting.

Encourage the development of vacant land a redevelopment of blighted areas within the City in order to provide more efficient service at lower costs.

Protect the character and value of existing land use.

Achieve a balance of conservation and utilization of natural resources which meet the physical, economic, and social needs of the community.

Preserve lands highly suited for agriculture through encouragement of infilling and directing future development to areas contiguous with the urban area in order to minimize the loss of prime soils.

## **City of Gridley**

The City of Gridley is located in the southwestern portion of the Butte Creek Watershed. Like Biggs five miles to the north, the City of Gridley is an agricultural town. Most of Gridley's residents are employed in activities related to farming, or in retail or service sectors. A large percentage of the population is retired (BCMEA).

In December, 1997 the estimated population in Gridley was 4,775. Much of the development in Gridley is single-family residential in character.

The following policies from the City of Gridley General Plan, Land Use Element adopted in 1992, call upon the City to:

Limit commercial, industrial, and residential growth to an overall historic growth rate of 1.3 percent.

Confine urban growth to the City's Primary Sphere of Influence.

Direct the majority of future urban expansion to the portion of the community served by Highway 99.

Locate the lowest appropriate residential density adjacent to county agricultural lands around the city periphery.

Prevent urban encroachment into productive agricultural lands by directing the City's expansion to the southeast to avoid the largest agricultural parcels.

Seek changes from the County plans and zoning that minimize the potential amount of agricultural land that could be removed from production.

Seek maximum coordination and compatibility between City and County planning activities in agricultural areas outside city limits.

## **Public Land Use and Management**

Government land in the watershed amounts to 44,692 acres or 11% of the area. This land is located primarily in the upper section of the watershed.

A number of State and Federal agencies exercise some level of regulatory control over land use decisions in the Butte Creek Watershed, either through permitting and review or ownership of land. (BCMEA) For a description of the agencies with permitting and review authority please see the Existing Resource Protection Measures Chapter.

The Lassen Land and Resource Management Plan (LMRP) provides direction for planning and conducting resource management activities on National Forest land, including those public lands within the Butte Creek Watershed which are managed by the USFS. The USFS has the authority to dictate land use activities for the

Forest lands that are consistent with the Forest Plan. The LRMP was formally adopted in 1993 after several years of gathering data and public input.

Preparation of Forest Plans is required by the Forest and Rangeland Renewable Resources Planning Act of 1974 (RPA), as amended by the National Forest Management Act of 1986 (NFMA), and implementing regulations found in the Code of Federal Regulations (36 CFR 219, issued September 30, 1982).

As directed by NFMA, the Forest Plan will be revised at least every 15 years and ordinarily every 10 years. It may be revised whenever the Forest Supervisors determines that the conditions or demands, including the RPA program, have changed sufficiently to affect goals or uses for the entire Forest. The Forest Supervisor will review conditions of the lands covered by the LRMP at least every 5 years.

Between Plan revisions, the Plan can be amended to reflect changing conditions. The Forest Supervisor can prepare and approve an amendment if the change is not significant. If the change is significant, the Forest Supervisor prepares the amendment for the Regional Forester's approval. Public notifications and adherence to NEPA procedures are required in either case.

### **LRMP Amendments**

Since 1993, the LRMP has been revised twice by administrative amendments and once by legislation. These revisions include the following:

The 1992 CASPO interim guidelines which restrict logging in spotted owl habitat and restrict harvesting trees greater than 30 inch diameter at breast height. The guidelines were designed to maintain future management options by retaining stand components most at risk, difficult to replace and to protect spotted owl nest/roost stands.

The 1995 PACFISH interim strategy which was developed to protect at risk anadromous fish stocks. The strategy provides new riparian goals, interim Riparian Management Objectives, special standards and guidelines and delineates Riparian Conservation Areas. Additionally, it provides for identification of a network of key watersheds and initiation of watershed analyses. The watershed analysis process is intended to provide the site specific data and foundation for refinement of the long-term strategy. The PACFISH interim strategy has been extended until it is replaced by a long-term strategy.

The overall management scenario displayed by the LRMP and its subsequent administrative amendments indicates a clear direction toward watershed protection, particularly for anadromous fish habitat, old growth forests, and roadless areas.

Future issues and trends for management of public land in the Butte Creek Watershed include the following:

Continued movement toward an ecosystem approach to the management of public lands. This includes assessment of existing and desired conditions in developing vegetation management prescriptions. For instance, managing stands to achieve a desired habitat characteristic and fire risk, rather than a timber volume objective.

Greater emphasis on monitoring of activities and conditions to provide information necessary to adapt management strategies and prescriptions. Collecting monitoring data by efficient and effective means.

Increased coordination with private land owners and agencies to accomplish watershed and other large scale management objectives.

### **USFS Management Direction**

The purpose of the LRMP is to:

Define the resources to be emphasized in different parts of the Forest

Establish goals and objectives for commodities and services to be provided

Prescribe standards, guidelines, and practices to achieve the goals and objectives. This management direction provides the framework for interdisciplinary project-level planning.

Direction for management of National Forests comes from law, regulation, policy, and procedures. The many laws enacted by Congress for this purpose include, among others: the Organic Administration Act of 1897, the Multiple-Us Sustained Yield Act of 1960, the Forest and Rangeland Renewable Resources Planning Act of 1974, and the National Forest Management Act of 1976. Regulations developed by the Secretary of Agriculture are found in the code of Federal Regulations (CFR). Policies developed by the agency are listed in the Forest Service Manual (FSM), and procedures developed by the agency are described in the Forest Service Handbooks (FSH).

The Forest will continue to be guided by these laws, regulations, and Forest Service Manual policy and Handbook procedures. This Forest Plan supplements, but does not replace, the direction from these sources. The Plan generally does not restate this direction, except where it is necessary to clarify treatment of an issues or concern.

### **USFS Management Areas**

There are seven USFS Management Areas located in the Butte Creek Watershed:

- Management Area 37 Butte Creek
- Management Area 41 Middle Deer Creek
- Management Area 43 Lomo
- Management Area 44 Jonesville
- Management Area 45 Soda Ridge
- Management Area 46 Philbrook
- Management Area 47 Mt. Hope

Much of the USFS land in the Butte Creek Watershed is located in Management Area 43 (Lomo) (see Table 7.4) and Management Area 44 (Jonesville) (see Table 7.9). The following section provides a description and standards and guidelines for Management Area 43 and Management Area 44 in the Butte Creek Watershed.

**Table 7.4**

Management Area 43 - Lomo

County	Butte
Ranger District	Almanor
Acreage:	
National Forest	5,025
Other	25,142

#### **Location**

The Lomo Management Area has the least amount of National Forest lands of any management area on the Almanor Ranger District. It contains scattered National Forest parcels ranging in size from 80 to 640 acres; the majority are plantations and reforestation sites initiated by the former Magalia Ranger District in the 1950's.

#### **Physical Environment**

The terrain is mountainous, especially in the vicinity of Big Chico and West Branch Canyons. The highest elevation is 5,307 feet at Bottle Hill. Short reaches of Big Chico and cascade creeks are on Forest lands; these streams support fisheries. Precipitation averages 65 inches a year. The soils are generally moderately deep and weathered from andesite, metovolcanic, and metasedimentary.

## Biological Environment

Vegetation is predominantly the mixed conifer type. Fuel loads vary from light to heavy. Fires burn an average of once every three years. While records show the occurrence of large fires in the past, in recent years none has exceeded 10 acres. Almost 70 percent has been human caused. Wildlife species are typical of the mixed-conifer community, and include goshawks and black bears. Big Chico Creek supports a high quality trout fishery and contributes high quality water to a reach downstream occupied by anadromous fish. It was listed on the USDI Nationwide Rivers Inventory of 1981.

## Management

The area was the scene of early logging. Small mills were located at various places, including the West Branch of the Feather River. Lumber was flumed from an early mill at Chico Meadows down Big Chico Creek Canyon to the Central Valley. Butte Meadows was an important logging center for Diamond International and supported a large camp. In addition to logging, mining was an important activity. The community of Inskip was a thriving commercial center for the mines in the area long before large scale lumbering began; all that remains is a hotel and a few buildings. The area is part of the Bull Hill and Butte Meadows Range Allotments. Developed sites are Soda Springs Campground and Butte Meadows Campground; Butte Meadows also has a summer home tract.

## Facilities

The Butte Meadows fire station is occupied in the summer and fall. Butte Creek has been the subject of applications for small hydroelectric generation facilities. State Highway 32 and the road to Butte Meadows and Jonesville give access to many private roads in the area.

## USFS Standards and Guidelines for Management Area 43

### Facilities

1. Evaluate the Butte Meadows fire station for future administrative purposes.

### Lands

1. Assess the need to preserve biodiversity when selected isolated parcels are proposed for land exchange.

### Sensitive Plants

1. Inventory for possible populations of Constance's rock cress (*Arabis constancei*), Stebbin's monardella (*Monardella stebbinsii*), and Feather River stonecrop (*Sedum albomarginatum*) on serpentine soils.
2. Inventory for closed-throated beardtongue (*Penstemon personatus*) in red fir and mixed conifer stands.

## USFS Prescription Allocation for Management Area 43

Prescription allocations apply a theme for management of specific land areas. Only one prescription can be applied to a given acre of land. Each prescription listed below (see Table 7.5 - 7.8), for example Range-Wildlife, has a specific purpose, management practices, application areas and standards and guidelines. For a detailed description of these prescriptions, readers are encouraged to review the Lassen National Forest Land and Resource Management Plan.

**Table 7.5**  
Areas of Prescription Types

Prescription		Acres
B	Range-Wildlife	900
D	Developed Recreation	15
E	Early Successional	100
K	Rocky/Sparse Timber	600
T	Timber	410
V	View/Timber	3,000
Total		5,025

**Table 7.6**  
Wildlife Habitat Allocation for Management Area 43

Goshawk Territories	1
Other Emphasis Species:	Black bear, rainbow trout.

**Table 7.7**  
Desired State for Diversity for Management Area 43

Vegetation		Acres
Shrub	Chaparral	635
	Montane Shrub	0
	Sagebrush	0
Conifer Forest	Eastside Pine	0
	Mixed Conifer	140
	Red Fir	0

**Table 7.8**  
USFS Range Allotment Strategies for Management Area 43

Allotment	Strategy
Bull Hill (100%)	A
Butte Meadows (50%)	C

(See Appendix N for Range Allotment Management Strategies)

#### Location

The Jonesville Management Area (Area 44) is located in the south central portion of the District. Several scattered inholdings occur along creeks and valley floors. For prescription allocations see Tables 7.9 - 7.13.

#### Physical Environment

The terrain is mountainous. The highest elevation is Humboldt peak at 7,087 feet. The Pacific Crest Trail crosses the area in the vicinity of the peak. Butte Creek and its tributaries drain most of the area. Precipitation averages 75 inches a year. Soils are stony and moderately deep to deep. The Snow Mountain area has been glaciated and has large numbers of stones on the surface.

### Biological Environment

The forest at higher elevations is composed of red fir, while a mixed conifer forest characterizes the middle and lower elevations. Fuel loads vary from light to heavy. Approximately one third of the area consists of vast brushfield resulting from fires. Several pine plantations have recently been established in them. In 1970, a 75-acre fire burned in this area, but since then no fire has exceeded ten acres. Fires average one per year, and all are human-caused. Goshawks are known to nest here. Black-tailed deer summer in the meadows and brushy areas. Butte Creek and other fish streams flow through the area.

### Management

Timber has been harvested throughout the eastern two-thirds of the area. It is part of the Soda Creek- North Butte, Butte Meadows and Coon Hollow Range Allotments. Cherry Hill campground is along Butte Creek, and the Jonesville summer home tract is located nearby. Some hiking, fishing, and camping occurs along Butte Creek and Scotts Creek. Two gold mining claims are present near Colby Mountain.

### Facilities

The area is crossed by the Humbug and Humboldt County Roads. These were developed on early competing stage from the Sacramento Valley to mining communities in Nevada and Idaho. Remnants of the original Humboldt Grade are found near Humboldt Summit. Jonesville, in the approximate center of the area, was one of the stage stops. The Pacific Crest National Scenic Trail follows the eastern edge of this area.

### USFS Standards and Guidelines for Management Area 44

### Facilities

1. Assess the Cold Springs location for a proposed administrative site.

### Fish

1. Evaluate the fish habitat conditions and use in the Butte Creek Watershed

### Recreation

1. Interpret significant land management activities along the Pacific Crest National Scenic Trail for trail users.
2. Manage the undeveloped camping area at Cold Springs as dispersed campsites.
3. Analyze the developed recreation potential of newly acquired parcels along Colby Creek before engaging in any activities that could adversely affect that potential.

### Sensitive Plants

1. Inventory for possible occurrences of short petalled campion (*Silene invisa*) and closed throated beard tongue (*Penstemon personatus*) in red fir stands.

### Visual Resources

1. Meet a visual quality objective of Partial Retention in the foreground of Pacific Crest Trail.

### Wildlife

1. Maintain or enhance potential willow flycatcher habitat.

**Table 7.9**  
USFS Management Area 44- Jonesville

<b>County</b>	<b>Butte</b>
Ranger District	Almanor
Acreage	
National Forest	23,120
Other	4,561

**Table 7.10**  
USFS Prescription Allocation for Management Area 44

<b>Prescription</b>	<b>Acres</b>
A Non-Timber Wildlife	900
B Range-Wildlife	1,860
D Developed Recreation	20
E Early Successional	100
F Riparian/Fish	900
K Rocky/Sparse Timber	1,350
L Late Successional	330
T Timber	11,030
V View/Timber	6,630
Total	23,120

**Table 7.11**  
USFS Wildlife Habitat Allocations

Goshawk Territories	1
Other Emphasis Species:	Deer (summer range), black bear, rainbow trout, spotted owls.

**Table 7.12**  
USFS Desired State for Diversity

<b>Vegetation</b>	<b>Acres</b>
Shrub	
Chaparral	9
Montane Shrub	25
Sagebrush	0
Conifer Forest	
Eastside Pine	0
Mixed Conifer	685
Red Fir	275

**Table 7.13**  
USFS Range Allotment Strategies

<b>Allotment</b>	<b>Strategy</b>
Butte Meadows (25%)	C
Coon Hollow (40%)	C
Soda Creek-North Butte (45%)	C

## Bureau of Land Management (BLM)

The Bureau of Land Management owns and manages various small land holdings throughout the Butte Creek Watershed. This BLM land falls within the "Forks of Butte Creek" subsection of the Ishi Management Area. (Redding Resource Management Plan and Record Decision). The following policies have been established for this BLM property:

The Redding Resource Management Plan (RMP) guides the BLM in managing its public land and mineral reserve estate within the Redding Resource Area of northern California. Sections 102 and 202 of the Federal Land Policy and Management Act (FLPMA) requires the Secretary of the Interior to develop land-use plans for all public land under the administration of the BLM.

The primary purpose of the RMP is to update and integrate BLM land use planning into a single comprehensive land use plan. The RMP is a fifteen year strategy on where and how BLM will administer public lands under their jurisdiction within the Redding Resource Area. When fully implemented, the BLM public land ownership pattern will shift dramatically from more than 1,000 scattered parcels to less than twenty-five large aggregates of accessible and useful public lands. This will be accomplished principally through land exchanges with the private sector and some transfers of jurisdiction with other agencies and organizations.

### BLM Planning Area

The Redding RMP covers a planning area which is identical to the Redding Resource Area. The planning area encompasses approximately 9,914,000 acres within the north central portion of California. BLM administered public lands total approximately 247,500 acres of roughly 2.5% of the surface of the area within the Redding Resource Area boundary. These public lands are generally scattered throughout the middle and to a lesser degree, lower elevations of the planning area. The over 1,000 individual parcels of BLM administered public land range in size from a fraction of an acre to over 8,000 acres.

The planning area encompasses all or portions of five counties including: Butte, Shasta, Siskiyou, Tehama, and Trinity. Approximately one half of the planning area is privately owned land predominately within the lower elevations or valleys. The public owned half of the resource area is dominated by the U.S. Forest Service, notably the Shasta, Trinity, Klamath and Lassen National Forests. The overwhelming majority of forest Service administered public lands are located within the upper elevations of the planning area.

### BLM Planning Issues

Planning issues are the major concerns with the management of BLM administered public land within the Redding Resource Area. These issues drive the entire RMP process through all steps of the planning process since the land-use management alternatives, including the proposed action, are designed to address these planning issues. There are four planning issues that the BLM has defined which encompass the majority of

concerns for management of BLM administered public lands. These issues include land tenure adjustment, recreation management, access and forest management.

### **BLM Management Concerns**

The BLM uses the RMP process to make other decisions to resolve management concerns. Many of these decisions are required through Supplemental Program Guidance (BLM Manual 1620) and California BLM State Director Guidance. A few decisions are made to address management situations especially applicable or unique to the planning area. These decisions or management concerns are treated within the context of the proposed action or as Resource Area-Wide Decisions.

Some of the more significant decisions include: designation of Areas of Critical Environmental Concern (ACEC), designation of Special Recreation Management Areas, determinations of eligibility (and preliminary classification) for inclusion of specific streams in the national Wild and Scenic Rivers System, determinations of Recreation Opportunity Spectrum settings to be maintained, and closure of areas to domestic livestock grazing.

### **BLM Monitoring and Implementation**

BLM will monitor the RMP on an annual or as needed basis. The purpose of the monitoring is to track successful completion of the actions approved by the RMP and to identify needed changes to the RMP. Minor changes in data not necessitating changes in land use allocations, restrictions or uses are documented in supporting records. Public involvement is not necessary to perform this plan maintenance. However, the BLM will be required to fully involve the public in any substantive modification of the RMP. Any change to land use allocations, restrictions or uses will be effected only through a formal plan amendment or revision prepared in conformance with BLM planning regulations found in Section 1610.4 of Title 43 of the code of Federal Regulations.

### **Management Area Decisions**

The BLM's objectives for Ishi Management Area as described in the RMP for resource condition objectives, land use allocations, and management actions for Butte Creek are as follows:

#### **Resource Condition Objectives**

1. Protect and Enhance the scenic quality of the canyon.
2. Maintain the fisheries habitat.
3. Improve the quality of riparian vegetation to Class I.
4. Maintain semi-private recreation opportunities.
5. Protect the historic values of the canyon.
6. Maintain the long-term sustained yield of forest products from the available commercial forest land outside the Butte Creek canyon.

#### **BLM Land Use Allocations**

##### *Forks of Butte Creek*

1. Designate Butte Creek Canyon from above the Forks of Butte Creek to Helltown as an Outstanding Natural Area/ACEC.
2. Manage as Semi-Primitive Motorized.
3. Vehicle use is limited to designated roads and trails.
4. Withdraw public lands from mineral entry.

5. Recreational mineral collection is permitted within the canyon.
6. Manage as VRM Class II.
7. The area is closed to grazing.
8. Acquire available, unimproved lands to protect scenic quality and enhance recreational experience.
9. All of the available commercial forest land within Butte Creek canyon would be managed for the enhancement of other resource values. All other available commercial forest land would be managed as restricted.

#### *Remainder of Management Area*

6. Transfer via exchange of R&PP to a qualified organization administrative responsibility of 35 acres of public land in Lower Butte Creek (near Honey Run Bridge) within the NE ¼ Section 36, T.22N., R. 2 E. Offer for exchange to any party after two years from approval of the Final RMP.

#### **BLM Management Actions**

- A. Develop suitability reports for the final classification and potential inclusion of Battle, Butte, and Deer Creeks in the National Wild and Scenic Rivers System.
- D. Develop ACEC management plans for Deer Creek and Forks of Butte Creek. The results of reports addressing the suitability for inclusion in the National Wild and Scenic Rivers System will be included as appropriate.
- G. Publish Federal Register notices regarding vehicle designations, mineral withdrawals, ACEC designations, and intent to develop a report(s) addressing the suitability of Battle, Butte, Deer, Bear and Big Chico Creeks for inclusion in the National Wild and Scenic Rivers System.

#### **Rationale for the Ishi Proposed Action**

Butte Creek has regionally significant recreational and cultural values, coupled with local mineral and hydroelectric importance. Consolidation of public land within this area will benefit the public for a very long time. The stream is considered eligible for inclusion in the National Wild and Scenic Rivers System. Competing public demands and proximity to a large population, however, warrant additional management attention and designation as an Outstanding Natural Area/ACEC. The existing mineral withdrawal coupled with a recreational mineral collection program has worked well for the public and natural resources. Expansion of this management strategy will enable BLM to protect sensitive resources while enhancing the recreational experience of most public land users. (Redding Resource Management Plan and Record of Decision. Bureau of Land Management, 1993)

#### **California Department of Fish and Game**

The California Department of Fish and Game owns a significant amount of land within the Butte Creek Watershed (15,180.87 acres). A majority of the Department's land is contained in their large landholdings including the Graylodge Wildlife Area and the Howard Slough Unit. Specific land management policies have been developed for these large parcels.

The California Department of Fish and Game has the following policies regarding the use of its property, as outlined in the *Fish and Game Operations Manual, February 1994*:

## **Department Owned or Controlled Real Property**

The policy of the Department on real property, which is owned or controlled by the Department, is that it shall be used, managed, maintained, or developed in accordance with the primary purpose for acquiring the property.

Guidelines for the use of real property will include, but are not limited to the following:

Providing suitable habitat and living space for the preservation of native species and endangered animals and plants.

Protecting surrounding agricultural lands from depredating waterfowl by providing feeding and resting areas for waterfowl.

Providing access to public lands for hunting and fishing opportunities.

Providing for multiple use of the area when this use will not unduly interfere with the primary use of the land.

For the purpose of this policy, real property shall include but is not limited to wildlife areas, hatcheries, refuges, and ecological reserves.