

6.2 TIMBERLANDS

6.2.1 Introduction

The Shasta County Timberlands Element is a combination of planning requirements from the mandated Land Use, Conservation, and Open Space Elements. Portions of these mandatory elements relevant to timberlands are cited below.

A land use element which designates the proposed general distribution and general location and extent of the use of land for...natural resources...The diagram for the land use element shall designate those parcels of real property for timberland production which have been so zoned pursuant to the California Timberland Productivity Act of 1982, Chapter 6.7 (commencing with Section 51100) of Part 1 of Division 1 of Title 5 (Government Code Section 65302(a)).

A conservation element for the conservation, development and utilization of natural resources including...forests...the conservation element may also cover...protection of watersheds.... (Government Code Section 64302(d)).

Open space for the managed production of resources, including...forest lands.... (Government Code Section 65560(b)(2)).

Parcels zoned as timberland preserve shall be zoned so as to restrict their use to growing and harvesting and to compatible uses and shall be entered as a timber preserve element of the County General Plan. (Government Code Section 51115).

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 products. Forest management is based on sound silviculture practices. Silviculture is the theory and practice of controlling the establishment, composition, and growth of forests. The State Forest Practice Rules defines a "silvicultural system" as a planned program of forest stand treatments during the life of a stand. It consists of a number of integrated steps conducted in logical sequence leading to or maintaining a forest of distinctive forms for the level of management intensity desired, which includes, but are not limited to, site preparation, planting, harvesting, road construction, insect and disease control, inventory, and fire protection.

Land dedicated to commercial forest management provides not only building materials, energy for industrial processes, firewood, County revenue for roads and schools, and employment opportunities, but also wildlife habitat, recreational opportunities, aesthetic enjoyment, and watershed. Maintaining timber operations and preservation of valuable timberlands are important to the economic base and the natural resource values of Shasta County. The Timberlands Element, therefore, relates present and future uses of timberlands to the natural resource, economic, and community development plans for Shasta County.

6.2.2 Findings

One of Shasta County's most valuable resources is its timberland. Of the County's 2,428,000 total acres, 50.7 percent or 1,231,000 acres are dedicated to commercial forest uses.^{1,2} In 2002, 613,495 acres of non-federally owned timberlands were designated in timber preserve zones (TPZs) pursuant

to California's Forest Taxation Reform Act of 1976.³ These timber preserve lands represent nearly half of all County timberlands and approximately 87 percent of privately owned timberlands. A breakdown of commercial forest land by ownership class is presented in Table T-1. The forest industry and miscellaneous private corporations control over 50 percent of the total commercial timberland in the County.

**TABLE T-1
COMMERCIAL FOREST LANDS IN SHASTA COUNTY BY OWNERSHIP CLASS, 2004**

OWNERSHIP	ACRES	%
National Forest	466,000	38
Other Public	63,000	5
TOTAL PUBLIC	529,000	43
Private Forest Industry	527,000	43
Private Farmer-Owner	39,000	3
Misc. Private	136,000	11
TOTAL PRIVATE	702,000	57
TOTAL - ALL	1,231,000	100

1. National Forest (NF) commercial timber acreage represents approximately 62 percent of USFS lands in Shasta County, based on review of area Forest Plans. There are 749,000 USFS acres in the County, including 409,000 acres in the Shasta NF, 31,000 acres in the Trinity NF, and 249,000 acres in the Lassen NF.
2. "Other Public" lands include lands administered by the Bureau of Land Management (BLM); the Bureau of Indian Affairs; miscellaneous federal agencies; lands owned by states, counties, and local public agencies, and lands leased by governmental units for more than 50 years.
3. "Private Forest Industry" lands are owned by companies or individuals operating wood-using plants.
4. "Farmer-Owned" lands are those owned by operators of farms.
5. "Miscellaneous Private" lands are privately owned lands other than forest industry or farmer-owned lands.

Source: Shasta County Assessor's Office, California; California Board of Equalization; USDA, Forest Service, Pacific Northwest Research Station, Portland Oregon; Department of Forestry and Fire Protection, Fire and Resource Assessment Program.

Under the Forest Taxation Reform Act, non-federal timber producing lands can be classified by the County's Zoning Plan as timber preserve zones (TPZs) through a process involving the Assessor, Planning Commission, Board of Supervisors, and timber owners. Such lands may be used for growing of forest products and compatible uses only, and property taxes for these lands are based on these limited uses. Forest lands outside of TPZ may also be assessed for their aesthetic or amenity value. When timberlands are harvested, a special yield tax is to be paid to the State for all forest products regardless of the zoning classification. Most of this tax revenue is returned to the county of origin. Table T-2 shows the breakdown of acres and leading ownership of timberlands within TPZs in Shasta County.

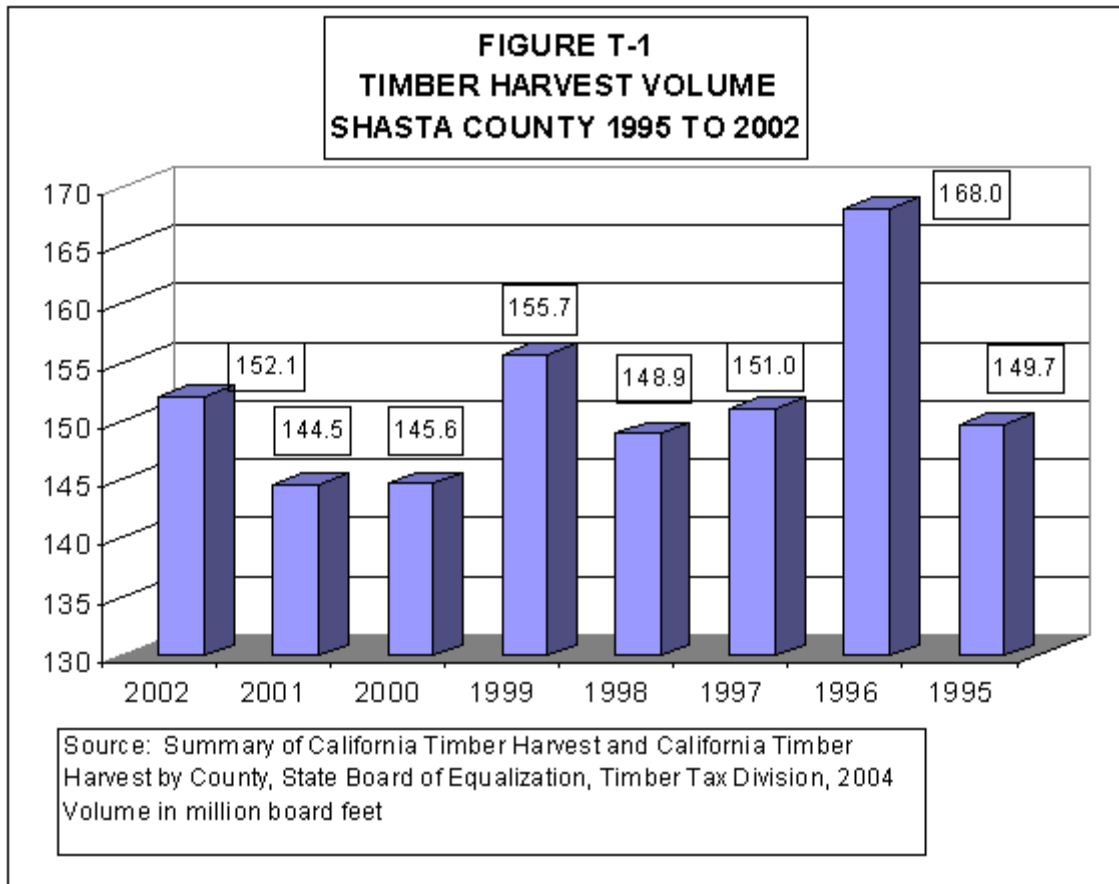
TABLE T-2 LEADING OWNERSHIP IN TIMBER PRESERVE ZONES IN SHASTA COUNTY JANUARY, 2003		
LANDOWNER	Acres in TPZ	% of Total Acres
Sierra Pacific Industries	221,560	36.1
Roseburg Resources Co.	122,485	20.0
Fruit Growers Supply	81,164	13.1
Brooks Walker	47,482	7.6
Hearst Corporation	39,733	7.2
Walter Walker	15,900	2.5
Crane Mills Corporation	16,005	2.5
Sierra Pacific Holding Company	11,845	1.8
Red River Forests Partnership	11,073	1.7
Latour State Forest	9,003	1.5
John Hancock Mutual Life	1,594	0.3
Other TPZ lands	35,651	5.7
TOTAL TPZ lands	613,495	100
Source: Shasta County Assessor, January 1, 2004		

The timber industry is important to the economy of the State as well as the County. In 2002, the County was the third ranking timber county producing a harvest amounting to 152.1million board feet and valued at \$39.2 million for timber cut from both private and public lands (see Figures T-1 and T-2). Revenue to the County budget from timber harvested on federal forest lands amounted to over \$367,098 dollars in timber yield taxes in 2003.

The County's relative position as a timber producer has been consistent with overall statewide trends through the 1990's. Timber harvest volumes increased significantly during the first part of the decade while value declined. This trend was altered during the latter part of the 1990's, due, in part, to new timber management and environmental concerns affecting state and federal timber harvest policies. While the timber industry has historically constituted a large segment of Shasta County's employment base, its prominence in this regard has been reduced.

The nature of Shasta County's economy has undergone significant structural changes, and the timber industry, although still important, does not command the share of Shasta County's economy that it once did. In 2002, wood products had dropped to 32.3 percent of total manufacturing employment compared to 46 percent in 1990 and only represented 1.3 percent of total County employment, down from 4.5 percent in 1990. The number of wood products jobs was 35 percent less than in 1990.⁷

The strength and importance of Shasta County's timber industry may likely maintain a generally stable trend in terms of annual harvesting quotas as experienced over the past five years. Over the long term, nationwide and worldwide demands for timber products may rise faster than available supplies, and higher prices for such products may rise as well. Higher prices can have positive implications for the County as they tend to promote more intensive forest management practices and improved diversification and wider utilization of wood products.



Nationwide trends in the timber industry have been somewhat redefined during the 1990's and include the following factors:

- Increased mechanization efficiency and labor-reducing mill technologies have resulted in increased production and volume while reducing labor needs.
- In certain areas, the harvesting of timber at rates which exceed the sustainable reproductive rate of the forest have caused concern for long-term supplies.⁹
- New environmental concerns are affecting timber harvests.
- Increased recycling of paper and wood products is expected to help reduce demand for timber and help balance timber reproduction at sustainable rates.¹⁰
- The shift of the timber industry to a more global orientation as a combination of the above trends increases in the Western states.

From a land use planning perspective, the timberland supply is impacted due to the conversion of timberland to other land uses which are incompatible with timber operations and management. Such uses are most often associated with rural residential uses which limit efficient timber management. In addition, these land use activities and patterns can create situations where management for wildland fires is much more difficult, both for adjacent timberlands and within such forested rural residential areas. Additional loss of timber resources is attributable to parcelization into lot sizes inefficient for economic timber production.

Negative impacts from forest practices may affect surrounding land uses and resources and create special management problems for timberland operations. Harvesting practices and the associated noise, dust, and traffic can be potentially damaging to air and water resources, wildlife habitats, aesthetic enjoyment, and the health and safety of nearby residences, although state-required timber harvest plans are intended to mitigate timber harvesting impacts to acceptable levels. These problems can be magnified if incompatible land uses locate too close to one another. Therefore, it is in everyone's best interest that the General Plan employ effective measures to avoid and/or minimize land use conflicts as is feasible. The County has adopted an "agricultural and timber use" ordinance for timber resource areas to advise future property owners that where land divisions occur adjacent to a timber use area, they may be subject to impacts from the conduct of existing and future forest management-related activities that may be considered objectionable (Shasta County Ordinance No. 94-2).

Private timberland owners range from large corporations to operators of small woodlots and Christmas tree farms. While the land use objectives for large-scale timber operators are fairly evident, opportunities and incentives for smaller operators to optimize yields from their lands are considerably less. For this group, economic barriers to increased timber production and a limited knowledge of existing timber management opportunities pose serious impediments to increasing timber supplies. Greater production potential for this group may be realized, however, with increased public education through cost-sharing and/or technical assistance programs.

6.2.3 Objectives

- T-1 Preservation of timberlands suitable for forest management and production to allow for the continuation of such uses or to provide opportunities for the future establishment of such uses.

T-2 Protection of timberlands from incompatible adjacent land uses which adversely impact forest management activities.

6.2.4 Policies

T-a Preservation of timberland shall be achieved by the use of the Timberlands land use designation. This designation shall be applied to lands as follows:

- Lands now within a Timber Production Zone (TPZ) in accordance with the Forest Taxation Reform Act (hereinafter Act).
- Lands which may be eligible to enter into a TPZ in accordance with the Act.
- Lands not contained within either of the above categories which are suitable for timber production as shown on the adopted land use maps.
- Timber producing lands which are sold or traded to a private landowner by a federal or state agency.

T-b Timberlands within a TPZ 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 Plan.

T-c Timberlands submitted for entrance into a TPZ in accordance with the Act shall be comprised of single or contiguous parcels whose resource value(s) and size(s) comply with Table T-3.

TABLE T-3 TIMBER SITE CLASSIFICATION AND PARCEL SIZE REQUIREMENTS		
Dunning's Site Classification	Tree Height 100-year old Site Index	County Minimum Parcel Size Acres
I	114 feet, or more	40
II	93 - 113 feet	60
III	75 - 92 feet	80
IV or V	Less than 75 feet	80

Notes:
 Timberland is rated for productivity based upon its ability to produce wood growth for trees. Five general site classes are established wherein Site I denotes areas of highest productivity, Site II and III denote areas of intermediate productivity, and Site IV and Site V denote areas of lowest productivity. The five site quality classes are set forth within each of three general forest types; redwood, Douglas fir, and mixed conifers.
 Table T-3 utilizes the mixed conifer class for Shasta County. Site index is based on average height of dominant trees at age 100 years. The Dunning system also includes 300 year age indexing for old growth stands.
Source: State Forest Practice Regulations, Article 4, Timber Site Classification Table. Also reference Revenue and Taxation Code Section 4341.

T-d Timberlands not within a TPZ shall be subject to the County development standards and to the following requirements as to their use and residential density.

Use - The primary use of these lands shall be for forest management and production. Secondary uses may include uses which do not impede forest management or the processing or utilization of timber. Such uses include limited residential and recreational uses, mineral exploration and extraction and processing where the surface area will be reclaimed, power generation facilities, and small hydropower facilities.

Density - Timberland may be developed at the maximum residential density of one dwelling per 40, 60 or 80 acres as shown in Table T-3 except, when 75 percent or more of the portion of the parcel proposed to be developed is in a Dunning Site Classification of IV or V and is within one-mile driving distance on a legal easement of a County paved road, the parcel may be developed at the maximum residential density of one dwelling per 10 acres. Pre-existing legal parcels that are smaller than provided above may develop at a density of one dwelling per parcel, subject to County Development Standards. For proposed land divisions involving irregular survey sections the density may vary up to 5 percent but not more than that needed to adjust for the irregularity, whichever is less.

Clustering - Developments on lands subject to a maximum density of the standards found in Table T-3 may receive a 100 percent density bonus if the residences are clustered on parcels not larger than 2 acres per residence to minimize conflicts with adjacent timber management activities on the remainder of the property.

T-e In order to protect timberland uses from incompatible land uses, lands being divided in areas designated either RA or RB and that adjoin lands designated for full-time timberland uses, shall comply with one of the following:

- If outside a rural community or town center, the minimum parcel size shall be ten 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.
- If within a rural community or town center, the minimum parcel size shall be five 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.
- If it can be shown that topographic or man-made features will sufficiently separate the uses, the above-mentioned standards may be modified.

T-f The County should encourage and promote the utilization of wood waste produced in the County.

T-g The County should encourage and promote biomass thinning programs in timbered areas with extensive rural residential development for purposes of improving both tree vigor and wildland fire safety.

Footnotes:

1. Cooperative Extension - Forestry. University of California, 1979 Forestry Facts (for) Shasta County. Commercial timberland is defined as land capable of growing commercial tree species at a rate of 15 cubic feet per acre per year.
2. USDA, Forest Service, Pacific Northwest Research Station, Portland Oregon, Department of Forestry and Fire Protection, Fire and Resource Assessment Program.
3. Shasta County Assessor, 2004
4. Shasta Trinity-National Forest, Land Management Department, Actual Receipts FY 2002
5. "Annual Planning Information - Redding Area - 1991," California Employment Development Department (EDD).
6. Ibid.,2002, EDD.
7. California Board of Forestry, staff report and documentation associated with promulgation of emergency rules, Nov., 1991
8. "Recycling will reduce demand for timber, Forest Service says," Sacramento Bee, 12/5/91.