State of California

Board of Equalization
Property and Special Taxes Department

Memorandum

To: Mr. Ramon J. Hirsig
Executive Director

Date: June 28, 2007

From: Ed King, Acting Deputy Director
Property and Special Taxes Department

Subject: ***Timber and Timberland Values Manual***
(July 17, 2007 Administrative Consent Agenda)

I am requesting that the attached revisions to the *Timber and Timberland Values Manual* be authorized for publication. The manual describes the principles and procedures used by the Board in the valuation of timber to be harvested and the establishment of timberland production zone values, and provides an overview of the responsibilities of the Timber Advisory Committee.

On March 13, 2007, Board staff initiated a project to revise the manual. Interested parties were provided the proposed revised text via Letter To Assessors 2007/017, and were given an opportunity to provide comments and/or suggestions on the proposed revisions. No comments were received from interested parties. The proposed revisions to the *Timber and Timberland Values Manual* consist of four pages (12, 27, 28 and 33) that contained technical errors. The proposed changes are shown in strike-out and underscore format.

Please place this item on the Board's July 17, 2007 Administrative Consent Agenda for approval.

EWK:kn
Attachment

cc: Mr. Gary Evans
Mr. Dean R. Kinnee

Approved: _____
Ramon J. Hirsig
Executive Director

BOARD APPROVED
At the _____Board Meeting

_____
Gary Evans, Acting Chief
Board Proceedings Division

TIMBER AND TIMBERLAND VALUES MANUAL

JULY 2007~~NOVEMBER 2005~~

CALIFORNIA STATE BOARD OF EQUALIZATION

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RAMON J. HIRSIG, EXECUTIVE DIRECTOR

FOREWORD

Prior to 1977, each county in California assessed all nonexempt standing timber for ad valorem taxation. Since the value of timber was added to the value of land and then taxed annually, property owners had an incentive to harvest trees to reduce their property taxes, thereby threatening to erode the timber base of California. Each forested county had to maintain a staff who established the values of standing timber. Owners of large timber properties were displeased with the variation in appraisal values that often occurred between counties and with the need to discuss values with county assessors in multiple counties. These owners strongly supported the centralized appraisal and determination of taxable value for timber.

The Z'berg-Warren-Keene-Collier Forest Taxation Reform Act of 1976 dramatically changed the method of taxing timber in California. The Act encouraged the protection of immature trees and the continued use of timberlands for the production of trees for timber products, and provided restrictions on the use of timberland to the production of timber products and compatible uses. The Act, codified as the Timber Yield Tax Law, replaced the ad valorem tax on standing timber with a yield tax on felled timber. The resulting timber yield tax is imposed on every timber owner who harvests timber or causes it to be harvested.

Many changes have occurred in the timber industry since 1977 when the timber yield tax program was established. There have been changes in forest harvest regulations, volume reductions in U.S. Forest Service sales, and an increased demand for timber from private timberlands. The overall average timber values rose significantly from 1977, to a peak in 1994, but have fluctuated subsequently with an overall decrease since 1994.

The *Timber and Timberland Values Manual* describes the principles and procedures used by the State Board of Equalization in the valuation of timber to be harvested and the establishment of timberland production zone values, and provides an overview of the responsibilities of the Timber Advisory Committee. This manual is designed to provide Board staff, county assessors and their staffs, and other interested parties with an informational resource.

The manual was prepared within an open process that allowed input from members of the Timber Advisory Committee, the California Assessors' Association, industry representatives, and other interested parties. Any issues regarding the manual's final language and contents that could not be resolved by consensus among interested parties were voted on and resolved by the Members of the State Board of Equalization after hearing relevant testimony from interested parties and Board staff.

Under Government Code sections 15606 et seq., the Board is charged with the duty of administratively enforcing and interpreting the statutes governing property tax assessment matters. Specifically, the Board is responsible for the administration and collection of the timber yield tax under Revenue and Taxation Code sections 38101 through 38908. While regulations adopted by the Board are binding as law, Board-adopted manuals are advisory only.

Nevertheless, courts have held that they may be properly considered as evidence in the adjudicatory process.[1]

The citations and law references in this publication were current as of the writing of the manual. The Board approved this manual on ~~November 15, 2005~~July 17, 2007.

David J. Gau
Deputy Director
Property and Special Taxes Department
~~November 2005~~July 2007

[1] *Coca-Cola Co. v. State Board of Equalization* (1945) 25 Cal.2d 918; *Prudential Ins. Co. v. City and County of San Francisco* (1987) 191 Cal.App.3d 1142; *Hunt Wesson Foods, Inc. v. County of Alameda* (1974) 41 Cal.App.3d 163.

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CHAPTER 1: OVERVIEW OF THE TIMBER YIELD TAX LAW

Pursuant to Article XIII, section 3, subdivision (j) of the California Constitution, in 1976 the Legislature completely revised the system of taxation for growing timber and preserving timberlands in California. Two different taxes are imposed on timber property: the timber yield tax and the property tax. The timber yield tax is a tax on the value of harvested timber. The property tax is a tax on the value of the underlying land. While the timber yield tax is a state tax, the taxation of timberland is part of the local property tax that is administered by the county assessor.

Prior to 1976, timber and timberlands were subject to an annual ad valorem tax. An ad valorem tax uses the *market value* of a commodity as a base for assessment of the tax. Simply put, a market value is the price a willing buyer will pay a willing seller for the use of a given commodity. Under this system of taxation, however, the market value of timberland was not restricted to what one timber owner would pay another for the use of the land to grow trees. Instead, the market value of timberland was computed on the basis of what any buyer would pay to put the land to its *highest and best use*, regardless of whether or not that use was timber production. Thus, the timber owner paid taxes based on the highest and best use value of the land, plus the market value of the trees.

The ad valorem tax system inherently discouraged maximum timber production in two ways. The first was a consequence of the highest and best use valuation factor. As population growth encroached on forested areas, the highest value use of land often shifted from timber production to commercial, residential, or recreational use. Land that formerly yielded its greatest financial return when used for timber production was found to yield an even greater return when used as a ski resort or vacation home. It was found that continued use of land for timber production was no longer profitable, and that timber did not generate enough revenue to offset the increasing tax. Thus, growers were induced to convert land from timber production to a higher valued use.

The second disincentive resulted from the imposition of an annual tax on a commodity with a long production period. Trees require many years of growth to reach maturity. Timber management decisions were being impacted when timber, which had been exempt from property taxation under the Constitution, faced assessment that would significantly increase the owners' tax burdens.[2]

With the passage of the Timber Yield Tax Law,[3] standing timber became exempt from local property taxes (ad valorem tax system) and instead is subject to a state tax at the time of harvest. Although the tax is administered and collected by the State Board of Equalization (Board), the revenue, after state administrative costs, is distributed to the counties whereby the county auditor

[2] California Constitution, Article XIII, section 12 ¾.; repealed by amendment adopted November 5, 1974.
[3] Revenue and Taxation Code sections 38101 through 38908. Unless otherwise stated, all statutory references are to the Revenue and Taxation Code.

distributes the funds among the jurisdictions within the county to replace the property taxes that had previously been collected.[4]

The 1976 legislation also required the Board to appoint a Timber Advisory Committee (TAC) with which to consult prior to adopting administrative regulations governing the assessment of harvested timber and bare land zoned Timber Production Zone. (See Chapter 3 for a discussion of the TAC.)

Under the Timber Yield Tax Law, the tax paid is based on values established by the Board for various timber products, as determined by analysis of market transactions in designated timber value areas. The timber owner does not pay the tax based on the amount actually received for a sale of his or her trees or wood products. A specified tax rate is applied to the value of the net volume of harvested timber calculated at its *immediate harvest value*, defined as the amount the "timber would sell for on the stump at a voluntary sale made in the ordinary course of business for purposes of immediate harvest."[5] *Stumpage value* is the value of the trees standing in the woods with access and all permits in place. Every six months, the Board is required to estimate the immediate harvest value of each species or subclassification of timber within the various specified timber areas of the state. (See the sections following titled *Timber Yield Tax Rate* and *Timber Value Areas* for more in depth discussions.)

In order to perform its statutory duty of estimating the immediate harvest values, the Board requests the reporting of significant amounts of information from parties participating in timber sales transactions throughout the state. Since there are no specific reporting requirements for data regarding timber sales transactions, in practice, the Board staff requests the necessary harvest information on a voluntary basis, and assures the reporting parties that the specific details regarding the sales will be kept confidential. If necessary, the information can be obtained from the parties through the exercise of the Board's subpoena power.[6]

RATE ADJUSTMENT COUNTIES

The Legislature designated, at the time of the enactment of the Timber Yield Tax Law in 1976, 17 timber producing counties as *rate adjustment counties*. The 17 counties designated were those counties where property tax revenues on timber represented 2 percent or greater of the county's total property tax revenue.[7] The rate adjustment counties form the basis for the determination of the timber yield tax rate. (See the section following titled *Timber Yield Tax Rate*.)

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[4] Section 38905.1.
[5] Section 38109.
[6] Government Code section 15613.
[7] The parameters were defined in the original Z'berg-Warren-Keene-Collier Forest Taxation Reform Act of 1976, and the specific counties were codified in section 38105.

The rate adjustment counties are Alpine, Del Norte, El Dorado, Glenn, Humboldt, Lassen, Mendocino, Modoc, Nevada, Placer, Plumas, Shasta, Sierra, Siskiyou, Tehama, Trinity, and Yuba.[8]

TIMBER YIELD TAX RATE

Beginning April 1, 1977, a timber yield tax rate was established to produce, for local governments, a sum equivalent to ad valorem collections on timber statewide. The timber yield tax rate was initially established at 6 percent on all harvested timber.[9]

Annually, the Board reviews data from the rate adjustment counties to determine if an adjustment is necessary to the timber yield tax rate. The tax rate is adjusted in the same proportion that the average rate of general property taxation in the rate adjustment counties in the current tax year differs from the average rate of general property taxation in those counties in the prior year.[10] Special taxes on intangibles, aircraft, property that is subject to a uniform statewide tax rate, and special assessments are not considered.

In 1980, following the adoption of the statewide property tax initiative commonly known as Proposition 13, the yield tax rate was reduced from 6 percent to 3 percent. In 1982, the rate was adjusted to 2.9 percent where it has remained to date. For example, the 2005 timber yield tax rate was calculated by applying the proportional change between 1.040 percent (the 2003-04 average tax rate in the rate adjustment counties) and 1.039 percent (the 2004-05 average tax rate in the rate adjustment counties) to the 2004 timber yield tax rate of 2.9 percent:

$$2.9\% \times [1.039 \div 1.040] = 2.89721.$$

The rate is rounded to the nearest one-tenth of one percent as required by statute.[11] Therefore, the rate remained at 2.9 percent for 2005.

TIMBER VALUE AREAS

For use in the preparation and application of immediate harvest values, the Board originally designated nine timber value areas in the state.[12] Subsequently, two timber value areas have been subdivided because of changing market conditions. (See Appendix 2 for a map of the timber value areas.) These designated areas contain timber having similar growing, harvesting, and marketing conditions. Timber owners compute the taxable value of their timber using the immediate harvest values designated for the areas where their timber has been harvested. The *taxable value of timber* is the immediate harvest value, by designated area, as of the first day of the period specified by the applicable harvest value schedule adopted by the Board.

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[8] Section 38105.
[9] Section 38115.
[10] Section 38202.
[11] Section 38202.
[12] Section 38204; Property Tax Rule 1020.

Once the harvest value schedules are adopted by the Board, they are made available to known timber owners and timber logging operators, as well as being posted to the Board's website.[13]

TIMBER ADVISORY COMMITTEE

The Timber Yield Tax Law requires that the Board appoint a Timber Advisory Committee (TAC).[14] (See Chapter 3 for a discussion of the TAC.) Section 431 contains the following definition of the TAC:

> ... (c) "Timber Advisory Committee" means a standing committee appointed by the board composed of one representative of the Board of Equalization, one representative of the State Board of Forestry and Fire Protection, five assessors from the rate adjustment counties defined in Section 38105, and one member representing small-scale timber owners, and one member representing large-scale timber owners.

IMMEDIATE HARVEST VALUES

As part of its administration of the Timber Yield Tax Law, the Board is required to establish twice yearly a schedule of immediate harvest values for each species or subclassification of timber within the various specified timber value areas in the state. As provided in section 38204, subdivision (a), the immediate harvest values are to be determined:

> ... from the best evidence available, including (1) gross proceeds from sales on the stump of similar timber of like quality and character at similar locations, or (2) gross proceeds from sales of logs, or of finished products, adjusted to reflect only the portion of those proceeds attributable to value on the stump immediately prior to harvest, or a combination of (1) and (2), and shall be determined in a manner that makes reasonable allowance for differences in age, size, quality, cost of removal, accessibility to point of conversion, market conditions and other relevant factors.

The TAC has a vital role in the adoption of the biannual harvest values and schedules. Section 38204, subdivision (a), further provides:

> ... the board, after consultation with the Timber Advisory Committee, shall estimate the immediate harvest values of each species or subclassification of timber within those areas as of the initial date of the period....

Board staff of the County Property Tax Division, Timber Tax Section, Property and Special Taxes Department, is responsible for analyzing statewide timber sales data and developing

[13] www.boe.ca.gov.
[14] Section 434.2.

suggested immediate harvest values. The statutory duties of the TAC under section 38204 to consult with the Board regarding immediate harvest values are advisory in nature and encompass no administrative responsibilities. The TAC members may perform their consultation function by providing information concerning timber values that each member has compiled from outside sources, or by applying their expertise to any timber-related questions raised by the Board. The TAC members are always encouraged to share any sales information they may have with Board staff. The TAC members are especially encouraged to participate during the period immediately preceding the review of suggested immediate harvest values. Most often, the TAC members' participation in the value-setting process occurs during the open forum of a TAC meeting.

The Board's staff suggests immediate harvest values for the periods of January 1 through June 30, and July 1 through December 31, annually. The staff suggested values are reviewed by the TAC at two semi-annual meetings prior to being adopted by the Board (See Chapter 2 and Appendix 5 for discussions of how values are established.)

The values are currently arrayed in three tables. (See Appendix 3 for a sample of the tables.) The harvest value tables provide the taxpayer with information necessary for reporting the timber yield tax. Table 1 is used for miscellaneous timber species and products, Table G for green timber, and Table S for salvage timber. The prices are expressed as a dollar amount per thousand (M) board feet or other designated unit of measure. Species codes and units of measure are shown in the tables for use by taxpayers in preparation of the Timber Tax Harvest Report. The tables array the allowable deductions; for example, low volume per acre or small total volume.

Prior to the biannual meetings at which the Board adopts the immediate harvest values, the staff prepares a schedule of preliminary estimates of immediate harvest values, and then meets with the TAC to discuss the suggested values. The TAC reviews the proposed values, and makes its recommendation, based on a majority vote, to the Board to approve or disapprove the values. Interested parties have the opportunity to discuss the timber values and the valuation process at the TAC meetings. The Board considers the staff recommended values and the TAC recommendation during a public hearing, and interested parties again have an opportunity to discuss the timber values with the Board Members.

CONFIDENTIALITY OF SALES INFORMATION

SALES TRANSACTIONS

Information regarding timber sales transactions obtained by the Board pursuant to section 38204 may not be disclosed to parties outside those involved in the sales transaction. This prohibition includes members of the TAC.[15] The controlling confidentiality statute is found in section 38705, which states in part:

> Except as provided in Sections 38402 and 38706, it is unlawful for the board or any person having an administrative duty under this part to make known in any

[15] A. G. Opinion CV 78/52, August 29, 1978.

> manner whatever the business affairs, operations, or any other information pertaining to any timber owner or any other person required to report to the board or pay a tax pursuant to this part, or the amount or source of income, profits, losses, expenditures, or any particular thereof, set forth or disclosed in any return, or to permit any return or copy thereof or any book containing any abstract or particulars thereof to be seen or examined by any person....

In a July 25, 2002 opinion,[16] the California Attorney General considered the question of whether the Board could publicly disclose information that its staff has compiled regarding timber and log sales transactions, if the information was provided in a source-neutral, summary fashion that did not identify or allow one to ascertain specific timber or log sales transactions or the parties involved in such transactions. The Attorney General concluded:

> In preparing estimates of timber values, the Board's staff first compiles statistical data based upon information it receives from timber owners and other knowledgeable persons regarding timber and log sales transactions. The question presented for analysis is whether the statistical schedules prepared by Board staff, which do not identify or make ascertainable specific timber or log sales transactions or the parties involved in such transactions, may be disclosed to the public....
>
> We conclude that the Board may publicly disclose information that its staff has compiled regarding timber and log sales transactions if the information is provided in a source-neutral, summary fashion that does not identify or make ascertainable specific timber or log sales transactions or the parties involved in such transactions.

Therefore, while the Board can publicly disclose the information arrayed in a source-neutral format, the raw data that would allow one to ascertain the parties involved in specific timber or log sales transactions must be held confidential and may not be disclosed by staff. For example, Board staff prepares several summary tables for the TAC to assist the members when analyzing the suggested immediate harvest values developed by Board staff. (See Appendix 6 for examples of the tables.) The summary tables do not include raw data but do include the following information:

Sales Summary Table G: For each timber value area, species, and sub-classification of species, this table contains:

- Number of sales used for current value schedule
- Total volume of those sales
- Computed average values weighted by volume
- Suggested values

[16] A. G. Opinion CV 01/901.

Sales Summary Table 1: For each species or product, this table contains:

- Number of sales used for current value schedule
- Total volume of those sales
- Computed average values weighted by volume
- Suggested values

Suggested Values and Changes From Prior: For each timber value area, species, and subclassification of species, this table contains:

- Current suggested values
- Changes from prior value schedule

Timber Sales Summary: For each timber value area as well as statewide, this table contains:

- Number of public and private sales
- Sales volume for both public and private sales
- Average tractor logging and haul costs
- Helicopter sales

To ensure confidentiality of the data, for *Sales Summary Table G* and *Sales Summary Table 1*, if the number of sales transactions in any category is less than five, only the suggested values are provided. However, the benchmark of using no less than five sales transactions is only a guide. In some instances, even five sales transactions could disclose confidential information. For instance, if there are five sales transactions in a timber value area but four of the transactions involve the same logging company, by process of elimination, disclosure could compromise the confidentiality of the fifth transaction.

LOG INDEX STATISTICAL SCHEDULES

The Board's staff monitors active log markets in all regions of the state to estimate changes in log and stumpage markets. The staff develops two indices of changes in stumpage prices based on changes in the delivered log markets. One index is for the coastal region and one index is for the interior regions. The log index is part of the staff's work product developed for use in conjunction with confidential sales information, calculations, and determinations of immediate harvest values. The log index is developed by staff to adjust older sales information for time-related changes in the delivered log freight on board (FOB) prices. In other words, the log index is a time adjustment table that indicates the upward or downward trends in the wholesale timber market. The raw data—the log price information—is obtained from sawmills under the assurance that the specific data will be kept confidential. The Attorney General found in A. G. Opinion CV 78/52:

> The requirement for confidentiality under section 38705 fosters the complete and accurate reporting of information to the Board...The Board's ability to perform its responsibilities might be impaired if those supplying it with information were not assured that such information would be kept confidential from the public, particularly business competitors.

Further in A. G. Opinion CV 01-901, the Attorney General opined:

> The prohibition of section 38705 is thus intended to protect the privacy rights of timber owners, preventing business competitors and others from obtaining information furnished to the Board concerning their business affairs and operations. The Board's administration of the Timber Yield Tax Law is thereby facilitated by making sure that the information it receives from timber owners is accurate due to the Legislature's confidentiality mandate....

To ensure confidentiality of the data used in the compilation of the log index, Board staff prepares a source-neutral summary table for use by the TAC. The *Time Adjustment Table* (see Appendix 6 for an example) contains:

- Date of sale of logs
- Changes in stumpage prices by species or subclassification from the Board staff's appraisal date to the contract sale date

ASSESSORS' ACCESS TO BOARD RECORDS

In January 1980, section 38706 was added to provide specific, limited access by county assessors to Board timber tax records pertaining solely to their respective counties. In so doing, the Legislature granted access to the Board's timber tax records to county assessors in their capacity as county assessors, but did not provide for disclosure to TAC members under either section 38705 or section 38706. Section 38706 provides, in part:

> Upon written request of the assessor of any county containing timber, the board shall permit the assessor, or any duly authorized deputy or employee of such assessor, to examine any records pertaining to the county of such assessor which are maintained by the board under this part....

The Legislature granted these rights to county assessors subject to certain disclosure limitations and sanctions. Section 38706 further provides that appraisal data, including market data as defined in section 408, may be disclosed to any assessor. However, if an assessor seeks to review Board-maintained records of a county other than the assessor's own county, the request to the Board must include a written statement authorizing such a review from the applicable county assessor.

RULES AND REGULATIONS

Under Government Code section 15606, subdivision (c), the Board is given the power and duty to prescribe rules and regulations for property tax matters. Recognizing the experience and expertise of the TAC members, the Legislature directed the TAC to consult with the Board regarding any administrative rules or regulations that were being considered by the Board regarding the timber program.[17]

Pursuant to the Board's general authority, and specifically the Board's authority under section 432, the Board, and after consultation with the TAC, adopted the following Property Tax Rules:[18]

- Property Tax Rule 41, *Market Value of Timberland*
- Property Tax Rule 53, *Open-Space Value of Timberland*
- Property Tax Rule 471, *Timberland*
- Property Tax Rule 1020, *Timber Value Areas*
- Property Tax Rule 1021, *Timberland Grading Rule*
- Property Tax Rule 1022, *Standard Unit of Measure*
- Property Tax Rule 1023, *Immediate Harvest Value*
- Property Tax Rule 1024, *Exempt Timber*
- Property Tax Rule 1026, *Timber Owner*
- Property Tax Rule 1027, *U. S. Forest Service Timber Volumes*
- Property Tax Rule 1031, *Records*

See Appendix 1 for a complete text of the rules.

EXEMPTIONS FROM THE TIMBER YIELD TAX

Pursuant to section 201, all property, not exempt under the laws of the United States or of this State, is subject to taxation. With the enactment of the Timber Yield Tax Law in 1976, timber became exempt from property taxation. Section 436 provided:

> On the lien date for the 1977-78 fiscal year and thereafter, all timber on both privately and publicly owned lands shall be exempt from property taxation, including possessory interest taxation, and shall not be assessed for taxation

[17] Sections 434.1, 38109, and 38116.
[18] All rule references are to the California Code of Regulations, Title 18, Public Revenues.

> purposes. Nothing herein shall preclude the assessment of trees standing on land not zoned as timberland production under this article for purposes of property taxation based on their aesthetic or amenity value.

Therefore, timber is subject to the timber yield tax in lieu of the general property tax. The following are instances where timber has been exempted from the timber yield tax by statutory and regulatory provisions.

LOW VALUE

Timber is exempt from the timber yield tax when the immediate harvest value of the timber is so low that the tax on the timber would amount to less than the cost of administering and collecting the tax.[19] Property Tax Rule 1024 provides:

> ... Timber, removed from a timber harvest operation whose immediate harvest value does not exceed $3,000 within a quarter, is exempt from timber yield tax pursuant to the authority granted by section 38116 of the Revenue and Taxation Code....

Two or more timber owners who elect to combine their harvest under one harvest permit may report each harvest as a separate operation. The specific requirements for reporting each harvest separately for the purpose of calculating the small total volume deduction are:

1. That each timber owner must have a separate timber yield tax account with the Board; and

2. That each timber owner must separately own the land from which the timber was harvested, as identified by an assessor's parcel number.

WELFARE EXEMPTION

The Constitution provides that the Legislature may exempt from property taxation property used exclusively for religious, hospital, or charitable purposes and owned or held in trust by corporations or other entities (1) that are organized and operating for those purposes, (2) that are nonprofit, and (3) no part of whose net earnings inures to the benefit of any private shareholder or individual.[20] The Legislature has implemented this exemption by enacting sections 214 et seq., commonly known are the welfare exemption.

Under section 214, if timber is harvested on property used for qualifying purposes that is owned by a qualifying organization under the welfare exemption, such timber is exempt from the timber yield tax. However, section 38104 contains the following:

> "Timber owner" means any person who owns timber immediately prior to felling or the first person who acquires either the legal title or beneficial title to timber

[19] Section 38116.
[20] Article XIII, section 4(b), California Constitution.

> after it has been felled from land owned by a federal agency or any other person or agency or entity exempt from property taxation....

Therefore, while harvested timber may be exempt from the timber yield tax pursuant to the provisions of the welfare exemption when owned by a qualifying organization, the first person acquiring title to the timber from the exempt organization is statutorily considered the "timber owner" and is liable for the applicable timber yield tax.

In *Hoopa Valley Tribe v. Nevins, et al,*[21] the federal Circuit Court of Appeal held that "timber owner" as defined in section 38104 and Property Tax Rule 1026 did not include any purchasers of timber owned by Indian tribes, whether the land is owned by the tribes themselves or by federal agencies on behalf of the tribes. (See the section following on Indian Lands.) However, timber harvested from land acquired by an individual member of a tribe as a deeded allotment is subject to the timber yield tax.

INDIAN LANDS

Indian lands are lands held in trust by the United States for Indian tribes.[22] These lands are immune from state property taxes. Federal laws and policies comprehensively support and regulate the harvest of timber on tribal lands. State taxes or regulations that interfere with tribal activities may be preempted if the tribal activity the state seeks to affect involves goods produced on the reservation.

The court found in *Hoopa*[23] that because the timber yield tax does not fund services that directly relate to the harvesting of tribal timber and is otherwise unconnected with tribal timber activities, the timber yield tax should be preempted. As a result of this decision, the timber yield tax is not applicable to timber owned by Indian tribes, nor to any purchasers of that timber or logs derived therefrom. Thus, non-Indian purchasers may negotiate with Indian tribes for the purchase of the tribe's timber or logs without regard to the timber yield tax or its application.

TIMBER PRODUCTION ZONE LANDS

Part of the Timber Yield Tax was the creation of the Timber Production Zone (TPZ). These are lands that are primarily devoted to and used for growing and harvesting timber. The zone carries a continuous, rolling 10-year restriction on use. These lands are assessed under the ad valorem system by each county based on values determined by the Board and transmitted annually to each assessor. (See Chapter 4 .)

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[21] (1989) 881 F.2d 657.
[22] The Wheeler-Howard Act of Congress (June 18, 1934) 25 U.S.C.A. 465.
[23] *Hoopa Valley Tribe v. Nevins et al., supra.*

CHAPTER 2: APPRAISAL PROCESS

The statutory mandate on the Board regarding valuing timber and timberland under the Timber Yield Tax Law is:

- ~~As of January 1 and July 1~~ On or before June 30 and December 31 each year, the Board must adopt a schedule of immediate harvest values by species, quality, and location to be used by timber owners when filing their taxes on harvested timber.[24]
- ~~As of~~ By November 30 each year, the Board must adopt timberland site class value schedules to be used by county assessors when valuing timberland properties within their counties.[25]
- ~~As of December~~ On or before December 31 each year, the Board must adopt the yield tax rate.[26]

The primary focus of this manual is on the development of the immediate harvest values by timber appraisers in the Board's Timber Tax Section. (See Appendix 3 for a sample of an immediate harvest value schedule.)

For the Board's timber appraisers, *appraisal* is the process of estimating the value of each species or subclassification of timber within each timber value area as of the timber appraisal date—the date that the immediate harvest values are determined. The values established represent the amount that each species or subclassification of timber would sell for on the stump at a voluntary sale made in the ordinary course of business with all access and permits in place. These values are a reflection of the marketplace as of the appraisal date (the date that the immediate harvest values are determined); they are not an attempt to predict the future marketplace.

IMMEDIATE HARVEST VALUE

Immediate harvest value is the amount of cash or its equivalent for which timber would be sold from a willing and informed seller to a willing and informed buyer, both seeking to maximize their incomes, if the timber could be harvested in the forthcoming year. This type of transaction is commonly known as an open-market, arm's-length transaction.[27]

When developing the immediate harvest values, the Board's staff considers all elements of value, including but not limited to, volume by species, quality, defect, market conditions (including date of sale), volume per acre, size of timber, method of harvesting, accessibility, topography, logging conditions, and distances from a processing center capable of utilizing the timber.[28]

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[24] Section 38204.
[25] Section 434.5; Property Tax Rule 471.
[26] Section ~~38202.~~ 38203.
[27] Section 110.
[28] Property Tax Rule 41, subsection (b).

STUMPAGE VALUE

The values upon which the timber yield tax is ultimately levied represent *stumpage value*—the value of the trees standing in the woods, with access and permits. The values are determined by Board staff from the best evidence available, including:

1. Gross proceeds from sales on the stump of similar timber of like quality and character at similar locations; or

2. Gross proceeds from sales of logs, or finished products (products in a state ready for normal consumption), adjusted to reflect only the portion of the proceeds attributed to value on the stump immediately prior to harvest.

Timber designated as *similar* means timber in an area of comparable elevation and topography, and subject to comparable logging conditions and accessibility to the point of conversion (access to a processing facility). The values must be determined in a manner that makes reasonable allowance for differences in age, size, quality, cost of removal, accessibility to point of conversion, market conditions, and other relevant factors that affect the determination of value.[29]

Sales transaction data is solicited by Board staff from many sources, including:

- Government agencies, for example, U. S. Forest Service, California Department of Forestry and Fire Protection, and the Bureau of Land Management
- Individual landowners
- Registered professional foresters
- Private log brokers
- Timber consultants
- Large-scale and small-scale timber operators
- Log buyers for manufacturing facilities

APPRAISAL PROCESS

SALES COLLECTION

Timber harvest valuation is based on transactional evidence. The transactions are open-market sales of standing timber and sales of delivered logs. The timber harvest values used for the biannual schedules are derived from sales occurring during the two-year period immediately preceding the appraisal date for the next schedule. However, good appraisal practice for all types of property, including timber, provides that the preferred method of arriving at the value of a

[29] Section 38204.

property is through the use of market sales data that represent arm's-length, open-market sales of comparable properties that are nearest in time to the valuation date of the subject property.

Therefore, if sufficient timber sales transactions and data are available close to the date that the harvest values are being determined, those sales transactions should be given the strongest consideration in analyzing the marketplace for timber. In the event that sufficient sales transactions are not available close in time to determining the harvest values, then Board staff must rely on older sales information, being careful to make appropriate adjustments for the differences in time. (See the section titled *Time Adjustments*.)

Board staff appraisers maintain databases of timber sales that properly reflect conditions within each of the timber value areas of the state. As time passes, the older sales are dropped and the newer sales added. When sales are scarce, Board staff makes every effort to contact all potential sources with transactional data, including timber landowners, loggers, and mill operators. Copies of approved harvest permits provided by the California Department of Forestry and Fire Protection are a primary source of potential sales information. (See Appendix 5 for a discussion of the sales analysis process.)

BID ANALYSIS

The bidding process for timber may be as simple as two individuals getting together—one with timber to sell and one who wants to buy timber. Or, it may be as formal as some U. S. Forest Service transactions where there could be many competitors vying for the same sale. Regardless of the nature of the bidding process, if the species are bid at prices proportional to their value based on current log markets (with each species bid individually), Board staff seldom have to reallocate the bid prices. However, if certain factors distort a bid price, for example, bid lump sum or bid at one price for all species, then adjustments must be made in order to establish relevant bid prices by species.

Ratios between species and log sizes are developed from information obtained from surveys of delivered log prices. Board staff apply these ratios to the bid prices of distorted bid sales in order to allocate the total bid to determine the market value for each species.

Escalation clauses specified in a contract are applied to a sale to adjust the apparent bid price to the date of the bid or sale. Miscellaneous fees, deposits, nonmonetary payments, etc., borne by the purchaser, are considered a part of the gross proceeds and are included in the sales price. Since the sales price represents gross proceeds, only typical costs directly attributed to the harvesting of the timber are considered. Excessive costs are those that go beyond the costs required by regulations or permitting agencies, and, therefore, are not allowed. Additionally, costs associated with obtaining permits or the preparation of permits are not allowed.

Costs incurred by the seller prior to harvest such as for cruising, marketing, developing the timber harvest plan, constructing permanent roads, and surveying are not recognized in the sales analysis because the immediate harvest value to be determined represents the value of the timber on the stump immediately prior to the harvest.

ARM'S-LENGTH TRANSACTION DETERMINATION

Each sale is analyzed to determine if the sale was an arm's-length transaction. Factors reviewed include:

- Was the sale an open-market transaction?
- Was either the buyer or seller under duress to achieve the sale?
- Was the buyer and seller aware of the quality of the product?

Only data from sales transactions that meet the definition of fair market value are used in the analysis. *Fair market value* is defined in section 110 as:

> ... "full cash value" or "fair market value" means the amount of cash or its equivalent that property would bring if exposed for sale in the open market under conditions in which neither buyer nor seller could take advantage of the exigencies of the other, and both the buyer and the seller have knowledge of all of the uses and purposes to which the property is adapted and for which it is capable of being used, and of the enforceable restrictions upon those uses and purposes....

If a sale is considered not to be an arm's-length transaction, it is excluded from further analysis and not placed in the sales database. Sales that are judged to be an arm's-length transaction are placed in the sales database and undergo further analysis.

SALES TRANSACTION ADJUSTMENTS

During the valuation process, adjustments are made to the comparable sales for differences that affect value. This is a critical step in the valuation process which may involve several types of adjustments.

PRICE ADJUSTMENT

Any consideration that affects the value of timber must be measured in such a way that it can be quantified and expressed in terms of dollars. Examples of sales requiring price adjustments include sales with bid rate indexing and sales with nonmarket financing. Also included in this group are sales with value deficits in which the required removal of a product costs more than the value of the product, such as sawlog sales with biomass components. Price adjustments are normally not necessary on delivered log sales.

PURCHASER PAYMENT ADJUSTMENT

Whenever a purchaser of timber or logs assumes the financial burden of any item that is the seller's responsibility, adjustments must be made to the purchase price paid for the timber or logs. The amount of adjustment is directly proportional to either the benefit received by the seller, or the cost incurred by the purchaser. This amount is expressed in dollars per thousand board feet and is added to the indicated stumpage price. For example:

- When the timber yield tax is paid by the purchaser, this amount is added as a positive adjustment to the stumpage price.
- Forestry costs, timber harvest plan costs, deposits, fees and other seller costs that are assumed by the purchaser are positive adjustments made to the stumpage price. This group of adjustments includes a multitude of factors that commonly impact the purchase price and may include costs incurred over a wide period of time—from well before the operation, to well after the actual logging activity. Examples of the latter would be slash disposal, clean-up, and post harvest environmental mitigations if the costs are for activities whose scope exceeds the requirements of regulations or permitting agencies. Nonrefundable payments for slash disposal, road surface replacement, and other factors shown on a U.S. Forest Service (USFS) contract as deposits are added to the purchase price, since they are not included in the bid price.
- Permanent improvements to the land such as roads or building sites.

Purchaser payments that have a significant impact on the bid price should be reallocated in proportion to the market value of each species in the sale.

LOGGING COST ADJUSTMENT

The harvest value schedules are founded upon market value indicators derived from typical transactions. Since most sales in the Board's timber yield tax transaction database are logged by tractor, sales that include alternate systems must be adjusted. The amount of adjustment is based upon the differential in the harvest value schedule between tractor logging and other logging systems, multiplied by the percentage of the sale volume to be logged by the other systems. The differentials are estimated by analyzing contract costs for alternate logging systems and by analyzing sales of timber using predominantly alternate logging systems. Adding this adjustment to the base value indicates the total harvest value as though the entire sale was logged by tractor.

Example

If 30 percent of the volume of a sale is to be helicopter logged and the remaining 70 percent tractor logged, then:

Logging Cost Adjustment = Helicopter logging ratio x Total helicopter adjustment amount
= 30% x $140
= $42

LOG AND HAUL COST ADJUSTMENT

When contract payments for logging and hauling are deducted, the delivered log price paid to the seller provides an indicator of stumpage value. Logging costs do not include engineering or forestry fees, permanent road building, clean-up costs, or other costs not directly related to the harvesting and removal of timber.

LOCATION ADJUSTMENT

Occasionally, market conditions and/or operating costs are such that existing indicators for a timber value area do not reflect localized stumpage values. When values are substantially different, deductions may be identified for operations within specific counties. If county deductions are recommended, they are supported with sales transaction evidence and differential logging and hauling cost data.

The county deduction for Marin, Monterey, San Mateo, Santa Clara, and Santa Cruz Counties was originally implemented for a combination of two reasons:

1. Increased harvest administration costs; and

2. Excessive haul costs.

Starting in 1987, it was determined that there was a sufficient difference in market conditions and haul costs between Sonoma County and the other counties in TVA 2S, and that some adjustment must be made to establish equitable values. A deduction was established to recognize these differences in TVA 2S. If the conditions had been similar throughout the range of the TVA, no deductions would have been warranted.

If adopted, county value deductions are substantiated during each subsequent valuation cycle.

SMALL TOTAL VOLUME ADJUSTMENT

The small total volume deduction is intended to reflect the disproportionate impact that fixed costs have on smaller sales, and also to account for the fact that small-volume harvests frequently are unable to obtain competitive prices from prospective purchasers. The small total volume deduction is based upon the following two factors:

1. The costs of moving personnel and equipment onto an operation are fixed and will be incurred regardless of operation size. The higher the volume to be harvested, the less impact the fixed costs will have per thousand board feet. Conversely, the smaller the volume, the higher the cost will be for each thousand board feet harvested.

   Once reasonable fixed costs have been determined, the costs should be divided by various volumes to determine at which volume these costs begin to have a significant effect on the cost per thousand board feet. This will show the point where an adjustment is warranted and indicate an appropriate allowance for the higher costs. Additional comparisons should be made at lower volumes to determine if additional allowances should be made.

2. People selling smaller amounts of timber do not dictate a strong market consideration, and are therefore not in a competitive position. They are also frequently less informed about the market, and thus may not receive a competitive price for their product.

Price differences between small and large volume harvests are monitored by Board staff to determine the effect of these combined factors.

LOW VOLUME PER ACRE ADJUSTMENT

The purpose of the low volume per acre adjustment is to recognize that the costs incurred in logging scattered trees are higher than when logging denser stands. Volume per acre can affect costs of felling, skidding, and to some extent loading. Felling and skidding costs increase proportionately with the distance that must be traveled between trees. Additionally, loading costs can increase if volume is arriving at the landing too slowly to keep up with the logging trucks or so scattered it requires frequent landing moves and small volumes per landing, especially if logs are being sorted for different destinations.

The cost differential can be derived by determining a cost per hour or per day for felling, bucking, skidding, and loading. The amount of timber that can be taken to the landing in the same period is also determined. The cost per period is then divided by the volume that can be logged in each period. This procedure should indicate at what point the cost per thousand board feet becomes significant, and indicate a reasonable cost adjustment. It should be noted that it would not apply to the typical situation, but only for those exceptions to a typical operation.

TIME ADJUSTMENT

Values proposed for each new harvest value schedule must be based upon a sufficiently large number of sales to provide accurate and reliable value indicators for each species, age, size, quality, and timber value area. There are no standard appraisal parameters for determining the number of sales necessary for an accurate analysis. Good appraisal practice provides that the market being analyzed dictates the number of sales required. For example, in some timber value areas or for some species, three or four sales will constitute sufficient data to accurately analyze the market. In other instances, more than 100 sales may be necessary for an accurate analysis. Therefore, sales for a two-year period are considered in each six-month valuation cycle.

When using older sales, it may be necessary to adjust sales prices to allow for changes in market conditions from the original sale date to the timber tax appraisal date (the date that the immediate harvest values are estimated—approximately 60 days before the values are effective). The object of time adjustments is to estimate the amount older sales would bring in an open market if sold on the timber tax appraisal date. Both private and government transactions are adjusted using the same time adjustments.

Two years of sales are used in the analyses. Sales are summarized by year of sale, and the older sales' summaries are compared to the newer ones. If values are similar, it may be implied that the time adjustments are reasonable, and that the older sales are reliable value indicators. There are no standard appraisal parameters for determining what constitutes "similar value" indicators. Good appraisal practice provides that the market being analyzed dictates what values are considered similar for comparison purposes. If there are significant differences between the older sales, adjusted for time, and the newer sales, the newer sales are given stronger consideration

when estimating the current market value.[30] Therefore, if sufficient timber sales transactions and data are available close to the date that the harvest values are being determined, those sales transactions should be given the greatest consideration in analyzing the current marketplace.

Since immediate harvest value refers to the value of timber that typically could be harvested in one year, sales with multi-year contracts may produce different indicators than those with short-term contracts due to speculation, favorable financing, or other considerations dealing with wood supply. If differences are found in pricing based upon length of contract, additional weight should be given to the short-term contracts because they generally require fewer adjustments.

RESIDUAL APPRAISAL METHODS

LOG CONVERSION

A log conversion is an appraisal technique used to estimate the value of standing timber. It is defined as the residual value for standing timber after appropriate costs, including allowance for profit and risk, have been subtracted from the price of delivered logs.

Two log conversion variations are used. The first is specific to an individual timber owner, and is used in the sales analysis process of setting immediate harvest values. The actual logging costs of a timber owner are subtracted from the price that a mill paid for delivered logs. The other, derived from average camp run mill price quotes, is used in value correlation. Average tractor costs for similar operations in a timber value area are subtracted from price average quotes for each specific species.

Active log markets exist throughout the forested regions of California. For most species, reliable log price and log sale information can be obtained from landowners or mills that are active in these markets. Most of the sawmills operating in California use the short log Scribner Decimal C log rule and buy logs based upon log size and/or grade as well as a camp run price. When gathering log price or log sales information, Board staff analyzes the parameters of log prices to ensure that variances can be adjusted to reflect a camp run, net short log Scribner Decimal C price.

The costs involved in harvesting and delivering logs to a mill site are gathered from contract loggers since these costs will contain an appropriate amount for profit and risk and are the best representation of prudent costs. Most often, these costs are presented as a single figure, and further analysis is made to determine what is covered. Any portion that is not appropriately chargeable to the removal of the timber is excluded from allowable costs.

Deductible operating costs involved in a log conversion are logging (felling, bucking, yarding, loading, and required slash disposal), hauling, *temporary* road construction and decommissioning, and road maintenance not included in the logging cost. Section 38204 and

[30] For an in-depth description of time adjustments, see Assessors' Handbook Section 501, *Basic Appraisal*, January 2002, at page 91.

Property Tax Rule 1023 exclude the deduction of all costs incurred by the seller before the harvest. These would include *permanent* road construction, timber harvest or management plan preparation, timber cruising, and marketing or administrative costs associated with the harvest or timber management plan approval process. Generally speaking, permit preparation costs are not deductible for log conversion analysis if they are for activities that occur prior to the time the permits are in place. Costs attributable to permit preparation (for example, marking of timber and flagging of streams) are not deductible even when performed after the permit is "in place."

Costs may be quoted on a gross or net scale basis. Gross scale basis means based on the total measured volume prior to any deductions for defects in the logs. Net scale basis means based on measured volume after subtracting deductions for defects in the logs. All costs used in log conversion analysis must be converted to a net scale basis before they are deducted. This is accomplished by multiplying a factor for scaling defect to the gross cost. For example, if the defect of a particular harvest has been determined to be 20 percent, the factor would be 1.2 to convert the cost from a gross scale basis to a net scale basis. The gross cost would be multiplied by the scaling defect factor to arrive at net cost.

The following hypothetical examples illustrate the use of the log conversion approach to value.

Example 1 – Timber Owner Logging Costs

Stump to truck	$150
Haul and road maintenance	50
Temporary road construction	5
	$205 /MBF Net Scale

Species	Delivered Log Price	Logging Cost	Indicated Immediate Harvest Value
RG3	$ 850	$ 205	$ 645
DFG3	500	205	295
CM	300	205	95

Example 2 – Average Timber Value Area Tractor Cost

Species	Regional Delivered Log Prices	TVA Average Tractor Costs	Indicated Immediate Harvest Value
PPG1	$ 700	$ 200	$ 500
DFG3	700	200	500
FG	400	200	200

LUMBER CONVERSION

In addition to the accumulation and analysis of stumpage and log sales, lumber conversions may be used by Board staff as a tool in arriving at proposed immediate harvest values. Although a lumber conversion is a valid method for estimating stumpage value, it is seldom used by Board staff due to the subjectivity and sensitivity of the various factors required in using this approach to value.

In principle, a lumber conversion is similar to a log conversion; that is, costs related to producing the finished product, plus an appropriate amount for profit and risk, are subtracted from the selling price to arrive at an indicated stumpage value. However, since many additional factors must be accounted for in a lumber conversion, it is far more subjective than a log conversion.

EXAMPLE—SALES ANALYSIS PROCESS

The following table is an example of the averages computed for one species in one timber value area (TVA). The example demonstrates the 64 averages computed for government (G) only, private (P) only, and P&G combined for green timber in one TVA. A similar table of averages is produced for the salvage sales for each species. This gives the appraiser a potential of 128 averages for an individual species (with size codes) in each TVA. These averages are all indicators that the appraiser uses when selecting a proposed immediate harvest value for one species in either the green or salvage table. The actual report would show total volume and number of sales for each of these averages.

Green Pines—TVA 7

SC1	Year 3, P (only)	Year 2, P (only)	Year 1,P (only)	Year 1&2, P (only)	Year 1, 2 & 3, P (only)
	Year 3, G (only)	Year 2, G (only)	Year 1, G (only)	Year 1&2, G (only)	Year 1, 2 & 3, G (only)
	Year 3, G&P	Year 2, G&P	Year 1, G&P	Year 1&2, G&P	Year 1, 2 & 3, G&P
	*Without index or deductions				
SC2	Year 3, P (only)	Year 2, P (only)	Year 1, P (only)	Year 1&2, P (only)	Year 1, 2 & 3, P (only)
	Year 3, G (only)	Year 2, G (only)	Year 1, G (only)	Year 1&2, G (only)	Year 1, 2 & 3, G (only)
	Year 3, G&P	Year 2, G&P	Year 1, G&P	Year 1&2, G&P	Year 1, 2 & 3, G&P
	*Without index or deductions				
SC3	Year 3, P (only)	Year 2, P (only)	Year 1, P (only)	Year 1&2, P (only)	Year 1, 2 & 3, P (only)
	Year 3, G (only)	Year 2, G (only)	Year 1, G (only)	Year 1&2, G (only)	Year 1, 2 & 3, G (only)
	Year 3, G&P	Year 2, G&P	Year 1, G&P	Year 1&2, G&P	Year 1, 2 & 3, G&P
	*Without index or deductions				
All SC	Year 3, P (only)	Year 2, P (only)	Year 1, P (only)	Year 1&2, P (only)	Year 1, 2 & 3, P (only)
	Year 3, G (only)	Year 2, G (only)	Year 1, G (only)	Year 1&2, G (only)	Year 1, 2 & 3, G (only)
	Year 3, G&P	Year 2, G&P	Year 1, G&P	Year 1&2, G&P	Year 1, 2 &3, G&P
	*Without index or deductions (includes sales without size codes)				

* Arithmetic average; not weighted by volume (all others are weighted by volume)
Year 1 = current calendar year; Year 2 = previous calendar year; Year 3 = calendar year for two years past
All sales are within the prior 24-month appraisal period.

The following are some of the ways that appraisers use the various indicators developed by the above table:

1. The appraiser starts by focusing on the Year 1&2, G&P, average for the dominant size code (the one with the strongest sales information—most sales and volume) for each species. Typically, this is size code 3 in the green table.

2. In the spring, the appraiser focuses on the Year 1&2, G&P, average because many times there is a shortage of current year sales since, to date, there have only been one to two months of current year sales activity. In the fall, the appraiser will focus on the Year 1 sales since by then there have been nine months of the current year's sales.

3. The appraiser monitors trends between Year 1, Year 2, and Year 3 as indicators of how well the indices are tracking the market and general market trends.

4. The appraiser looks at the relationship between size codes for each species. Occasionally, the relationship of the sales does not fit with the logical expectations—SC-1 being the highest and SC-3 being the lowest values.

5. If there are no sales in a particular size code, the appraiser estimates the value based on other size codes for which there are available sales.

6. The appraiser also analyzes key indicator sales. These are recent sales containing a high percentage of the subject species.

7. Once the appraiser finishes the independent analysis of green and salvage for each species, the appraiser compares the green and the salvage preliminary proposals to ensure the changes in one are consistent with the changes in the other.

8. Next, the appraiser plots the preliminary proposed values on the array of all sales.

9. If the plotted proposals are not well distributed within the array, the appraiser will re-examine the process to make sure that nothing has been misapplied during the analysis process.

10. Once the appraiser is satisfied with the proposed values, the values are compared to the previous schedule to determine the amount of change. If the indicated changes are not representative of changes in the log and stumpage markets, the appraiser re-examines the analysis to validate the conclusions.

Board staff appraisers analyze differences that are evident between indicators, and arrive at a reasonable value conclusion for each timber classification. Each indicator is reviewed to ensure that it accurately represents the timber being valued. The impact of distorted bidding and the existence of other considerations in the purchase price are considered.

RECONCILIATION

DATABASE REPORTS

Once the completed database has had all adjustments applied, a series of reports is produced which assist Board staff in estimating immediate harvest values for each classification and subclassification of timber in the schedules (see Appendix 5). These reports summarize the sales data in a number of different ways, including:

- By weighted average prices for each species category by timber value area
- By year of sale
- By groups of sales from multiple years
- By array of sales prices for each species
- By unweighted average price

Value analysis is initiated as follows, and sales are selected from the database based on:

- Sale dates
- Timber value area
- Helicopter used (yes or no)
- Government or private sale
- Log or stumpage sale
- Logging system
- Total volume parameters
- Volume per log parameters
- Volume per acre parameters
- Other factors as appropriate

The database program then computes a series of average immediate harvest values; some are weighted by volume and some are arithmetic averages. For those sales of more than one year in duration, the species volumes are divided by the number of years and this fractional volume is used as the weighted volume for averages weighted by volume.

APPRAISER DETERMINATION OF SUGGESTED VALUES

Board staff analyze the sales data and determine supportable harvest values for inclusion in the suggested harvest value schedules that are submitted to the TAC for discussion and ultimately to the Board for adoption.

As with the appraisal of all types of property, with the variability of indicated values ultimately produced by the information in the database, Board appraisers must apply a degree of appraisal

judgment in recommending immediate harvest values for the schedules. Since by definition an appraisal is an "estimate of value," all appraisals involve some degree of appraiser judgment. For instance, a timber appraiser must use judgment in rating the quality of the timber involved in a particular sale when determining whether that sale is comparable to other sales of the same timber species. Likewise, the appraiser must use judgment when comparing sales where the volume sold differs significantly since, generally, volume impacts the sales price.

The process of resolving the differences among value indicators is called reconciliation.[31] The result of reconciliation is a meaningful, defensible conclusion concerning the final recommended immediate harvest value.

The final value estimate is not a simple average of the timber sales; one or more sales often have greater significance and are given stronger consideration by the appraiser. Simply calculating an average implies that all the value indicators have equal validity. While this may occur in certain instances, it is usually not the case. The final value estimate must reconcile all available indicators in an analytical manner.

Example

The database grouping for determination of the proposed immediate harvest value for July 1 through December 31, 2005 for green redwood size code 3 in TVA 2N, may provide the following weighted averages:

Species	*2003*	*2004*	*2005*	*2004-2005*	*2003-2005*
RG 3	700	681	590	643	683

The appraiser will analyze the database information to determine a final proposed value. The appraiser will look at each grouping of sales and ask questions such as:

- Are the sales in one grouping more market related than other groupings (is the species bid at prices proportional to their value based on current log markets)?
- Are the sales in one grouping subject to more adjustments than other groupings?
- Are the sales in one grouping comprised of a number of key indicator sales—recent sales containing a high percentage of the subject species?

For the above example, the appraiser may determine through the reconciliation process that the proposed immediate harvest value is, for example, $640 because of the more recent sales.

PEER REVIEW OF VALUES

Once the appraisers have analyzed the data for all TVAs and all species and size codes, the suggested values are scrutinized in a peer review session with the other appraisers. For each

[31] For a complete discussion of the appraisal reconciliation process, see Assessors' Handbook Section 501, *Basic Appraisal* (January 2002, p. 109), and Assessors' Handbook Section 502, *Advanced Appraisal* (December 1998, p. 108).

suggested value, the responsible appraiser provides an explanation and justification for the suggested value.

REVIEW OF SUGGESTED VALUES

Prior to the recommended harvest value schedules being submitted to the TAC and the Board, the values are reviewed by Timber Tax Section supervisors and the County Property Tax Division chief. Values that appear questionable or conflict with those of surrounding timber value areas are discussed in detail and may be re-evaluated.

TAC REVIEW OF VALUES

After management has reviewed the suggested values, the suggested values are sent to the TAC members and interested parties. The TAC meets to discuss the values and accepts public input. The TAC votes to approve or disapprove the suggested values. The result of the vote of the body is transmitted to the Board for its consideration.

SUBSEQUENT VALUE INDICATORS

New sales information may become available during or after the review process of the suggested harvest value schedules. Each group of new sales is analyzed by Board staff to determine if there is an impact on the original value estimates. If changes are in order, they may be made by Board staff prior to the TAC meeting and discussed at the meeting. Changes may also be made when the Board meets to discuss and adopt the suggested value schedules.

BOARD ADOPTION OF VALUES

Before June 30 and before December 31 of each year, the Board adopts values to be used for reporting of timber harvested during the succeeding two quarters. The board takes into consideration staff suggestions, TAC comments, and public input during an open session of the Board.

VALUE LIMITATIONS OF HARVEST VALUE SCHEDULES

Although Board staff expends a great deal of time gathering and analyzing sales of logs and standing timber, it should be noted that values in the Board's Harvest Value Schedules do not necessarily represent the value of any individual timber harvest. The schedule values are based on information from many sources, including timber sales of varying size, quality, logging conditions, access, aspect (general direction the slope of the site faces), elevation, soils, etc. What an individual seller may receive for his or her timber will not necessarily be the same as the values in the schedules. Value schedules are not a substitute for a market value appraisal for any particular tract of timber. They are values estimated based on the analysis of many different transactions over a large geographic area.

MODIFIED HARVEST VALUES

Occasionally, a catastrophic event, such as a wildfire, will significantly alter the market value of a large volume of timber. When the market value is affected to such an extent that the existing harvest value schedule does not represent that market value, then a modified schedule is considered. Modifications to the Board-adopted harvest value schedules may be initiated by the Board or in response to a taxpayer's request.[32]

When a taxpayer requests a modification to the immediate harvest value schedule, the Board may adopt a modified schedule without consulting with the TAC. However, if Board staff proposes to modify the schedule, it shall consult with the TAC.[33] Modified values are then presented to the Board for adoption prior to being used for reporting by taxpayers. These modified values are established for a specific period of time, condition, and timber value area, and are usually applicable to all similarly affected timber within the same timber value area.

Once modified harvest values have been adopted by the Board, the modified schedules are distributed to the taxpayers in the affected timber value area.

[32] Section 38204, subdivision (b).
[33] *Ibid.*

CHAPTER 3: TIMBER ADVISORY COMMITTEE

Pursuant to the requirements of section 434.2, the Board has maintained a Timber Advisory Committee since the enactment of the Timber Yield Tax Law in 1976. Section 434.2 provides:

> Within 30 days of the effective date of this section, the board shall appoint the timber advisory committee as defined in subdivision (c) of Section 431.

Subdivision (c) of section 431 provides that:

> "Timber Advisory Committee" means a standing committee appointed by the board composed of one representative of the Board of Equalization, one representative of the State Board of Forestry and Fire Protection, five assessors from the rate adjustment counties defined in Section 38105, and one member representing small-scale timber owners, and one member representing large-scale timber owners.

DUTIES

Sections 434, 434.1, 38109, 38116, 38204 and Property Tax Rule 1023 include references to various duties of the TAC. With the exception of indicating that the TAC is to consult with the Board, the statutes are silent as to specific duties and responsibilities of the Committee. However, in an opinion dated August 29, 1978, the Attorney General stated that the duties of the TAC "... are advisory in nature and encompass no administrative responsibilities."[34] That is, the TAC's purpose is to advise the Board relative to the Board's fulfillment of its responsibilities in the administration of the Timber Yield Tax Law. After meeting, discussing, and voting, the TAC advises the Board on timber issues as one body.

The original language of the Z'Berg-Warren-Keene-Collier Forest Taxation Reform Act required that the Board complete the following duties after consultation with the TAC:

- On or before September 1, 1976, prepare instructions setting forth temporary criteria and procedures for grading timberland on the basis of site quality and operability.[35]
- Prior to December 31, 1976, and periodically thereafter, adopt regulations establishing a standard unit of measure for timber and conversion factors for converting other units of measure to the standard.[36]

[34] A. G. Opinion CV 78-52.
[35] Section 434.
[36] Section 38109.

- On or before December 31, 1976, designate areas containing timber having similar growing, harvesting, and marketing conditions to be used as timber value areas for the preparation and application of immediate harvest values.[37]

- On or before March 1, 1977, estimate the immediate harvest values of each species or subclassification of timber within the timber value areas for timber to be harvested between April 1 and December 31, 1977. On June 30 and December 31 of each year thereafter, estimate the immediate harvest values for timber harvested during the succeeding two calendar quarters.[38]

- On or before March 1, 1977, adopt regulations setting forth the final procedures for grading timberland on the basis of its site quality and operability, replacing the instructions adopted on or before September 1, 1976.[39]

- On or before January 1, 1980, and every three years thereafter, adopt schedules re-establishing the value of each grade of timberland pursuant to section 434 (section 434.5 (b)).[40]

In addition to the specific statutory duties listed above, the TAC, at the direction of the Board and/or staff, performs other duties in support of the timber tax program, such as reviewing proposed amendments to statutes or administrative rules, and generally advising the Board on timber issues. The following significant changes have been made by the Board, through the consultation and advice of the TAC, in the timber tax program since completing the initial statutory requirements of the Z'Berg-Warren-Keene-Collier Forest Reform Taxation Act:

- In 1997, the harvest value schedules were simplified. This included the allowance of adjustments in the form of deductions to the values in the schedules for logging systems, small total volumes, and county locations.

- In 1998, Property Tax Rule 1024, *Exempt Timber*, was adopted for the purpose of exempting any timber from the timber yield tax if the tax on the timber would amount to less than the cost of administering and collecting the tax.[41]

- In 2000, the timber yield tax was converted from a system using old-growth and young-growth classifications to a system based on average log size, removing much of the subjectivity of the previous system. Additionally, some species were consolidated, thereby reducing the number of categories and further simplifying the harvest value schedules.

- In 2001, based on historical data, a firm standard was implemented for establishing the value of salvage species. Specifically, when there are not enough salvage sales in a species

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[37] Section 38204.
[38] ~~Section 38109; Property Tax Rule 1023, *Immediate Harvest Value.*~~Section 38204.
[39] Section 434.1, subdivision (a).
[40] Section 434.5 was rewritten in 1984 establishing new values for timberland and implementing a formula for adjusting timberland values for subsequent years.
[41] Section 38116.

category to establish its immediate harvest value, the value is deemed to be 75 percent of the corresponding green values listed in the harvest value schedules.

MEETINGS

There is no set schedule governing when or how often the TAC will meet. When the timber yield tax system was being implemented, meetings were held on a frequent basis to address important issues and statutory requirements. Currently, the TAC meets twice a year, which enables the Board to consult with the TAC members before holding public hearings to adopt harvest values and schedules.

Additional TAC meetings may be convened if timber program issues arise that require the Board or its staff to consult with the TAC members. All TAC meetings are public and subject to public noticing and disclosure requirements.

OFFICERS

At the inaugural meeting of the TAC, the members elected two officers – a Chair and a Vice-Chair/Secretary. The Board's representative to the TAC was selected to serve as the Chair at that meeting, and has continued to serve as Chair since that time. The Humboldt County Assessor was selected as Vice-Chair/Secretary, and continued to serve in that capacity until he retired. In 1994, the Del Norte County Assessor was selected as Vice-Chair/Secretary, and continues to serve in that capacity.

If the TAC members desire to do so, they may elect new officers each year.

TENURE OF MEMBERS

The Board is given authority to appoint the TAC members pursuant to section 431.[42] Pursuant to Board policy, the TAC members serve one-year terms and are appointed for each calendar year.[43]

Most of the TAC members have been re-appointed several times and, thus, have long-standing tenure. Since the TAC is a standing committee of the Board, its members must take an oath of office.[44] Either a Board Member or the Board's Executive Director administers the oaths of office to the members at the first TAC meeting scheduled after their appointment.

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[42] Subdivision (c).
[43] Meeting of the Board of Equalization, February 9, 1995.
[44] Government Code section 1360.

ALTERNATES

Members of the TAC may appoint alternates to serve in their absence. The members may, at the members' discretion, grant any powers they have to alternates, including voting privileges. The controlling statute is section 7 which provides:

> Whenever a power is granted to, or a duty imposed on, any person or board by any provision of this code, it may be exercised or performed by any deputy or person authorized by the person or board to whom the power is granted or on whom the duty is imposed, unless it is expressly provided that the power or duty shall be exercised or performed only by the person or board to whom the power is granted or on whom the duty is imposed.

Since the appointment of an alternate is a statutory right of the TAC members, the other Committee members may not limit this right by majority vote or otherwise.

COMPENSATION OF TAC MEMBERS

The members do not receive direct compensation for serving on the TAC. However, Government Code section 11009 provides for payment to reimburse members for necessary expenses, such as travel and per diem living expenses. In order for a member to receive expense reimbursement, the document evidencing that a member has taken the oath of office at the time of appointment must be filed with the Secretary of State. Board staff files these papers on behalf of the members.

CHAPTER 4: TIMBER PRODUCTION ZONE LANDS

Privately owned land and land acquired for state forest purposes which is primarily devoted to growing and harvesting timber, and is zoned for a minimum 10-year period as timberland production zone, is valued for property taxation on the basis of its use for growing and harvesting timber, plus the value attributable to any existing compatible, nonexclusive uses of the land.

The purpose of sections 51110 through 51119.5 is to establish timberland production zones (TPZ)[45] to be valued for property taxation on the basis of lands used for growing and harvesting timber only. The original 1977 statutory scheme for zoning property as timberland production was quite extensive:

- The county assessor was required to determine parcels which, as of the lien date in 1976, were assessed for growing and harvesting timber as the highest and best use of the land—referred to as "List A."[46]
- The county assessor was required to determine parcels which, as of the lien date in 1976, appeared in the assessor's judgment to have constituted timberland, but which were not assessed for growing and harvesting timber as the highest and best use of the land—referred to as "List B."[47]
- The county or city planning commission was required to hold public hearings on parcels and to make recommendations to the board of supervisors.[48]
- Landowners whose properties were not included on either List A or List B could petition to the board of supervisors to have their properties added to the timberland production zone.[49]
- The board of supervisors was required to hold public hearings on parcels and consider the recommendations of the planning commission prior to having parcels zoned as timberland production.[50]

Despite the desirability and advantages of having land zoned as timberland production, the Legislature was cognizant of the long-standing right of owners of properties to do with their properties what they wish. Therefore, provision was made for owners to demonstrate that it would not be in the public interest for their parcels to be zoned as timberland production.[51]

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[45] Also known as "timberland preserve zones."
[46] Section 51110.
[47] Section 51110.1.
[48] Section 51110.2.
[49] Section 51110.3.
[50] Section 51112.
[51] Section 51110.

Today, all parcels zoned as timberland production are zoned as such for an initial term of 10 years. On the first and each subsequent anniversary date of the initial zoning, a year is added to the initial term of 10 years, unless a notice of rezoning is given. [52] All parcels in a timberland production zone are valued pursuant to the Timber Yield Tax Law.

COMPATIBLE USES

Timberland means any land that is devoted to and used for growing and harvesting timber and compatible uses.[53] *Compatible use* is defined in section 51104, subdivision (h), as:

> "Compatible use" is any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber, and shall include, but not be limited to, any of the following, unless in a specific instance such a use would be contrary to the preceding definition of compatible use:
>
> (1) Management for watershed.
>
> (2) Management for fish and wildlife habitat or hunting and fishing.
>
> (3) A use integrally related to the growing, harvesting and processing of forest products, including but not limited to roads, log landings, and log storage areas.
>
> (4) The erection, construction, alteration, or maintenance of gas, electronic, water, or communication transmission facilities.
>
> (5) Grazing.
>
> (6) A residence or other structure necessary for the management of land zoned as timberland production.

The county board of supervisors or city council was mandated in 1976 to adopt a list and detailed description of compatible uses additional to those legislated in section 51104.[54] Subsequently, the board or council continues to make determinations regarding compatible uses within the timberland production zones.

Property restricted to timberland use is excluded from the provisions of Article XIII A (commonly known as Proposition 13) and instead is valued under the Timber Yield Tax Law. However, property not subject to valuation under the Timber Yield Tax Law within a timberland production zone, such as structures, structure sites, and compatible uses, is to be valued according to the provisions of Proposition 13, i.e., valued at their adjusted base year value or at

[52] Section 51114.
[53] Section 38103.1.
[54] Section 51111.

current market value, whichever is less~~, depending on whether the use is considered a "nonexclusive" or "exclusive" compatible use~~.

"Nonexclusive" compatible uses of timberlands, such as grazing, receive different treatment than "exclusive" compatible uses, such as a structure site. The lesser of fair market ~~current full cash~~ value or factored base year value attributable to a nonexclusive compatible use is determined and enrolled annually, above and beyond the TPZ value.[55]

For exclusive compatible uses, any structure on the land or an area of reasonable size used as a site for compatible uses are not restricted or subject to TPZ restrictions.[56] Therefore, the taxable value attributable to an area used exclusively as a site for an approved compatible use is the lesser of its factored base year value or fair market value.[57]

A special base year problem is created when, for example, a new homesite is developed on a TPZ property, thereby changing a portion of the property's use from timberland production to residential. The question then becomes, what base year should be assigned to the portion of land developed into the residential site? There has been no change in ownership that would warrant a reappraisal of the site, yet new construction such as grading has been performed that has brought about a change in use.

Property Tax Rule 463, subsection (b)(2), defines *newly constructed* or *new construction* to mean and include:

> Any substantial physical alteration of land which constitutes a major rehabilitation of the land or results in a change in the way the property is used ... In any instance in which an alteration is substantial enough to require reappraisal, *only* the value of the alteration shall be added to the base year value of the preexisting land or improvements. Increase in land value caused by appreciation or a zoning change rather than new construction shall not be enrolled.... (Emphasis added.)

Therefore, while the value added by the physical alteration is assessable, the value attributable to the change in use is not assessable. Any physical changes such as driveway, grading, domestic wells, etc., associated with the newly created site should be assessed as new construction and assigned a base year as of the date of completion. However, the underlying land cannot be reassessed, and the base year value allocation has to be made as of the last actual change in ownership.

Example

> Assume that a 160-acre TPZ property, with no improvements, transferred in September 2003. In July 2005, construction is completed on a new residence and the appraiser determines that the appropriate size for the site is one acre.

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[55] Section 435, subdivision (a).
[56] Section 435, subdivision (c).
[57] Section 435, subdivision (b).

In this example, the base year value of the newly created site should be established based on the value of comparable one-acre homesites in 2003. If it is determined that the proper 2003 value is $100,000, this becomes the base year value for the homesite. The value of any new construction—such as driveways, grading, domestic wells, etc.—should be added to the $100,000 (plus appropriate factoring) to establish the site value.

Similarly, if TPZ property changes ownership and a portion of the property has been designated as a compatible use site, for example a residence (exclusive compatible use), the portion of the property designated as the residential site is subject to the change in ownership statutes applicable to Proposition 13. Therefore, upon change in ownership, the portion of the land designated for the residential site, and any improvements on that portion of land, will receive a new base year value and will be subject to supplemental assessment statutes.[58]

As an exception, the values of **temporary** access roads, culverts, drainage ditches, and other improvements necessary to the growing and harvesting of timber by providing *accessibility to point of conversion*[59] are not valued pursuant to Proposition 13, but are included in the estimates of immediate harvest value for the relevant timber value area. Thus, roads, culverts, drainage ditches, and improvements necessary for timber access are not assessable as a compatible, nonexclusive use of timberland, except to the extent that they may exceed what is necessary to provide essential accessibility.

LAND VALUES

Section 434 sets forth instructions for grading timberland into five general site quality classes for each timber region or sub-zone. Each of these site quality classes is the same as adopted by the State Board of Forestry.[60] There are two timber regions and one sub-zone for timberlands within California:

- Redwood Region[61]
- Whitewood Subzone of the Redwood Region[62]
- Pine-Mixed Conifer Region[63]

From the inception of the Timber Yield Tax and TPZ until lien date 1984, TPZ lands were valued using the sales comparison and income capitalization approaches to establish bare land values. In 1983, the Legislature replaced the previous land values with a schedule of bare land values that is subject to annual adjustment. Section 434.5 prescribes the method of making annual adjustments to the value per acre of TPZ property for the various site classes and timber regions.

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[58] Sections 75 through 75.80.
[59] Section 38109.
[60] Section 4528, subdivision (d), and section 4528, Public Resources Code.
[61] Section 434.5, subdivision (a)(1).
[62] Section 434.5, subdivision (a)(2).
[63] Section 434.5, subdivision (a)(3).

CALCULATION OF TIMBERLAND PRODUCTION ZONE VALUES

A rolling five-year average is used to calculate the percent of change which is applied to the previous land values to compute new land values.[64] Each fiscal year, the total of saw log harvest value and volume is calculated into a single average value for all species reported on a board foot basis. A fiscal year of harvest reports is comprised of the total of the third and fourth quarter of one year, and the first and second quarter of the successive calendar year. Volume is the total of all green timber and salvage timber, and the immediate harvest value total is all green and salvage timber.

The annual adjustment is a measurement of percent change between two sets of five-year periodic averages. Each of these sets consists of the average of five annual averages combined for the "five-year periodic immediate harvest value." Using the most current six years of reporting, set one consists of years one through five in chronological order. Set two consists of years two through six. The percent change, rounded to the nearest one-tenth of 1 percent, between these two sets of periodic averages is then divided by two and applied to the previous year's values. The dollar amount is then rounded to the nearest dollar before being added to the previous year's timberland value.

Example of How the Percentage of Change is Calculated

Fiscal Year	Volume Logged	Harvest Value	Average $/M
(1) 1998 – 1999	2,239,822	$774,664,690	(1) $345.86
(2) 1999 – 2000	2,179,497	$825,642,326	(2) $378.82
(3) 2000 – 2001	1,848,645	$845,644,868	(3) $457.44
(4) 2001 – 2002	1,652,280	$502,457,129	(4) $304.10
(5) 2002 – 2003	1,632,072	$420,989,485	(5) $257.95
(6) 2003 – 2004	1,816,420	$493,022,147	(6) $271.43

First 5-Year Periodic Average	Second 5-Year Periodic Average	
(1) $345.86	(2) $378.82	
(2) 378.82	(3) 457.44	
(3) 457.44	(4) 304.10	
(4) 304.10	(5) 257.95	
(5) 257.95	(6) 271.43	
Total $1,744.17	Total $1,669.74	Total divided by 5 equals the average
Average $348.83	Average $333.95	

($333.95 – $348.83) ÷ $348.83 x 100 = -4.27% (-4.3% rounded)

-4.3% ÷ 2 = -2.1%

[64] Section 434.5.

Example of How the Percent of Change is Applied

Redwood Region	2004 Value		% of Change	Change	2005 Value
Site I	$272	x	-2.1%	$ -6	$266
Site II	$221	x	-2.1%	$ -5	$216
Site III	$193	x	-2.1%	$ -4	$189
Site IV	$168	x	-2.1%	$ -4	$164
Site V	$ 53	x	-2.1%	$ -1	$52

The adjusted values are sent to the Board for approval each year, prior to November 30. After approval, the Board certifies to county assessors the values to be used in the following calendar year for lands zoned timberland production.

REZONING

Sections 51120 through 51146 describe the process of getting TPZ lands rezoned to an alternative use. The law describes two methods of rezoning TPZ property:[65] *rezoning* or *immediate rezoning*. Rezoning may be initiated by either the owner or by the county board or council and involves the non-renewal of the 10-year term of the TPZ and a change in zoning after the 10-year contract expires. Immediate rezoning, as the name implies, may be done immediately when the continued use of the TPZ is neither necessary nor desirable to accomplish the purposes of section 3(j) of Article XIII of the Constitution.[66] Immediate rezoning may only be initiated by the owner.

Removal from TPZ over a 10-year period requires the landowner or the county board or council to give written notice at least 90 days prior to the anniversary date of the original zoning date. If no timely written notice is provided, the zoning is automatically deemed extended.

The written notice must name the new zoning desired and follow the procedures established in Government Code sections 65854 through 65857. With timely written notice, rezoning proceeds as follows:[67]

- Within 120 days of receipt of the written notice of an owner's desire to rezone a parcel, the county board or council, after a public hearing, will rule on the request for rezoning.
- The county board or council, by a majority vote of the full body, may remove the parcel from the TPZ and must specify a new zone for the parcel.
- The new zone will become effective 10 years from the date of approval. Upon rezoning, the parcel will be valued pursuant to section 426 in the same manner as if a restriction were terminated.[68]

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[65] Sections 51120, 51121, and 51130 through 51134.
[66] Section 51130.
[67] Section 51120.
[68] Sections 51091 or 51245.

- If the county board or council denies the owner's request for rezoning, the owner may petition for a rehearing.

If a county board or council desires not to extend the term of a TPZ, then, after a public hearing, the county board or council must give written notice of its intent to change the zoning. Written notice must be given at least 90 days prior to the anniversary date of the zoning, or the zoning will be deemed extended. Once the notice is provided to the landowner, the owner has 30 days to appeal. The county board or council may at any time prior to the anniversary date withdraw the notice of intent to rezone. [69]

The county board or council must hold a public hearing to reaffirm its intent to change the zoning. A new zone of a parcel will be effective 10 years from the date of the reaffirmation vote. Upon rezoning, the parcel will be valued pursuant to section 426.[70]

Section 426 contains specific directives concerning the valuation procedure applicable to land subject to a terminating restriction. Such land shall be valued annually by:

1. Determining the full cash value of the land according to section 110.1 (factored base year value), or, if the land will not be subject to Article XIII A upon the expiration of the contract, according to section 110 or other special restricted assessment provided for in the law;

2. Determining the restricted value of the land by the method specified for TPZ land as provided by section 435;

3. Subtracting the restricted value from the value determined in 1 above;

4. Discounting the difference between the restricted value and the value determined in 1 for the number of years remaining until the termination of the enforceable restriction at the interest rate announced by the Board (annually by October 1) pursuant to subdivision (b)(1) of section 423; and

5. Adding this discounted value to the TPZ value determined in 2 above.

Note that the discount rate is only the interest rate announced by the Board and does not contain the risk and tax components that are included in the open-space capitalization rate. The discounting period is the number of years remaining until the termination of the enforceable restriction. Therefore, the first computation after a notice of nonrenewal will be for a term of nine years (unless a governmental notice is protested by the property owner), and this term will decrease for each succeeding computation.

As an example of this procedure, assume that the factored base year value of a parcel of land that will be subject to Article XIII A following termination for nonrenewal is $5,000 per acre. The restricted value of this land is $266 per acre, the remaining term of the restriction is nine years,

[69] Section 51121, subdivisions (a) and (b) .
[70] Section 51121, subdivision (d).

and the open-space rate last announced by the Board is 4.75 percent. The computation of the restricted land value for the first year of nonrenewal would be:

Per acre factored base year value	$5,000
Per acre restricted value	$266
PW 1 deferred 9 years @ 4.75%	0.658588
0.658588 ($5,000 - $266) + $266	$3,384 per acre

If the factored base year value and the restricted value of the land are the same, no discounting is necessary.

IMMEDIATE REZONING

If an application for conversion is required pursuant to section 4621 of the Public Resources Code, rezoning can be approved by a four-fifths vote of the full county board or council and all of the following occur:[71]

1. A public hearing with notice to property owners within one mile of the property.
2. A written finding by the county board or council that immediate rezoning is not inconsistent with subdivision (j) of section 3 of Article XIII of the California Constitution.
3. A written finding by the county board or council that rezoning is in the public interest.
4. Approval by the Board of Forestry and Fire Protection.

If an application for conversion is not required pursuant to section 4621 of the Public Resources Code, rezoning can be approved by four-fifths vote of the full county board or council and written findings that all of the following exist:[72]

1. The immediate rezoning would be in the public interest.
2. The immediate rezoning does not have a substantial and unmitigated adverse effect upon the continued timber growing use or open space use of other land zoned as timberland production and situated within one mile of the exterior boundary of the land on which the immediate rezoning is proposed.
3. The soils, slopes, and watershed conditions will be suitable for the uses proposed by the applicant if the immediate rezoning is approved.
4. The immediate rezoning is not inconsistent with the purposes of subdivision (j) of section 3 of Article XIII of the California Constitution.

[71] Section 51133.
[72] Section 51134.

RECOUPMENT FEE

Properties that are approved for immediate rezoning are subject to a tax recoupment fee. The fee is calculated from the difference between the tax levied on a reassessment of the rezoned parcel and the amount of tax last levied against the TPZ property.[73] The difference is then multiplied by the "multiple" chosen from the following table:

Year	*Multiple*
1	1.06000
2	2.18360
3	3.37462
4	4.63709
5	5.97332
6	7.39384
7	8.89747
8	10.49132
9	12.18080
10	13.97164

Example of Calculating a Recoupment Fee

A landowner has a 160-acre parcel that has been zoned TPZ for the last 10 years, Site II, Redwood Region.

The current tax liability is:

160 (acres) x $221 (Site II, Redwood Region value) = $35,360 value

$35,360 x .01 (tax rate) = $353.60 tax

After the property undergoes immediate rezoning to RR-10, the tax liability is:

Assessed value is set at $750,000 or $4,687.50 per acre

$750,000 x .01 (tax rate) = $7,500 tax

The tax recoupment fee is:

$7,500 (new tax) - $353.60 (prior tax) = $7,146.40 x 13.97164 (10-year multiple) = $99,846.93 recoupment fee

The recoupment fee is payable to the county in which the rezoning occurs. The fee is enrolled on the county assessment roll and becomes a lien on the property.

[73] Section 51142.

The landowner can submit a written application to the Board or the county board, if the county has an authorizing resolution, requesting a waiver of the recoupment fee. All or part of the fee can be waived if it is determined to be in the best interest of the public.

APPENDIX 1: PROPERTY TAX RULES

Title 18, Public Revenues
California Code of Regulations

RULE 41. MARKET VALUE OF TIMBERLAND.

Reference: Sections 110, 401, 423.5, Revenue and Taxation Code.

(a) THE TIMBER APPRAISAL UNIT. In determining the timber to be valued as a unit, there shall be combined those parcels having:

(1) The same legal ownership. Timber sale contracts shall not be included in the unit.

(2) Commercial timber production as a dominant use.

(3) Geographical and physical conditions which permit similar treatment and economic removal of the timber to a common processing center. The typical practices of timberland owners and timber purchasers shall be used as a guide to indicate the geographical areas which are suitable for inclusion in the unit. Parcels shall not be excluded from the unit because they are outside the county, or because they are eligible for assessment under section 423.5 of the Revenue and Taxation Code.

(b) IMMEDIATE HARVEST VALUE OF TIMBER. The immediate harvest value of the timber on each of the separate parcels in the unit shall be determined. Immediate harvest value is the amount of cash or its equivalent for which timber would be transferred from a willing and informed seller to a willing and informed buyer, both seeking to maximize their incomes, if the timber could be harvested in the forthcoming year. The appraiser must consider all elements of value, such as volume by species, quality, defect, market conditions, volume per acre, size of timber, accessibility, topography, logging conditions, and distance from a processing center capable of utilizing the timber.

(c) MARKET VALUE OF TIMBER. This section shall only apply to timber in the unit not eligible for assessment under section 423.5 of the Revenue and Taxation Code. The immediate harvest value of the timber on the timber appraisal unit is synonymous with market value if all the merchantable timber may reasonably be harvested in the forthcoming year. If the immediate harvest value of the timber on the appraisal unit is not synonymous with market value, it shall be converted to market value by application of a valuation factor to the immediate harvest value of the timber on each parcel in the unit. In determining the valuation factor, the appraiser shall consider the effect on market value of the total timber volume on the unit and the length of time over which the owner and knowledgeable prospective purchasers might reasonably be expected to harvest the timber, as indicated by sales of comparable timbered properties.

(d) MARKET VALUE OF TIMBERLAND. This section shall only apply to areas in the unit not eligible for assessment under section 423.5 of the Revenue and Taxation Code. The market value of the timber on each parcel in the appraisal unit shall be added to the market value of the land as determined by the comparative sales approach. When land included within the timber appraisal unit has uses in addition to timber production, the appraiser shall determine its value with consideration for such uses, as evidenced by recent sales of comparable land. Allowances must be made for the value of any trees or improvements included in the sales of properties used as indicators of the value of land in the appraisal unit.

History: Adopted March 27, 1968, effective April 28, 1968.
Amended November 16, 1972, effective January 21, 1973.

RULE 53. OPEN-SPACE VALUE OF TIMBERLAND.

Reference: Section 423.5, Revenue and Taxation Code.

(a) THE TIMBER APPRAISAL UNIT. The timber appraisal unit shall be as defined in Property Tax Rule No. 41, except that it shall include only properties eligible for assessment under section 423.5 of the Revenue and Taxation Code.

(b) TAXABLE VALUE. Land and standing timber used for the production of timber for commercial purposes, whether planted or of natural growth, when eligible for assessment under section 423.5 of the Revenue and Taxation Code, shall be valued by determining the present worth of the net income which the future harvest of timber crops can reasonably be expected to yield and the present worth of the net income attributable to other allowed compatible uses of the land. The value of timber which is exempt under Article XIII, section 3 (j) of the State Constitution shall be excluded when determining taxable value of the property, but the value of land supporting exempt timber shall be included and determined in accordance with section (f).

(c) NET INCOME. The amount of income to be capitalized is the net income which an informed owner or an informed buyer of the timber appraisal unit may anticipate on the lien date that the property assessable under section 423.5 of the Revenue and Taxation Code will yield in the future from the harvest of timber crops and the net income from other allowed compatible uses of the property. Net income shall be estimated as follows:

(1) When computing the expected annual or periodic net income from the harvest of timber crops, the appraiser shall determine the difference between revenue and expenditures. Revenue shall be estimated by multiplying the expected annual or periodic volume of timber to be harvested in the future by the immediate harvest value per unit of volume for similar timber. Revenue shall include all income from all forest products. Expenditures shall include the estimated outlays of money which are ordinary and necessary for the production and maintenance of revenue as defined in section 423 of the Revenue and Taxation Code.

(2) When computing the net income attributable to compatible uses, the appraiser shall determine the difference between revenues and expenditures for each type of compatible use. Revenue shall be estimated on the basis of rents, fees, or charges for the use as provided by recently consummated leases, contracts, or verbal agreements on the subject property or comparable properties. Expenditures shall include any outlays which are ordinary and necessary for the production of revenue from the compatible use.

(d) INCOME CAPITALIZATION. The shape of the future net income stream shall govern the method used to discount the various future incomes.

(1) If the property is capable of producing an equal annual income in perpetuity or may be valued as if it will produce an equal annual income, the expected annual net income shall be divided by the capitalization rate to estimate present worth.

(2) If the property is capable of producing an equal periodic income in perpetuity or may be valued as if it will produce an equal periodic income, the expected net income shall be divided by $(1 + p)n-1$, where n is the number of years between receipt of the periodic incomes and p is the capitalization rate.

(3) If the property is not capable of producing perpetually an equal annual income or an equal periodic income, but is capable of producing unequal annual or periodic incomes at regular or irregular intervals, the present worth of the net income stream shall be estimated by computing the sum of the present worths of the individual incomes on a year-by-year or period-by-period basis.

(e) AREAS WITHOUT TIMBER EXEMPTION. The appraiser shall estimate the annual or periodic net income from these areas in accordance with section (c). Taxable value will be the present worth of land and timber in accordance with section (d), using the capitalization rate prescribed in section 423 (b) (1), (2), and (3) of the Revenue and Taxation Code.

(f) AREAS WITH TIMBER EXEMPTION. In determining the taxable value for these areas by excluding the value of exempt timber, the appraiser shall:

(1) Derive a total value for the land and exempt timber by:

(A) Estimating the annual or periodic net income from these areas in accordance with section (c).

(B) Computing the present worth of the land and timber in accordance with section (d), using a capitalization rate which is the sum of the bond and risk rate components prescribed in section 423 (b) (1) and (2) of the Revenue and Taxation Code.

(2) Allocate the total value derived in (1) between the land and exempt timber by:

(A) Estimating the market value of the property using the comparative sales approach.

(B) Subtracting the estimated market value of the timber. The remainder will be the estimated market value of the land under the exempt timber and is to be used only for purposes of allocating present worth between the exempt timber and the land thereunder.

(C) Multiplying the present worth of the property, as determined in (1) (B), by the ratio of the market value of the land to the total market value of the property, as determined from (2) (A) and (B), to derive the present worth of the land plus the present worth of the taxes.

(D) Computing the taxable value of the land by multiplying the present worth derived in (2) (C) by a fraction in which the numerator is the sum of the capitalization rate components prescribed in section 423 (b) (1) and (2) and the denominator is the sum of the capitalization rate components prescribed in section 423 (b) (1), (2), and (3).

(g) TOTAL TAXABLE PROPERTY VALUE. The taxable value for the nonexempt areas, as determined in section (e), shall be added to the taxable value for the exempt areas, as determined in section (f), to determine the total taxable property value. The value assigned to each parcel in the unit shall reasonably reflect each source of income that is attributable to the parcel.

(h) EFFECTIVE DATE. This rule shall be effective from and after March 1, 1973.

History: Adopted November 16, 1972, effective March 1, 1973.
Amended December 17, 1975, effective January 25, 1976.

RULE 471. TIMBERLAND.

Reference: Article XIII A, Sections 1 and 2, California Constitution.

Consistent with the intent of the provisions of Section 3 (j) of Article XIII of the California Constitution and the legislative interpretation thereof, the value for land which has been zoned as timberland pursuant to Section 51110 or 51113 of the Government Code shall be ascertained for the 1979 lien date from the schedule contained in Section 434.5 of the Revenue and Taxation Code and thereafter from the most recent board-adopted timberland site class value schedule.

History: Adopted June 29,1978, effective July 3, 1978.
Amended September 26, 1978, effective October 2, 1978.
Repealed Old Rule and Adopted New Rule August 16, 1979, effective August 22, 1979.

RULE 1020. TIMBER VALUE AREAS.

References: Section 38109, 38204, Revenue and Taxation Code.

The following nine designated areas contain timber having similar growing, harvesting and marketing conditions and shall be used as timber value areas in the preparation and application of immediate harvest values:

Area 1
Del Norte County
Humboldt County
Trinity County south and west of that part of the exterior boundary of the Shasta-Trinity National Forest between Humboldt and Tehama Counties

Area 2
Alameda County
Contra Costa County
Marin County
Mendocino County
Monterey County
San Francisco County
San Mateo County
Santa Clara County
Santa Cruz County
Sonoma County

Area 3
Siskiyou County west of Interstate Highway No. 5

Area 4
Shasta County west of Interstate Highway No. 5
Trinity County except that portion which is south and west of that part of the exterior boundary of the Shasta-Trinity National Forest between Humboldt and Tehama Counties

Area 5
Colusa County
Glenn County
Lake County
Napa County
Sacramento County
Solano County
Tehama County west of Interstate Highway No. 5

Area 6
Lassen County
Modoc County
Shasta County east of State Highway No. 89
Siskiyou County east of Interstate Highway No. 5

Area 7
Butte County
Nevada County
Placer County
Plumas County
Shasta County between Interstate Highway No. 5 and State Highway No. 89
Sierra County
Sutter County
Tehama County east of Interstate Highway No. 5
Yuba County

Area 8
Amador County
Calaveras County
El Dorado County
Tuolumne County

Area 9

Alpine County
Fresno County
Imperial County
Inyo County
Kern County
Kings County
Los Angeles County
Madera County
Mariposa County
Merced County
Mono County
Orange County
Riverside County
San Benito County
San Bernardino County
San Diego County
San Joaquin County
San Luis Obispo County
Santa Barbara County
Stanislaus County
Tulare County
Ventura County

History: Adopted November 4, 1976, effective January 1, 1977.
Amended January 31, 1977, effective February 1, 1977.

RULE 1021. TIMBERLAND GRADING RULE.

References: Sections 434.1, 38204, Revenue and Taxation Code.

(a) GENERAL. Beginning with the 1977-78 fiscal year, privately owned land and land acquired for state forest purposes which is primarily devoted to and used for growing and harvesting timber and is zoned for a minimum 10-year period as timberland production zone (TPZ) will be valued for property taxation on the basis of its use for growing and harvesting timber, plus the value, if any, attributable to existing, compatible, nonexclusive uses of the land.

(b) SITE QUALITY. Timberland is rated for productivity based upon its ability to produce wood growth on trees. Five general site classes are established wherein Site I denotes areas of highest productivity, Site II and Site 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.

Land zoned as timberland production zone (TPZ) shall be graded by the assessor using the following site classification table as a measure of land productivity.

TIMBERLAND PRODUCTION ZONE SITE CLASSIFICATION TABLE

Productivity Potential	*Young Growth Redwood*[1]		*Douglas Fir*[2]		*Ponderosa Pine Jeffrey Pine, Mixed Conifer & True Fir*[3]		
	Site Class	Site Index Feet @ 100 yrs.	Site Class	Site Index Feet @ 100 yrs.	Site Class	Site Index Feet @ 100 yrs	Site Index Feet @ 300 yrs.
Highest	I	180 or more	I	194 or more	I	114 or more	163 or more
Inter-mediate	II	155-179	II	164-193	II	93-113	138-162
	III	130-154	III	134-163	III	75-92	113-137
	IV	105-129	IV	103-133	IV	60-74	88-112
Lowest	V	Less Than 105	V	Less Than 103	V	Less Than 60	Less Than 88

[1] Lindquist, James L., and Marshall N. Palley. Empirical yield tables for young-growth redwood, Calif. Agr. Exp. Stn. Bull. 796, 47 pp., 1963.

[2] McArdle, Richard E., and Walter H. Meyer. The yield of Douglas fir in the Pacific Northwest. USDA Tech. Bull. 201, 74 pp., Rev. 1961. Adjusted to average height of dominant trees after Forest Research Note No. 44, Pacific Northwest Forest and Range Experiment Station, by Forest Survey, Calif. Forest and Range Exp. Stn., 1948.

[3] Dunning, Duncan. A site classification for the mixed conifer selection forests of the Sierra Nevada. USDA Forest Serv. Calif. Forest and Range Exp. Stn. For. Res. Note 28, 21 pp., 1942.

Young—Growth Redwood. Site index based on average height of dominant trees at breast height age of100 years. Use in young-growth redwood stands in which more than 20 percent of the stand by basal area is redwood and when sufficient dominant redwood trees are available to determine site index.

Douglas Fir. Site index based on average height of dominant trees at age 100 years. Use in young-growth redwood stands in which 20 percent or less of the stand by basal area is redwood or when sufficient dominant redwood trees are not available to determine site index. Use also in old-growth redwood stands. In such cases, measure Douglas fir trees for determining site index. Also use for Sitka spruce, grand fir, hemlock, bishop's pine, and Monterey pine stands.

Ponderosa Pine, Jeffrey Pine, Mixed Conifer, And True Fir. Site index based on average height of dominant trees at age 100 and 300 years. Use also for lodgepole pine stands. For old-growth stands, use height of dominants at age 300 years.

(c) OPERABILITY. Timberland shall be rated for operability based upon such factors as accessibility, topography, and legislative or administrative restraints. On or before December 31, 1979, two classes of operability shall be used by the assessor and designated as operable or inoperable. Areas of inoperable land must be identified by the assessor. For the purpose of land site classification, inoperable means that any of the following circumstances are applicable:

(1) Extreme physical barriers prevent access.

(2) Legal or administrative restraints prevent access or harvest.

(3) Rocky ground, steep slopes, or sterile soil prevent growing or harvesting merchantable timber.

History: Adopted January 6, 1977, effective March 3, 1977.
Amended June 21, 1983, effective October 7, 1983.

RULE 1022. STANDARD UNIT OF MEASURE.

References: Sections 38109, 38204, Revenue and Taxation Code.

(a) GENERAL. In determining quantities of timber for purposes of the timber yield tax the Scribner Decimal C Log Rule based on a maximum scaling length of 20 feet (Scribner Decimal C (Short Log) Scale) shall be used as the standard board foot log rule for timber that is measurable by the net board foot method. This standard board foot log rule for such timber is to be used in all instances, except that in those rare instances when circumstances preclude the use of this standard board foot log rule for such timber, conversion factors as specified herein shall be employed for reporting harvested timber originally scaled using other than the standard board foot log rule.

Timber that is not normally scaled by the net board foot method shall be measured using the unit commonly employed by those dealing with the wood products to which the timber is to be converted, e.g.

INTENDED WOOD PRODUCT	MEASUREMENT UNIT
Fuel Wood	Cord
Christmas trees, poles and pilings	Lineal foot
Chip wood	Gross scale of useable wood

(b) DEFINITIONS. When used in this section the terms board foot and board foot log rule shall have the following meaning:

(1) Board foot — a solid piece of wood, 12 inches wide, 12 inches long and 1 inch thick.

(2) Board foot log rule — a method for estimating the volume in board feet of a log with a known diameter and length.

(c) CONVERSION FACTORS. When board foot volumes are not scaled using the standard board foot log rule the following factors shall be used to convert the scale employed to the standard scale.

(1) The Humboldt Log Scale shall be converted to gross Scribner Decimal C (Short Log) Scale by the application of a multiplier factor of 1.45. The actual defect in board feet as determined by the difference between that scale and the mill tally records shall be deducted from the gross Scribner scale. Until January 1, 1978, the Humboldt Log Scale when applied to old growth redwood shall be converted to net Scribner Decimal C (Short Log) Scale by the application of a multiplier factor of 1.15.

(2) The Spaulding Log Scale (Short Log) shall be converted to Scribner Decimal C (Short Log) Scale by the application of a multiplier factor of 1.02.

(3) When logs harvested in California are scaled outside California, and only when circumstances preclude the use of the Scribner Decimal C Log Rule based on a maximum scaling length of 20 feet (Scribner Decimal C (Short Log) Scale), the Scribner Decimal C Log Rule volumes attributable to long log scaling shall be converted to Scribner Decimal C (Short Log) Scale by the application of a multiplier factor of 1.20.

History: Adopted November 4, 1976, effective January 1, 1977.
Amended August 19, 1980, effective December 31, 1980.

RULE 1023. IMMEDIATE HARVEST VALUE.

References: Sections 38109, 38204, Revenue and Taxation Code.

(a) DEFINITIONS. Immediate harvest value is the amount that each species or subclassification of timber would sell for on the stump at a voluntary sale made in the ordinary course of business for purposes of immediate harvest. Such value shall be expressed to the nearest dollar per standard unit of measure applicable pursuant to Rule No. 1022, except that the immediate harvest value of Christmas trees shall be the sale price of such trees in quantities of 100 or more in the market area nearest to the place where the trees are cut and adjusted to reflect the value of the trees immediately prior to severance.

Timber value areas are those areas containing timber having similar growing, harvesting, and marketing conditions.

Harvest value is the immediate harvest value in a timber value area as of the first day of the period specified by the applicable harvest value schedule.

"Timber at similar locations" means timber in an area of comparable elevation and topography, and subject to comparable logging conditions and accessibility to the point of conversion.

(b) HARVEST VALUE SCHEDULES. The timber owner shall determine the taxable value of the timber harvested for each harvest operation by the use of the Board harvest value schedule applicable to the tax reporting period.

The harvest value schedules adopted by the Board provide estimates of harvest values by considering gross proceeds from sales on the stump of similar timber of like quality and character at similar locations, or gross proceeds from sales of logs, or of finished products, adjusted to reflect only the portion of such proceeds attributable to value on the stump immediately prior to harvest, or a combination of both. Allowance is made for differences in age, size, quality, cost of removal, accessibility to point of conversion, market conditions, and other relevant factors.

Each value schedule provides harvest values for a timber value area taking into account species and average tree or log size. Appropriate allowances for costs of removal have been calculated by consideration of the most common logging systems used within the area, the actual methods of harvesting the timber, the volume per acre, the total volume removed per harvest operation, the typical haul range distances to a conversion point and any excessive required costs of removal.

(c) DAMAGED TIMBER. The Board, either on its own motion after consultation with the Timber Advisory Committee or in response to an application from a timber owner may specify a modification of immediate harvest value to reflect material changes in timber values that result from fire, blowdown, ice storm, flood, disease, insect damage, or other cause, for any area in which damaged timber is located. Whenever a timber owner uses such modified immediate harvest values for reporting damaged timber, he shall maintain appropriate accounting records as specified by the Board.

History: Adopted January 6, 1977, effective March 3, 1977.
Amended and effective June 24, 1997.

RULE 1024. EXEMPT TIMBER.

Reference: Section 38116, Revenue and Taxation Code.

(a) GENERAL. There is exempt from timber yield tax timber whose immediate harvest value is so low that, if not exempt, the tax on the timber would amount to less than the cost of administering and collecting the tax.

(b) EXEMPT HARVEST. Timber, removed from a timber harvest operation whose immediate harvest value does not exceed $3,000 within a quarter, is exempt from timber yield tax pursuant to the authority granted by section 38116 of the Revenue and Taxation Code. For the purpose of this rule, immediate harvest value shall be that value described in sections 38109 and 38204 of the Revenue and Taxation Code, and in Rule 1023. The Board harvest value schedule applicable to the tax reporting period at the time of harvest shall define the timber harvest operation, and shall be the basis for determining the immediate harvest value thereof.

(c) Nothing in this rule shall authorize the exemption of timber whose immediate harvest value exceeds $3,000.

History: Adopted December 9, 1998, effective April 8, 1999.

RULE 1026. TIMBER OWNER.

Reference: Sections 38104, 38108, 38115, Revenue and Taxation Code.
Hoopa Valley Tribe v. Nevins, et al (1989) 881 F. 2d 657.

Exempt person or agency. The timber yield tax is imposed not only on every timber owner who harvests his or her timber or causes it to be harvested but also on every timber owner of felled or downed timber who acquires title to such felled or downed timber in the state from a person or agency exempt from property taxation under the Constitution or laws of the United States or under the Constitution or laws of the State of California. In some instances, such timber owners may acquire title to felled or downed timber directly from the exempt person or agency. In other instances, however, such timber owners may acquire title to felled or downed timber from an exempt person or agency which itself has previously acquired title to the timber from another exempt person or agency.

Where timber owners of felled or downed timber have acquired title to the timber in the state from an exempt person or agency, "first person who acquires either the legal title or beneficial title to timber after it has been felled" means the first non-exempt person who acquires such title from an exempt person or agency, and such a person is a timber owner liable for applicable timber yield tax (e.g., where the person initially felling timber is exempt from property taxation and the person acquiring the felled timber is also exempt from property taxation, the first non-exempt person who thereafter acquires title to the felled timber is liable for applicable timber yield tax).

As used in Sections 38104 and 38115 of the Revenue and Taxation Code, "timber owner" does not include, however, any person who harvests timber, causes it to be harvested, or acquires title to felled or downed timber derived from Indian lands held in trust by the United States for an Indian Tribe or Band or for any individual Indian member thereof; and no timber yield tax shall be imposed with respect to that timber upon any person who thereafter acquires title to the timber.

History: Adopted August 19, 1980, effective December 31, 1980.
Amended August 5, 1983, Section 38301 repealed effective January 1, 1983.
Amended April 22, 1992, effective September 12, 1992.

RULE 1027. U. S. FOREST SERVICE TIMBER VOLUMES.

References: Sections 38108, 38115, Revenue and Taxation Code.

(a) GENERAL. U.S. Forest Service timber sale contract holders shall report timber volumes harvested as hereinafter provided.

(b) SCALED VOLUME BILLINGS. The Timber Sale Statement of Account (TSSA) is the basis for most U.S. Forest Service billing statements. Timber volumes shall be reported for the quarters reflected by the Timber Sale Statements of Account (e.g., April, May, and June, 1980 TSSA volumes shall be reported for the second quarter of 1980.)

(c) LUMP-SUM BILLINGS. Timber volumes actually harvested, regardless of the volume purchased from, and billed for by the U.S. Forest Service, shall be reported for the quarters in which scaled. Timber sale contract holders must get and retain scaling data for such volumes.

(d) OTHER METHODS OF REPORTING. Timber harvested pursuant to U.S. Forest Service timber sale contracts may be reported on a basis other than (b) or (c), above, only if a written description of the reporting basis to be used is submitted to and is authorized by the Timber Tax Division prior to the due date of the return and prior to reporting.

History: Adopted August 19, 1980, effective November 16, 1980.
Amended August 5, 1983, Section 38301 repealed effective January 1, 1983.

RULE 1031. RECORDS.

References: Sections 38703, 38704, Revenue and Taxation Code.

(a) GENERAL. Every timber owner, timberland owner, timber operator, and person harvesting timber for forest products purposes, shall keep adequate and complete records showing:

(1) Contractual or financial agreements relative to the ownership and harvest of timber for forest products.

(2) Harvest locations for logged timber.

(3) The basis for adjustments to harvest values.

These records shall include the books of account ordinarily maintained by the average prudent businessman engaged in the activity, together with all bills, receipts, invoices, scaling records, tapes, or other documents of original entry supporting the entries in the books of account as well as all schedules or working papers used in connection with the preparation of tax returns.

(b) MICROFILM RECORDS. Microfilm reproductions of general books of account, such as cash books, journals, voucher registers, ledgers, etc., are acceptable in lieu of original records, and microfilm reproductions of supporting data such as sales invoices, purchase invoices, credit memoranda, scale tickets, trip tickets, etc., are acceptable providing the following conditions are met:

(1) Appropriate facilities are provided for the preservation of the films for periods required under subparagraph (d).

(2) Microfilm rolls are indexed, cross referenced, labeled to show beginning and ending numbers or beginning and ending alphabetical listing of documents included, and are systematically filed.

(3) The taxpayer agrees to provide transcriptions of any information contained on microfilm which may be required for purposes of verification of tax liability.

(4) Proper facilities are provided for the ready inspection and location of the particular records, including modern projectors for viewing and copying the records.

A posting reference must be on each invoice. Credit memoranda must carry a reference to the document evidencing the original transaction. Documents necessary to support a claimed adjustment for immediate harvest value, such as scaling tickets and trip records, must be maintained in an order by which they can be readily related to the harvesting for which the value adjustment is sought.

(c) RECORDS PREPARED BY AUTOMATED DATA PROCESSING SYSTEMS. An ADP tax accounting system shall include a method of producing visible and legible records that will provide the necessary information for verification of the taxpayer's tax liability.

(1) RECORDED OR RECONSTRUCTIBLE DATA. ADP shall make possible the tracing of any transaction back to the original source or forward to a final total. If detail printouts are not made of transactions at the time they are processed, then the system must have the ability to reconstruct these transactions.

(2) GENERAL AND SUBSIDIARY BOOKS OF ACCOUNT. A general ledger, with source references, shall be maintained to coincide with financial reports for tax reporting periods. Subsidiary ledgers used to support the general ledger accounts shall also be in printout form, or the system be capable of producing a printout for any appropriate calendar or fiscal period.

(3) SUPPORTING DOCUMENTS AND AUDIT TRAIL. Records shall be kept in such a manner as to provide an audit trail that allows for ready identification of details underlying the summary accounting data. The system should be so designed that supporting documents, such as sales invoices, purchase invoices, scaling tickets, credit memoranda, etc., are readily available.

(4) PROGRAM DOCUMENTATION. A description of the ADP portion of the accounting system shall be available. The statements and illustrations of the scope of operations should be sufficiently detailed to indicate, (a) the application being performed, (b) the procedures employed in each application (supported by flow charts, block diagrams or other satisfactory description of the input or output procedures), and (c) the controls used to insure accurate and reliable processing. Important changes, together with their effective dates, should be noted in order to preserve an accurate chronological record.

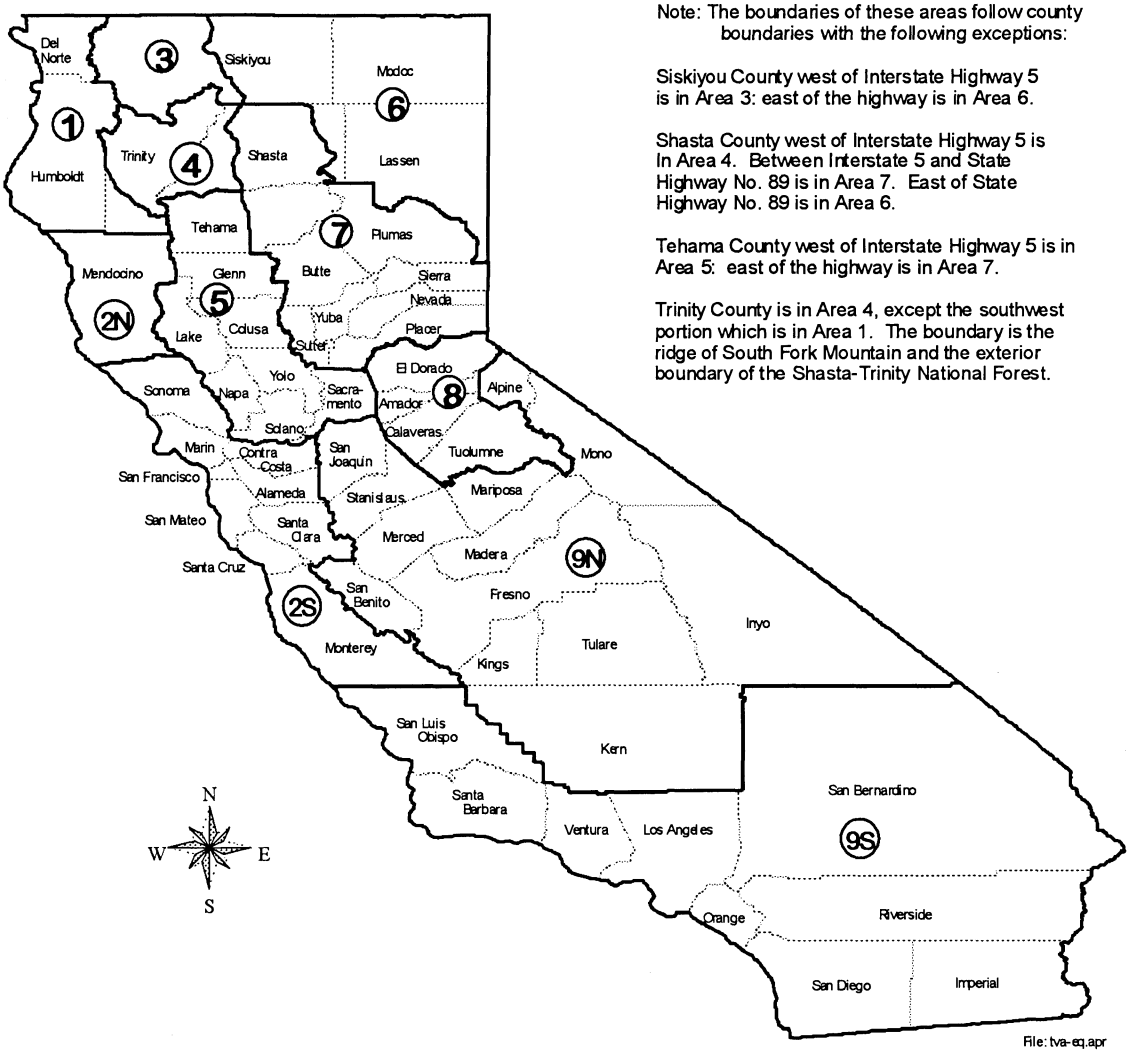
(d) RECORDS RETENTION. All records pertaining to transactions subject to the timber yield tax must be preserved for a period of not less than four years unless the State Board of Equalization authorizes in writing their destruction within a lesser period.

(e) EXAMINATION OF RECORDS. All of the above-described records shall be made available for examination on request by the Board or its authorized representatives.

(f) FAILURE TO MAINTAIN RECORDS. Failure to maintain and keep complete and accurate records shall be considered evidence of negligence or intent to evade the tax and may result in penalties or other appropriate administrative action.

History: Adopted January 6, 1977, effective March 3, 1977.

APPENDIX 2: TIMBER VALUE AREAS



Note: The boundaries of these areas follow county boundaries with the following exceptions:

Siskiyou County west of Interstate Highway 5 is in Area 3: east of the highway is in Area 6.

Shasta County west of Interstate Highway 5 is In Area 4. Between Interstate 5 and State Highway No. 89 is in Area 7. East of State Highway No. 89 is in Area 6.

Tehama County west of Interstate Highway 5 is in Area 5: east of the highway is in Area 7.

Trinity County is in Area 4, except the southwest portion which is in Area 1. The boundary is the ridge of South Fork Mountain and the exterior boundary of the Shasta-Trinity National Forest.

APPENDIX 3: SAMPLE IMMEDIATE HARVEST VALUES SCHEDULE

CALIFORNIA STATE BOARD OF EQUALIZATION

HARVEST VALUES SCHEDULE, EFFECTIVE JANUARY 1, 2005 THROUGH JUNE 30, 2005

(Adopted by the California State Board of Equalization December 14, 2004)

INSTRUCTIONS

REPORTING PROCEDURE - Timber tax returns must be filed using the Timber Tax Account Number of the timber owner (R&T code 38115). Each return shall include only timber having the same timber owner as shown for the registration of the account on the return.

The Timber Tax Harvest Report must be completed before preparing the Timber Tax Return.

TAX RATE - The tax rate for the period of this schedule is 2.9%.

TIMBER HARVEST OPERATION - DEFINITIONS

A. A harvest on private land for an entire Timber Harvesting Plan, Notice of Timber Operations, or Emergency Notice, or a combination of these sharing a common geographical area, as submitted to the Department of Forestry. Two or more timber owners who elect to combine their harvests under one harvest permit may report each harvest as a separate operation so long as each owner has a distinct timber parcel and each has a separate yield tax account. Taxpayers must maintain sufficient records to support the reporting of separate operations.

B. A harvest on public land for an entire timber sale contract between a public agency and a purchaser.

HARVEST VALUES SCHEDULE - The Timber Owner shall select the appropriate table values to be used for preparing the Timber Tax Harvest Report and the Timber Tax Return. Nine timber value areas are designated within the State, and the taxpayer must use the appropriate column of the harvest values schedule for timber harvested within each specified area. Timber value areas are shown on the map on page 3, and the boundaries of these areas follow county boundaries with exceptions in Shasta, Siskiyou, Tehama, and Trinity Counties.

SPECIES - Timber species or products are reported by using the appropriate species code as shown on pages 4, 5, and 6 in the harvest values tables. Jeffrey pine, sugar pine, coulter pine and western white pine are all reported as ponderosa pine. Hem/fir includes western hemlock, mountain hemlock, white fir, red fir, grand fir, spruce, and Shasta red fir. Western red cedar is reported as incense cedar. The Miscellaneous conifer code includes lodgepole pine, knobcone pine, gray pine, sierra redwood and other evergreen species not listed in tables G and S. **(See Table 1 for the appropriate harvest value of CM.)** Small Sawlogs Miscellaneous (SSM) category includes volume harvested from the operation for the entire quarter. To see if you qualify for this species code read the definition found in the Table 1 instructions on page 4. Unsound sapwood logs are to be reported along with the other volumes for a particular species code.

CULL LOGS - Cull logs are any that, when scaled, show less than ¼ of its gross volume as sound, usable lumber. Cull logs are to be reported in adjusted gross M board feet. Unsound sapwood logs are not classified as cull logs.

SALVAGE TIMBER - The salvage values table is used for reporting salvage timber removed from areas designated for salvage logging. Salvage logging is defined as the removal of dead and/or dying trees that are expected to survive less than 12 months if not harvested. For redwood, salvage logging includes the removal of dead or down material previously left as unmerchantable.

- Salvage timber includes only dead, dying, fatally damaged, or downed trees removed from an area of salvage logging.
- Non-salvage trees removed from an area of salvage logging do not qualify to use the salvage value tables.
- Salvage trees should not be reported as salvage timber if they are removed as part of a normal harvest.

LOGGING SYSTEM ADJUSTMENTS - The taxpayer must report the volume of timber harvested by logging system. Logging systems and logging code numbers are as follows: Tractor, which includes yarding with a winch, rubber tired skidder, horse logging and endlining, is coded as "T", cable and skyline yarder as "S", and Helicopter as "H". Any system not listed here will be reported as tractor, unless a special request is made prior to logging. Note that the table values are for tractor logging; adjustments should be made when other logging systems are used.

VOLUMES - All volumes are reported in net Scribner short-log scale (20 feet maximum scaling length) except where otherwise indicated in Table 1. For national forest timber sold on scaled volumes the Forest Service statements of account (billing statement) shall be the basis for determining taxable volume. For reporting lump-sum sales, use the timber volumes actually scaled during the quarter. To convert split products to a board foot basis, multiply the thickness by the width and by the length (all in inches) and divide by 144 (T" x W" x L" / 144)= Board Feet per piece.

INSTRUCTIONS

AVERAGE VOLUME PER LOG (AV/L) - The taxpayer determines the average net volume per 16' log (AV/L) for those species requiring a quality code. The average volume per log is determined from the quarterly volume within the harvest operation, and is calculated by dividing the net Scribner volume for the species by the number of sixteen foot short-log scaling segments. The number of scaling segments may be determined by dividing the total number of linear feet by 16. Cull logs are excluded when making this determination, however small sawlogs (SSM) should be included. When the AV/L is determined from a cruise or other statistical sample prior to logging, it shall remain fixed for reporting purposes during the life of the operation.

TABLES - Harvest values tables provide the taxpayer with information necessary for reporting the timber yield tax. The following are included: Table 1 for valuing Miscellaneous Harvest Values, Table G for green timber, and Table S for salvage timber. The prices are expressed as a dollar amount per thousand (M) board feet or other unit of measure. Species codes and units of measure are shown in the tables for preparation of the Timber Tax Harvest Report. Adjustments to value may be available, if the requirements in the "VALUE ADJUSTMENTS" instructions are met.

VALUE ADJUSTMENTS - Low volume harvests may qualify for reduction of harvest value. Volume criteria and adjustment amounts are shown at the bottom of Tables S and G. There are no value adjustments for Table 1, Miscellaneous Harvest Values. The small total volume adjustment is available to all qualifying timber harvest operations. The low average volume per acre adjustment is only available to green timber found in Table G; both adjustments may be used if the operation meets the applicable criteria. To determine the average net volume per acre, divide the total net volume harvested during the reporting quarter by the actual acres harvested.

EXEMPT TIMBER – Timber removed from a timber harvest operation whose immediate harvest value does not exceed $3000 in a quarter is exempt from timber yield tax. If line 21 of a harvest report is not greater than $3000 for an operation, do not carry the value forward to the tax return; instead write "EXEMPT" in large letters across the face of the harvest report. If all of your operations harvested for the quarter qualify for this exemption, enter zero in column 4 on line 10 of the tax return, sign, and file the return along with the harvest reports, according to instructions. If you have both exempt and taxable operations, transfer only the value information from the taxable operations to the tax return and follow the instructions for completing and filing a return.

FOR MORE INFORMATION

If you need general information about the timber yield tax, or help completing your timber tax forms, you may call the Board's 800 Number Information Center. Customer service representatives are available to help you Monday through Friday (except State holidays), from 8:00 A.M. to 5:00 P.M. (Pacific time). **Call 800-400-7115**

For TDD assistance (telephone device for the deaf), call: 800-735-2929 (from TTD phones), or 800-735-2922

For specific information about your account or tax reporting requirements, you may write, call or fax:

Timber Tax Section, MIC: 60
State Board of Equalization
PO Box 942879, Sacramento, CA 94279-0060
phone 916-445-6964 or fax 916-324-2757

PRIVACY NOTICE - INFORMATION FURNISHED THE BOARD OF EQUALIZATION IS HELD CONFIDENTIAL

The Information Practices Act of 1977 requires this agency to provide the following notice to individual taxpayers who are asked by the State Board of Equalization to supply information:

The principal purpose for which the requested information will be used is to administer the California Timber Yield Tax Law. This includes the determination and collection of the correct amount of tax.

An individual taxpayer has the right of access to personal information about himself or herself in records maintained by the State Board of Equalization. The Board official responsible for maintaining Timber Tax Information is the County Property Tax Division Chief, Property and Special Taxes Department, 450 N Street, Sacramento, CA 95814, Telephone 916-445-6964.

The California Revenue and Taxation Code, Part 18.5 (Timber Yield Tax), requires individuals and other persons meeting certain requirements to file applications for registration and tax returns in such form as prescribed by the State Board of Equalization.

It is mandatory that such individuals and other persons furnish all the required information requested by applications for registration, tax returns and other related data, except that the furnishing of social security numbers by individual applicants for Timber Yield Tax Accounts is voluntary. In addition, the law provides penalties for failure to file a return, for failure to furnish specific information required, for failure to supply information required by law or regulations, and for furnishing fraudulent information.

Information individuals and other taxpayers furnish to the State Board of Equalization may be given to federal, state and local government agencies as authorized by law.

CALIFORNIA STATE BOARD OF EQUALIZATION

HARVEST VALUES SCHEDULE, EFFECTIVE JANUARY 1, 2005 THROUGH JUNE 30, 2005

(Adopted by the California State Board of Equalization December 14, 2004)

TABLE 1 MISCELLANEOUS HARVEST VALUES - This table is applicable to all timber value areas and shows the harvest values for special items such as Christmas trees, fuelwood, chipwood, poles, posts, split products, small sawlogs, cull logs and miscellaneous conifers. Small sawlogs (SSM) are conifer logs of any species, except coastal redwood, where the average net volume per 16-ft log for all sawlogs removed from a timber harvest operation during the reporting quarter is less than 65 board feet, Scribner Short Log Scale. Cull logs are to be reported in adjusted gross M board feet. For cull logs measured in tons, use a conversion factor of 4 tons per adjusted gross MBF, Scribner scale. For a listing of species included in the miscellaneous conifer category, see the SPECIES instructions on page 1. Except for split products, small sawlogs, and miscellaneous conifers, the items in this table are to be reported in column 17 (other unit measure) on the Timber Tax Harvest Report.

TABLE 1 - MISCELLANEOUS HARVEST VALUES

SPECIES OR PRODUCT	SPECIES CODE	UNIT	HARVEST VALUE PER UNIT
Christmas trees, Natural Misc.	XNM	Lineal Feet	N/A
Christmas trees, Natural Red Fir	XNR	Lineal Feet	N/A
Christmas trees, Natural White Fir	XNW	Lineal Feet	N/A
Christmas trees, Plantation	XP	Lineal Feet	N/A
Cull logs	CUL	Adj. Gross M board feet	5.00
Fuelwood, hardwood	FWH	Cords	35.00
Fuelwood, miscellaneous	FWM	Cords	30.00
Pulp chipwood & hardwood logs	HW	Green Tons	1.00
Woods-produced fuel chips	CS	Bone Dry Tons	0.00
Poles & pilings, small (20'- 40')	PS	Linear feet	0.60
Poles & pilings, medium (41' - 60')	PM	Linear feet	1.00
Poles & pilings, large (61'- up)	PL	Linear feet	1.60
Posts, round	PST	8 Linear feet	0.20
Split products, redwood	TR	Net M board feet	75.00
Split products, miscellaneous	TM	Net M board feet	10.00
Small sawlogs, miscellaneous 1/	SSM	Net M board feet	160.00
Miscellaneous conifer species	CM	Net M board feet	100.00

NO ADJUSTMENTS FOR THIS TABLE

1/ Do not include coastal redwood volume in the Small Sawlog Miscellaneous category.

CALIFORNIA STATE BOARD OF EQUALIZATION

HARVEST VALUES SCHEDULE, EFFECTIVE JANUARY 1, 2005 THROUGH JUNE 30, 2005

(Adopted by the California State Board of Equalization December 14, 2004)

TABLE G - TIMBER HARVEST VALUES - This table shows the harvest values for the timber by species, size and timber value area. The taxpayer makes the adjustments for the logging system, for small total volume on the harvest operation, low volume per acre on the harvest operation, and county location if the operation qualifies.

Tractor Logging (Logging Code T)														
	SPECIES	VOLUME	TIMBER VALUE AREA											
SPECIES	CODE	PER LOG	*SIZE CODE*	1	2N	2S	3	4	5	6	7	8	9N	9S
		Over 300	1	320	290	270	440	470	530	480	520	480	460	180
Ponderosa Pine	PPG	150-300	2	260	240	220	340	370	460	420	450	380	400	130
		Under 150	3	180	200	150	240	240	240	320	310	330	300	110
Hem/fir	FG	N/A	N/A	150	80	70	200	170	130	260	220	170	200	50
		Over 300	1	440	350	320	410	440	420	460	490	430	240	90
Douglas-fir	DFG	150-300	2	380	290	270	360	400	370	410	410	350	200	90
		Under 150	3	360	270	250	330	310	290	390	370	320	190	90
Incense Cedar	ICG	N/A	N/A	270	270	N/A	430	390	410	450	460	380	330	170
		Over 300	1	800	800	800	N/A	N/A	650	N/A	N/A	N/A	N/A	N/A
Redwood	RG	150-300	2	770	690	680	N/A	N/A	550	N/A	N/A	N/A	N/A	N/A
		Under 150	3	720	640	660	N/A	N/A	450	N/A	N/A	N/A	N/A	N/A
Port-Orford Cedar	PCG	Over 125	1	1000	N/A	N/A	750	750	N/A	N/A	N/A	N/A	N/A	N/A
		125 & Under	2	300	N/A	N/A	300	300	N/A	N/A	N/A	N/A	N/A	N/A

ADJUSTMENTS

Logging System:

Deduct $40 for volumes which were yarder/skyline logged (Logging Code S)

Deduct $140 for volumes which were helicopter logged (Logging Code H)

Small Total Volume:

Deduct $50 if total volume harvested this quarter is less than 300 MBF

Deduct $100 if total volume harvested this quarter is less than 100 MBF

Deduct $150 if total volume harvested this quarter is less than 25 MBF

County:

Deduct $40 if harvesting was located in any of the following counties:

Marin, Monterey, San Mateo, Santa Clara, or Santa Cruz

Low Volume Per Acre:

Deduct $25 if the average volume harvested this quarter is under 5 MBF per acre

$ 1 PER MBF IS THE MINIMUM HARVEST VALUE ALLOWABLE AFTER ADJUSTMENTS

CALIFORNIA STATE BOARD OF EQUALIZATION

HARVEST VALUES SCHEDULE, EFFECTIVE JANUARY 1, 2005 THROUGH JUNE 30, 2005

(Adopted by the California State Board of Equalization December 14, 2004)

TABLE S - SALVAGE HARVEST VALUES - This table shows the harvest values for the timber by species, size and timber value area. The taxpayer makes the adjustments for the logging system and for small total volume on the harvest operation and county location if the operation qualifies.

Tractor Logging (Logging Code T)

SPECIES	SPECIES CODE	VOLUME PER LOG	TIMBER VALUE AREA										
			SIZE CODE	1	2N	2S	3	4	5	6	7	8	9N	9S
Ponderosa Pine	PPS	Over 300	1	240	220	200	330	350	400	360	390	360	340	1
		150-300	2	200	180	160	260	280	340	320	340	280	300	1
		Under 150	3	140	150	110	180	180	180	240	230	250	220	1
Hem/fir	FS	N/A	N/A	110	60	50	150	130	100	160	130	150	100	1
Douglas-fir	DFS	Over 300	1	330	260	240	310	330	320	340	370	320	180	1
		150-300	2	290	220	200	270	300	280	310	310	260	150	1
		Under 150	3	280	200	190	250	230	220	290	280	240	140	1
Incense Cedar	ICS	N/A	N/A	200	200	N/A	320	290	310	340	340	280	250	1
Redwood	RS	Over 300	1	600	600	600	N/A	N/A	490	N/A	N/A	N/A	N/A	N/A
		150-300	2	580	520	510	N/A	N/A	410	N/A	N/A	N/A	N/A	N/A
		Under 150	3	540	480	500	N/A	N/A	340	N/A	N/A	N/A	N/A	N/A
Port-Orford Cedar	PCS	Over 125	1	750	N/A	N/A	560	560	N/A	N/A	N/A	N/A	N/A	N/A
		125 & Under	2	220	N/A	N/A	220	220	N/A	N/A	N/A	N/A	N/A	N/A

ADJUSTMENTS

Logging System:

Deduct $40 for volumes which were yarder/skyline logged (Logging Code S)

Deduct $140 for volumes which were helicopter logged (Logging Code H)

Small Total Volume:

Deduct $50 if total volume harvested this quarter is less than 300 MBF

Deduct $100 if total volume harvested this quarter is less than 100 MBF

Deduct $150 if total volume harvested this quarter is less than 25 MBF

County:

Deduct $20 if harvesting was located in any of the following counties: Marin, Monterey, San Mateo, Santa Clara, or Santa Cruz

$ 1 PER MBF IS THE MINIMUM HARVEST VALUE ALLOWABLE AFTER ADJUSTMENTS

APPENDIX 4: INDEXING PROCESS

Board staff contacts mills that process logs harvested in California on a regular basis to collect log price information. These "quotes" form the basis of the log price index numbers used to make time adjustments. These numbers, collected by species and size class, represent spot quotes at specific points in time. Board staff uses the quotes gathered quarterly to develop a monthly log index. The quarterly numbers are based on the following process, while the intervening monthly numbers are interpolated by staff, generally on a mathematical basis. However, dramatic events in current market conditions may influence the interpolation process. The goal of the index is to measure general trends in the market.

The following hypothetical scenario accurately describes the process of developing the log price index. However, all data and analysis are fictitious and have no relationship to actual transactions.

The process begins with gathering current log quotes from the mills. These are quotes of what the mill is willing to pay for logs delivered today (the date that staff contacts the mill) to the mill. This is not necessarily the price being paid today for logs that were contracted for in the past. Prices are gathered based on the way each mill is currently buying logs of each species. This may be camp run (one price for any log of that species), or it may be different prices for various log diameters or various log grades.

For those species valued based on size codes, the log prices are converted to size code values based on a set of formulas garnered from the Forest Service program that predicts log sizes for trees based on taper form class, DBH (diameter breast high), and log heights. The program takes various size logs for trees of varying sizes and forms, and relates them to size codes based on the average log size of the trees. Once the raw log prices are converted to size codes, the prices are compared to the previous quarter's size code prices for each mill (see examples in Tables 4-1 and 4-2 following).

Staff then analyzes the change for each mill that is active in the market for the quarter being reviewed (see example in Table 4-3 following). Using Table 4-3, positive numbers indicate an increase in the price quote from the previous quarter's price quote. Conversely, negative numbers indicate a decrease from the previous quarter. Zero means there has been no change during the quarter. The citation of "NA" means that the mill is either not currently in the market for that species or a price quote received from the mill was rejected by the appraiser.

Again, using the ***fictitious*** data arrayed in Table 4-3, Mill F does not buy large redwood logs and, therefore, has no value or changes for redwood, size code 1. For Mill K, a price quote was provided for redwood of $400 camp run for all sizes of logs. This quote would have produced negative changes of $150 to $200 by size code. These negative changes were considered atypical and outside of the range for the overall general market trend, and, therefore, were not included in the index.

After all individual source changes are computed, the total of the changes for each species or size codes are divided by the number of quotes contributing to the total to compute the average change for each species or size code. For example, using Table 4-3, for the R1 species, the total (289) would be divided by 10, since two of the 12 mills in the analysis received an N/A for either (1) not providing a quote or (2) providing a quote that was determined to be atypical for the market.

Next, a determination is made by Board staff as to whether there has been a change in log and haul costs that must be recognized in order to compute the changes in the log market affect on stumpage prices. Logging and haul costs generally change in small increments that accumulate over time; occasionally, these incremental changes must be recognized as affecting stumpage prices. On the other hand, the changes can occur in a relatively short time frame, such as those that may be brought about by revisions to the Workman's Compensation Laws or escalating fuel rates.

Log and haul costs are monitored by Board staff as they gather sales information and by periodically interviewing operators. When it is determined that these costs will change the relationship between stumpage and delivered log prices for the log index being prepared, they must be recognized. If there is a change in the log and haul costs that must be recognized, the appraiser will adjust the change in the log market to account for the change in the log and haul costs. The result is the change in stumpage prices as represented by the average change in delivered log prices. The adjusted change is rounded to the nearest $5.00 increment. For the example, in Table 4-3, no adjustments were considered necessary for log and haul costs.

The final step in the process is that the change for each species or size code is applied to the previous quarter's index number for that species or size code (see example in Table 4-4 following). The index number for every species and size code was originally set at 5,000 on January 1, 2000. That number was chosen to allow for positive and negative changes in the market, and it was chosen so it would not be confused with actual stumpage or delivered log prices. The index measures change in the general market over time. The index does not represent the level of the market with respect to any species or size code.

TABLE 4-1

Mill A															
		R1		R2		R3		FC		DFC1		DFC2		DFC3	
Date	**R-LS**	**%/LS**	**$/LS**	**%/LS**	**$/LS**	**$/LS**	**$/LS**		**D-LS**	**%/LS**	**$/LS**	**%/LS**	**$/LS**	**%/LS**	**$/LS**
Apr 05	**6-7**	2	690	3	690	4	690		**6-7**	2	325	3	325	4	325
	6-11	3	690	7	690	12	690		**8-11**	3	325	527	325	12	325
	12-19	14	690	31	690	57	690		**12-19**	14	325	2631	325	57	325
	20-29	44	740	59	740	27	740		**20-29**	44	350	059	350	27	350
	30+	36	740	0	740	0	740		**30+**	37	350	0	350	0	350
Apr 05 Quotes			731		720		704	200			345		340		332
Jan 05	**6-7**	2	650	3	650	4	650		**6-7**	2	350	3	350	4	350
	8-11	3	650	7	650	12	650		**8-11**	3	350	7	350	12	350
	12-19	14	650	31	650	57	650		**12-19**	14	350	31	350	57	350
	20-29	44	725	59	725	27	725		**20-29**	44	375	59	375	27	375
	30+	37	725	0	725	0	725		**30+**	37	375	0	375	0	375
Jan 05 Quotes			711		694		670	200			370		365		357
Change from Jan 05 to Apr 05			20		26		34	0			-25		-25		-25

Mathematical Computations:

Quotes: %/LS multiplied times $/LS; add answers and divide by 100 (multiple regression formula)

Legend:

R1	Redwood, Size Code 1
FC	Fir, Coastal Region
DFC1	Douglas Fir, Coastal Region, Size Code 1
R-LS	Redwood, Log Diameter (Size)
%/LS	Percent of Each Log Diameter in Each Size Code
$/LS	Dollars Per Thousand (MBF) Being Paid for Each Log Diameter
6-15	Range of Log Diameters in Inches

TABLE 4-2

Mill E															
		R1		R2		R3		FC		DFC1		DFC2		DFC3	
Date	**R-LS**	**%/LS**	**$/LS**	**%/LS**	**$/LS**	**$/LS**	**$/LS**		**D-LS**	**%/LS**	**$/LS**	**%/LS**	**$/LS**	**%/LS**	**$/LS**
Apr 05	**6-15**	10	550	22	550	41	550		**6-15**	10	350	22	350	41	350
	16-24	24	650	52	650	59	650		**16-24**	24	425	52	425	59	425
	25-32	45	650	26	650	0	650		**25-32**	45	425	26	425	0	425
	33+	21	650	0	650	0	650		**33+**	21	425	0	425	0	425
Apr 05 Quotes			640		628		609	200			418		409		394
Jan 05	**6-15**	10	500	22	500	41	500		**6-15**	10	325	22	325	41	325
	16-24	24	600	52	600	59	600		**16-24**	24	400	52	400	59	400
	25-32	45	600	26	600	0	600		**25-32**	45	400	26	400	0	400
	33+	21	600	0	600	0	600		**33+**	21	400	0	400	0	400
Jan 05 Quotes			590		578		559	200			393		384		369
Change from Jan 05 to Apr 05			50		50		50	0			25		25		25

Mathematical Computations:

Quotes: %/LS multiplied times $/LS; add answers and divide by 100 (multiple regression formula)

Legend:

R1	Redwood, Size Code 1
FC	Fir, Coastal Region
DFC1	Douglas Fir, Coastal Region, Size Code 1
R-LS	Redwood, Log Diameter (Size)
%/LS	Percent of Each Log Diameter in Each Size Code
$/LS	Dollars Per Thousand (MBF) Being Paid for Each Log Diameter
6-15	Range of Log Diameters in Inches

TABLE 4-3

COASTAL LOG SIZE INDEX

Changes (in Dollars) from January 2005 to April 2005

	R1	R2	R3	FC	DFC1	DFC2	DFC3
Mill A	20	26	34	0	-25	-25	-25
Mill B	75	25	-25	N/A	-30	-30	-30
Mill C	-10	50	50	N/A	-20	-10	-10
Mill D	60	60	60	-25	N/A	-30	-30
Mill E	50	50	50	0	25	25	25
Mill F	N/A	50	25	0	N/A	0	-25
Mill G	84	44	10	N/A	-20	-10	-20
Mill H	70	90	10	-60	-20	-25	-25
Mill I	50	55	26	N/A	-18	-17	-16
Mill J	-60	25	50	-65	-25	-25	-25
Mill K	N/A	N/A	N/A	-50	-5	-40	-35
Mill L	-50	-25	25	-50	0	0	0
Totals	289	450	315	-250	-138	-187	-216
Count	10	11	11	8	10	12	12
Average Change	29	41	29	-31	-14	-16	-18
Adjustment for Log & Haul	0	0	0	0	0	0	0
Rounded	**30**	**40**	**30**	**[30]**	**[15]**	**[15]**	**[20]**

Mathematical Computations:

Totals: Sum of column
Average Change: Total divided by Count

Legend:

R1	Redwood, Size Code 1
FC	Fir, Coastal Region
DFC1	Douglas Fir, Coastal Region, Size Code 1
Count	Number of Mills with Quotes
Rounded	Measures the Change in the Index in Dollars

TABLE 4-4

LOG SIZE INDEX

Date	R1	R2	R3	FC	DFC1	DFC2	DFC3
Jan 2005	4,825	4,710	4,685	4,940	4,965	4,930	4,940
Feb 2005	4,835	4,725	4,695	4,930	4,960	4,925	4,935
Mar 2005	4,845	4,735	4,705	4,920	4,955	4,920	4,925
Apr 2005	4,855	4,750	4,715	4,910	4,950	4,915	4,920
Change from Jan to Apr	**30**	**40**	**30**	**[30]**	**[15]**	**[15]**	**[20]**

Mathematical Computation:

Jan and Apr: Actual measurement of mill quotes
Feb and Mar: Mathematical interpolation

Legend:

R1	Redwood, Size Code 1
FC	Fir, Coastal Region
DFC1	Douglas Fir, Coastal Region, Size Code 1

APPENDIX 5: VALUE ANALYSIS

Board staff appraisers maintain databases of timber sales that reflect conditions within each of the timber value areas of the state. Once the sales database is complete, a series of reports is produced that assist Board staff in estimating immediate harvest values for each classification and subclassification of timber in the schedules.

The following hypothetical scenarios and tables accurately describe the process of developing recommended immediate harvest values. However, all data and analysis are fictitious and have no relationship to actual transactions. The process is realistic, but the numbers are not.

For demonstration purposes, the following tables replicate the database tables available to assist Board staff in developing recommended immediate harvest values.

Table 5-1: *Average Value Summary*. The table presents data combined for both government and private sales for a timber value area (TVA 01 in our example). The data are presented by:

- The current year (2007 in our example), showing totals for all sales in the database for that year.
- The two prior years, showing totals for all sales in the database for each of the two previous years (within the prior 24-month appraisal period).
- A combination of two years (current and immediately prior year), showing totals for all sales in the database combined for the two years.
- A combination of all three years (current and prior two years), showing totals for all sales in the database combined for all three years.

The numbers in the "Volume" and "Sales" columns are mathematical totals, and the numbers in the "IHV" column are weighted average values. The data are extractions from Tables 5-4 through 5-10.

Table 5-2: *Average Value Summary*. The table presents data for government sales only. The data are arrayed in the same manner as Table 5-1.

Table 5-3: *Average Value Summary*. The table presents data for private sales only. The data are arrayed in the same manner as Table 5-1.

Tables 5-4 through 5-10: *Harvest Value Array*. Each table is an array of all sales in the database by species and size code, for the appraisal period, by TVA. The totals from these tables are ultimately carried forward to the summary in Table 5-1.

Table 11: *Sales Listing*. The data are a compilation of all sales by TVA within the appraisal period.

Hypothetical Analysis—RG-3

The following hypothetical analysis encompasses establishing a recommended immediate harvest value for redwood, size code 3 (RG-3), for December 2007. RG-3 is a dominant species, and the dominant size code within that species, and, generally, sales data are readily available.

Using Table 5-1 (following), staff looks at the current year (2007 in our example) sales average of **$725;** the prior year sales average of **$748**; and the two-year sales average of **$742** to begin the analysis of the three-year market. Likewise, the trend between years 2005 to 2007 shows sales averages of **$886**, **$748**, and **$725** respectively, and this information adds to the staff's knowledge of the three-year market. These data clearly provide staff with a downward trend in the market over the three calendar years (24 months). This is the beginning analytical stage of developing suggested immediate harvest values.

The initial analysis of sales for each timber value area (TVA) is done by the staff appraiser (1) who is assigned to the area, (2) who has field inspected the majority of sales reported in the area, and (3) who is most familiar with the sale conditions and marketing process for the TVA. Using Table 5-9, the appraiser identifies Test 49, Test 24, and Test 44 as "prime" sales and will give greater consideration to these sales in the final analysis. These sales are considered prime because:

- The sales occurred close to the appraisal date (the date that the immediate harvest values will be determined).
- The sales were marketed well—they were open-market, arm's-length transactions.
- The sales require very limited adjustments.

The computed average of these three sales is **$720**:

Prime Sale	*SPP NTH Volume*		*AVCAT IHV*		*Weighted Value*
Test 49	275	x	$815	=	$224,125
Test 24	2,000	x	$715	=	$1,430,000
Test 48	750	x	$699	=	$524,250
	3,025				$2,178,375

$2,178,375 ÷ 3,025 = **$720 Computed Average**

Since the appraisal is in the late fall of the year, the overall market has had time to adjust and stabilize for current supply and demand conditions. (For appraisals in the spring, the current years sales information is frequently more scarce, and the market is sometimes less stable as the market seeks to adjust to current supply and demand conditions.) With the knowledge and recognition that the current market is stabilized, the appraiser determines that the current years sales average of **$725** is reflective of a current value for RG-3.

Since the process of developing immediate harvest values is specifically designed to avoid peaks and valleys of the market, the analysis must include all three years of sales data. Considering the downward trend in the market, and avoiding peaks ($886) and valleys ($725), the appraisers determines that **$740** is a good preliminary estimate for the RG-3 immediate harvest value for December 2007. This represents a decrease of $10 from the previous value.

Next, staff looks at the types of sales in each year, mostly log conversions, with a few stumpage sales. Log sales are slightly less reliable because more adjustments need to be made to bring them to the subject condition of stumpage. Using Tables 5-4 through 5-10, staff observes that most of the sales are non-reallocated. Reallocated sales are slightly less reliable because more adjustments are needed than non-reallocated sales. Since most of the sales are non-reallocated sales, there is no data in this review to change the staff's preliminary estimate of **$740**.

Hypothetical Analysis—RG-2

The following hypothetical analysis encompasses establishing a recommended immediate harvest value for redwood, size code 2 (RG-2), for December 2007. This is the next most dominant size code in this species for the sample TVA.

The process covers the same steps as for the RG-3 analysis. Using Table 5-1, staff looks at the current years (2007) sales average of **$673**; the prior year sales average of **$783**; and the two-year sales average of **$748**. This size code also seems to show a downward trend in the market between 2005 and 2007.

Note the inverse relation of SC-2 and SC-3 displayed in the sales analysis. The average of the 2007 SC-2 sales (**$673**) is less than the average of the 2007 SC-3 sales (**$725**). Logic and the market dictate that the value of SC-2 should be higher than the value of SC-3. A review of current log markets indicates that mills are paying more for SC-2 type logs than for SC-3 type logs. Generally, costs per MBF of handling SC-2 logs are less than for SC-3 logs so the result is we would expect trees averaging SC-2 logs to have a higher IHV than trees having SC-3 type logs. Since the sales analysis displays an inverse relationship, we presume that this is the result of a weak sales sample.

We examine the relationship in previous years that shows SC-2 valued higher than SC-3. Considering the historic spread between SC-2 and SC-3, the appraiser determines that **$790** is a good preliminary estimate for the RG-2 immediate harvest value for December 2007. This represents a decrease of $10 from the previous value.

Hypothetical Analysis—RG-1

There is little information available for RG-1. There are no current year sales, and only two sales that are two years old. Based on the changes of RG-3 and RG-2 and an analysis of the log market and historic spreads between size codes, the appraiser determines that **$900** is a good proposed value for RG-1. This would represent no change from the previous value.

Combined Analysis—RG-3, RG-2, RG-1

Next, the suggested values are plotted on the RG list of sales (Table 5-10) to see how the dispersion of the suggested values compares to the range of sales. After review of the plotted values, the appraiser finds no information to change the preliminary estimates of **$740** for RG-3, **$790** for RG-2, and **$900** for RG-1. In the appraiser's judgment, these estimates represent the best IHVs as of the appraisal date for implementation on January 1, 2008.

Similar procedures are followed in suggesting values for other species in this and other TVAs.

Peer Review

Once the appraisers have analyzed the data for all TVAs and all species and size codes, the suggested values are scrutinized in a peer review session with the other appraisers. For each suggested value, the responsible appraiser provides an explanation and justification for the suggested value.

Management Review

The final stage of establishing suggested immediate harvest values is a review by management of all of the values suggested by the appraisers. During this review, suggested values in each TVA are analyzed and compared to suggested values in adjacent TVAs. Overall market trends are again reviewed, and the analysis and value conclusions of each appraiser is scrutinized.

For our sample scenario, when management compared the values with adjacent TVAs, it was determined that the redwood values in TVA 2N were flat or down a little. Similarly, the log market and index both support a slight reduction in the value. The management team reviewed all these factors and chose to reduce the suggested value of TVA 1 RG-2 to **$780**.

After a comprehensive review, management determined that the final suggested values fall within the range of the sales in the analysis and that the suggested values placed well within the array of the sales analyzed. The values of **$900** for RG-1, **$780** for RG-2, and **$740** for RG-3 are then forwarded to the TAC for further review.

TABLE 5-1
HARVEST VALUE ARRAY – TVA 01
AVERAGE VALUE SUMMARY
COMBINED GOVERNMENT AND PRIVATE SALES
GREEN

Species	Prior Value	2005 Sales			2006 Sales			2007 Sales			2006-2007 Sales			2005-2007 Sales		
		Volume	Sales	IHV	Volume	Sales	IHV	Volume	Sales	IHV	Volume	Sales	IHV	Volume	Sales	IHV
DFG 1	300	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
DFG 2	250	400	1	305.0	600	2	370.0	0	0	0.0	600	2	370.0	1,000	3	344.0
DFG 3	200	1,110	3	513.0	3,450	7	345.0	510	4	283.0	3,960	11	337.0	5,070	14	376.0
DFG		1,510	4	458.0	4,050	9	349.0	510	4	283.0	4,560	13	342.0	6,070	17	371.0
RG 1	900	325	2	976.0	0	0	0.0	0	0	0.0	0	0	0.0	325	2	976.0
RG 2	800	3,820	4	902.0	15,745	7	783.0	7,500	3	673.0	23,245	10	748.0	27,065	14	769.0
RG 3	750	18,620	10	886.0	18,520	13	748.0	7,175	11	725.0	25,695	24	742.0	44,315	34	802.0
RG		22,765	16	890.0	34,265	20	764.0	14,675	14	698.0	48,940	34	744.0	71,705	50	790.0
		24,275			38,315			15,185			53,500			77,775		

TABLE 5-2
HARVEST VALUE ARRAY – TVA 01
AVERAGE VALUE SUMMARY
GOVERNMENT SALES
GREEN

Species	Prior Value	2005 Sales			2006 Sales			2007 Sales			2006-2007 Sales			2005-2007 Sales		
		Volume	Sales	IHV	Volume	Sales	IHV	Volume	Sales	IHV	Volume	Sales	IHV	Volume	Sales	IHV
DFG 1	300	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
DFG 2	250	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
DFG 3	200	1,000	1	545.0	0	0	0.0	0	0	0.0	0	0	0.0	1,000	1	545.0
DFG		1,000	1	545.0	0	0	0.0	0	0	0.0	0	0	0.0	1,000	1	545.0
RG 1	900	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
RG 2	800	0	0	0.0	160	1	925.0	0	0	0.0	160	1	925.0	160	1	925.0
RG 3	750	7,000	1	896.0	0	0	0.0	0	0	0.0	0	0	0.0	7,000	1	896.0
RG		7,000	1	896.0	160	1	925.0	0	0	0.0	160	1	925.0	7,160	2	897.0
		8,000			160			0			160			8,160		

TABLE 5-3
HARVEST VALUE ARRAY – TVA 01
AVERAGE VALUE SUMMARY
PRIVATE SALES
GREEN

Species	Prior Value	2005 Sales			2006 Sales			2007 Sales			2006-2007 Sales			2005-2007 Sales		
		Volume	Sales	IHV	Volume	Sales	IHV	Volume	Sales	IHV	Volume	Sales	IHV	Volume	Sales	IHV
DFG 1	300	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
DFG 2	250	400	1	305.0	600	2	370.0	0	0	0.0	600	2	370.0	1,000	3	344.0
DFG 3	200	110	2	225.0	3,450	7	345.0	510	4	283.0	3,960	11	337.0	4,070	13	334.0
DFG		510	3	288.0	4,050	9	349.0	510	4	283.0	4,560	13	342.0	5,070	16	336.0
RG 1	900	325	2	976.0	0	0	0.0	0	0	0.0	0	0	0.0	325	2	976.0
RG 2	800	3,820	4	902.0	15,585	6	782.0	7,500	3	673.0	23,085	9	747.0	26,905	13	769.0
RG 3	750	11,620	9	880.0	18,520	13	748.0	7,175	11	725.0	25,695	24	742.0	37,315	33	785.0
RG		15,765	15	887.0	34,105	19	753.0	14,675	14	698.0	48,780	33	736.0	64,545	48	773.0
		16,275			38,155			15,185			53,340			69,615		

TABLE 5-4
HARVEST VALUE ARRAY – TVA 01
DFG2

PLANCONT NUMBER	SALE NAME	OWN	FOR EST	CTY NO.	TYPE SALE	YYMM	REAL CATE	CONT LGTH	LOG SYS	SPP NTH VOLUME	VOL /AC	AVCAT IHV	DED ADJ	TIME ADJ	ADJ IHV	VOL /LOG	SIZE CODE	SPP PCT
Test 33	Sale 33	P		12	L	0603	N	1	ST	500	10.0	$342		$35	$377	160	2	50
Test 40	Sale 40	P		12	L	0611	N	1	SS	100	23.3	$345		$-10	$335	160	2	7
Test 4	Sale D	P		12	L	0510	N	1	SS	400	12.9	$270		$35	$305	160	2	7

Total – All Sales 3 Sales 1,000 M

Average Value	$319/M	$339/M	
Standard Deviation	$34/M	$29/M	
Weighted Average Value		$344/M	
Indicated Average Volume Per Log – 3 Indicators			160 BF
Standard Deviation			0 BF

Legend:

PLANCONT NUMBER	Permit (THP, NTMP, EX, or EM Number) or Contract Number
SALENAME	Name Given to Operation
OWN	Owner Type—**G**overnment or **P**ublic
FOREST	National Forest Name
CTY NO.	County Number
TYPE SALE	Type of Sale—**L**og or **S**tumpage
YYMM	Sale Date—Year/Month
REALCATE	Reallocated Sale—**S**kewed (Yes) or **N**on-Reallocated (No)
CONT LGTH	Number of Years in Contract
LOG SYS	Logging System—Tractor (**TR**), Skyline/Tractor (**ST**), Skyline (**SS**)
SSP NTH VOLUME	Volume of this Species in this Sale, Divided by Number of Years in the Contract
VOL/AC	Total Volume of Sale, Divided by Acres of Sale
AVCAT IHV	Bid Rate for this Species, Adjusted for Skewed Bidding and Alternate Logging Systems
DED ADJ	Adjustments for Volume Per Acre and/or Total Volume
TIME ADJ	Adjustment for Date of Sale (Index)
ADJ IHV	Fully Adjusted Bid Rate
VOL/LOG	Volume per Log for this Species (BF)
SIZE CODE	Size Code of this Species
SPP PCT	Percent of Total Sale Volume in this Species

TABLE 5-5
HARVEST VALUE ARRAY – TVA 01
DFG3

PLANCONT NUMBER	SALE NAME	OWN	FOR EST	CTY NO.	TYPE SALE	YYMM	REAL CATE	CONT LGTH	LOG SYS	SPP NTH VOLUME	VOL /AC	AVCAT IHV	DED ADJ	TIME ADJ	ADJ IHV	VOL /LOG	SIZE CODE	SPP PCT
Test 28	Sale 28	G		12	L	0508	S	1	TS	1,000	8.9	$515		$30	$545	120	3	13
Test 9	Sale I	P		12	S	0602	N	1	TS	1,000	10.9	$420		$75	$495	120	3	14
Test 7	Sale G	P		08	S	0509	N	1	TR	20	11.0	$250	$50	$40	$340	100	3	9
Test 37	Sale 37	P		12	S	0608	N	1	TS	200	12.5	$320		$15	$335	140	3	20
Test 48	Sale 48	P		12	L	0705	N	1	TR	100	17.7	$309		$15	$324	80	3	12
Test 41	Sale 41	P		12	L	0612	N	1	TR	50	12.0	$300		$20	$320	100	3	8
Test 16	Sale P	P		12	L	0604	N	1	TR	700	13.4	$250		$55	$305	140	3	10
Test 24	Sale X	P		12	L	0704	N	1	TR	110	10.6	$280		$25	$305	120	3	5
Test 13	Sale M	P		12	S	0605	N	1	TR	1,000	14.0	$254		$45	$299	140	3	10
Test 45	Sale 45	P		12	L	0702	N	1	ST	100	7.4	$269		$25	$294	140	3	20
Test 20	Sale T	P		12	L	0703	N	1	SS	200	7.7	$220		$25	$245	120	3	10
Test 12	Sale L	P		12	L	0607	N	1	TR	100	9.6	$192		$25	$217	140	3	9
Test 3	Sale C	P		12	L	0511	N	1	ST	90	2.7	$150	$25	$25	$200	110	3	3
Test 17	Sale Q	P		12	L	0604	N	1	ST	400	10.8	$144		$55	$199	100	3	12

Total – All Sales 14 Sales 5,070 M

Average Value	$276/M	$315/M	
Standard Deviation	$95/M	$95/M	
Weighted Average Value		$376/M	
Indicated Average Volume Per Log – 14 Indicators			119 BF
Standard Deviation			18 BF

TABLE 5-6
HARVEST VALUE ARRAY – TVA 01
DFG

PLANCONT NUMBER	SALE NAME	OWN	FOR EST	CTY NO.	TYPE SALE	YYMM	REAL CATE	CONT LGTH	LOG SYS	SPP NTH VOLUME	VOL /AC	AVCAT IHV	DED ADJ	TIME ADJ	ADJ IHV	VOL /LOG	SIZE CODE	SPP PCT
Test 28	Sale 28	G		12	L	0508	S	1	TS	1,000	8.9	$515		$30	$545	120	3	13
Test 9	Sale I	P		12	S	0602	N	1	TS	1,000	10.9	$420		$75	$495	120	3	14
Test 33	Sale 33	P		12	L	0603	N	1	ST	500	10.0	$342		$35	$377	160	2	50
Test 7	Sale G	P		08	S	0509	N	1	TR	20	11.0	$250	$50	$40	$340	100	3	9
Test 37	Sale 37	P		12	S	0608	N	1	TS	200	12.5	$320		$15	$335	140	3	20
Test 40	Sale 40	P		12	L	0611	N	1	SS	100	23.3	$345		$-10	$335	160	2	7
Test 48	Sale 48	P		12	L	0705	N	1	TR	100	17.7	$309		$15	$324	80	3	12
Test 41	Sale 41	P		12	L	0612	N	1	TR	50	12.0	$300		$20	$320	100	3	8
Test 16	Sale P	P		12	L	0604	N	1	TR	700	13.4	$250		$55	$305	140	3	10
Test 24	Sale X	P		12	L	0704	N	1	TR	110	10.6	$280		$25	$305	120	3	5
Test 4	Sale D	P		12	L	0510	N	1	SS	400	12.9	$270		$35	$305	160	2	7
Test 13	Sale M	P		12	S	0605	N	1	TR	1,000	14.0	$254		$45	$299	140	3	10
Test 45	Sale 45	P		12	L	0702	N	1	ST	100	7.4	$269		$25	$294	140	3	20
Test 20	Sale T	P		12	L	0703	N	1	SS	200	7.7	$220		$25	$245	120	3	10
Test 12	Sale L	P		12	L	0607	N	1	TR	100	9.6	$192		$25	$217	140	3	9
Test 3	Sale C	P		12	L	0511	N	1	ST	90	2.7	$150	$25	$25	$200	110	3	3
Test 17	Sale Q	P		12	L	0604	N	1	ST	400	10.8	$144		$55	$199	100	3	12

Total – All Sales 17 Sales 6,070 M

Average Value	$284/M	$320/M	
Standard Deviation	$89/M	$88/M	
Weighted Average Value		$371/M	
Indicated Average Volume Per Log – 17 Indicators			126 BF
Standard Deviation			22 BF

TABLE 5-7
HARVEST VALUE ARRAY – TVA 01
RG 1

PLANCONT NUMBER	SALE NAME	OWN	FOR EST	CTY NO.	TYPE SALE	YYMM	REAL CATE	CONT LGTH	LOG SYS	SPP NTH VOLUME	VOL /AC	AVCAT IHV	DED ADJ	TIME ADJ	ADJ IHV	VOL /LOG	SIZE CODE	SPP PCT
Test 31	Sale 31	P		12	L	0508	N	1	TR	200	20.0	$860	$50	$120	$1030	350	1	100
Test 32	Sale 32	P		08	L	0509	N	1	TR	125	25.0	$725	$50	$115	$890	320	1	100

Total – All Sales 2 Sales 325 M

Average Value	$792/M	$960/M	
Standard Deviation	$67/M	$70/M	
Weighted Average Value		$976/M	
Indicated Average Volume Per Log – 3 Indicators			335 BF
Standard Deviation			15 BF

TABLE 5-8
HARVEST VALUE ARRAY – TVA 01
RG 2

PLANCONT NUMBER	SALE NAME	OWN	FOR EST	CTY NO.	TYPE SALE	YYMM	REAL CATE	CONT LGTH	LOG SYS	SPP NTH VOLUME	VOL /AC	AVCAT IHV	DED ADJ	TIME ADJ	ADJ IHV	VOL /LOG	SIZE CODE	SPP PCT
Test 30	Sale 30	P		08	L	0508	N	1	TR	1,000	33.3	$730		$215	$945	200	2	100
Test 34	Sale 34	G		12	L	0604	N	1	TR	160	20.0	$745	$50	$130	$925	200	2	100
Test 6	Sale F	P		12	L	0512	N	1	TR	1,200	7.5	$715		$180	$895	190	2	100
Test 11	Sale K	P		12	S	0603	N	1	TR	285	9.5	$700	$50	$140	$890	200	2	100
Test 8	Sale H	P		12	L	0510	N	1	TR	1,100	6.9	$675		$210	$885	190	2	100
Test 14	Sale N	P		12	L	0608	N	1	TR	600	7.5	$790		$90	$880	200	2	100
Test 2	Sale B	P		12	S	0509	N	1	TR	520	20.0	$660		$210	$870	180	2	100
Test 33	Sale 33	P		12	L	0603	N	1	ST	500	10.0	$717		$140	$857	160	2	50
Test 43	Sale 43	P		12	L	0701	N	1	TR	1,000	8.3	$805		$50	$855	180	2	100
Test 9	Sale I	P		12	S	0602	N	1	TS	6,000	10.9	$680		$155	$835	160	2	86
Test 16	Sale P	P		12	L	0604	N	1	TR	6,000	13.4	$600		$130	$730	160	2	90
Test 15	Sale O	P		12	S	0604	N	1	TR	2,200	8.8	$590		$130	$720	175	2	100
Test 21	Sale U	P		12	L	0705	N	1	TR	4,800	9.6	$635		$10	$645	167	2	100
Test 25	Sale Y	P		12	L	0707	N	1	TR	1,700	10.6	$645		$0	$645	170	2	100

Total – All Sales 14 Sales 27,065 M

Average Value	$691/M	$826/M	
Standard Deviation	$61/M	$95/M	
Weighted Average Value		$769/M	
Indicated Average Volume Per Log –14 Indicators			180 BF
Standard Deviation			15 BF

TABLE 5-9
HARVEST VALUE ARRAY – TVA 01
RG 3

PLANCONT NUMBER	SALE NAME	OWN	FOR EST	CTY NO.	TYPE SALE	YYMM	REAL CATE	CONT LGTH	LOG SYS	SPP NTH VOLUME	VOL /AC	AVCAT IHV	DED ADJ	TIME ADJ	ADJ IHV	VOL /LOG	SIZE CODE	SPP PCT
Test 50	Sale 50	P		12	L	0509	N	1	TR	1,500	15.0	$810		$205	$1015	140	3	100
Test 10	Sale J	P		08	S	0602	N	1	TR	70	4.7	$700	$125	$140	$965	140	3	100
Test 5	Sale E	P		12	S	0511	N	1	TR	80	2.1	$650	$125	$190	$965	110	3	100
Test 47	Sale 47	P		12	L	0604	N	1	TR	100	33.3	$770	$50	$120	$940	120	3	100
Test 27	Sale 27	P		12	L	0508	N	1	TR	100	8.3	$650	$50	$210	$910	80	3	100
Test 3	Sale C	P		12	L	0511	N	1	ST	3,100	2.7	$690	$25	$190	$905	140	3	97
Test 28	Sale 28	G		12	L	0508	S	1	TS	7,000	8.9	$686		$210	$896	110	3	88
Test 29	Sale 29	P		08	L	0508	N	1	TR	80	4.0	$530	$125	$210	$865	90	3	100
Test 39	Sale 39	P		12	L	0610	N	1	TR	250	25.0	$735	$50	$70	$855	140	3	100
Test 26	Sale 26	P		12	L	0508	N	1	TR	1,000	6.7	$640		$210	$850	130	3	100
Test 7	Sale G	P		08	S	0509	N	1	TR	200	11.0	$590	$50	$205	$845	140	3	91
Test 4	Sale D	P		12	L	0510	N	1	SS	5,000	12.9	$640		$200	$840	140	3	93
Test 12	Sale L	P		12	L	0607	N	1	TR	1,050	9.6	$742		$90	$832	140	3	91
Test 49 *	Sale 49	P		12	L	0707	N	1	TR	275	11.0	$765	$50	$0	$815	110	3	100
Test 46	Sale 46	P		12	L	0703	N	1	TR	800	21.1	$780		$20	$800	130	3	100
Test 1	Sale A	P		12	L	0508	N	1	TR	560	11.2	$580		$210	$790	140	3	100
Test 35	Sale 35	P		12	L	0604	N	1	TR	1,500	7.5	$655		$120	$775	100	3	100
Test 42	Sale 42	P		12	L	0701	N	1	TR	150	10.0	$725		$40	$765	100	3	100
Test 13	Sale M	P		12	S	0605	N	1	TR	8,800	14.0	$654		$110	$764	120	3	90
Test 18	Sale R	P		12	S	0609	N	1	TR	200	3.0	$585	$75	$80	$740	118	3	100
Test 36	Sale 36	P		12	S	0607	N	1	TR	350	8.8	$650		$90	$740	120	3	100
Test 20	Sale T	P		12	L	0703	N	1	SS	1,890	7.7	$715		$20	$735	140	3	90
Test 40	Sale 40	P		12	L	0611	N	1	SS	1,300	23.3	$675		$60	$735	140	3	93
Test 19	Sale S	P		08	L	0701	N	1	TR	420	10.0	$680		$40	$720	125	3	100
Test 24 *	Sale X	P		12	L	0704	N	1	TR	2,000	10.6	$700		$15	$715	140	3	95
Test 37	Sale 37	P		12	S	0608	N	1	TS	800	12.5	$620		$85	$705	130	3	80
Test 48 *	Sale 48	P		12	L	0705	N	1	TR	750	17.7	$689		$10	$699	90	3	88
Test 38	Sale 38	P		12	L	0609	N	1	TR	500	3.1	$590	$25	$80	$695	75	3	100
Test 45	Sale 45	P		12	L	0702	N	1	ST	400	7.4	$664		$30	$694	140	3	80
Test 17	Sale Q	P		12	L	0604	N	1	ST	3,050	10.8	$564		$120	$684	110	3	88
Test 41	Sale 41	P		12	L	0612	N	1	TR	550	12.0	$600		$50	$650	110	3	92
Test 22	Sale U	P		12	L	0707	N	1	TR	220	5.8	$590	$50	$0	$640	100	3	100
Test 23	Sale W	P		12	S	0706	N	1	TR	190	9.5	$600		$5	$605	140	3	100
Test 44	Sale 44	P		12	L	0702	N	1	TR	80	4.0	$505		$30	$535	60	3	100

Total – All Sales 34 Sales 44,315 M

Average Value	$659/M	$784/M
Standard Deviation	$71/M	$108/M
Weighted Average Value		$802/M
Indicated Average Volume Per Log – 34 Indicators		119 BF
Standard Deviation		22 BF

* Prime Sales

TABLE 5-10
HARVEST VALUE ARRAY – TVA 01
RG

PLANCONT NUMBER	SALE NAME	OWN	FOR EST	CTY NO.	TYPE SALE	YYMM	REAL CATE	CONT LGTH	LOG SYS	SPP NTH VOLUME	VOL /AC	AVCAT IHV	DED ADJ	TIME ADJ	ADJ IHV	VOL /LOG	SIZE CODE	SPP PCT
Test 31	Sale 31	P		12	L	0508	N	1	TR	200	20.0	$860	$50	$120	$1030	350	1	100
Test 50	Sale 50	P		12	L	0509	N	1	TR	1,500	15.0	$810		$205	$1015	140	3	100
Test 10	Sale J	P		08	S	0602	N	1	TR	70	4.7	$700	$125	$140	$965	140	3	100
Test 5	Sale E	P		12	S	0511	N	1	TR	80	2.1	$650	$125	$190	$965	110	3	100
Test 30	Sale 30	P		08	L	0508	N	1	TR	1,000	33.3	$730		$215	$945	200	2	100
Test 47	Sale 47	P		12	L	0604	N	1	TR	100	33.3	$770	$50	$120	$940	120	3	100
Test 34	Sale 34	G		12	L	0604	N	1	TR	160	20.0	$745	$50	$130	$925	200	2	100
Test 27	Sale 27	P		12	L	0508	N	1	TR	100	8.3	$650	$50	$210	$910	80	3	100
Test 3	Sale C	P		12	L	0511	N	1	ST	3,100	2.7	$690	$25	$190	$905	140	3	97
Test 28	Sale 28	G		12	L	0508	S	1	TS	7,000	8.9	$686		$210	$896	110	3	88
Test 6	Sale F	P		12	L	0512	N	1	TR	1,200	7.5	$715		$180	$895	190	2	100
Test 11	Sale K	P		12	S	0603	N	1	TR	285	9.5	$700	$50	$140	$890	200	2	100
Test 32	Sale 32	P		08	L	0509	N	1	TR	125	25.0	$725	$50	$115	$890	320	1	100
Test 8	Sale H	P		12	L	0510	N	1	TR	1,100	6.9	$675		$210	$885	190	2	100
Test 14	Sale N	P		12	L	0608	N	1	TR	600	7.5	$790		$90	$880	200	2	100
Test 2	Sale B	P		12	S	0509	N	1	TR	520	20.0	$660		$210	$870	180	2	100
Test 29	Sale 29	P		08	L	0508	N	1	TR	80	4.0	$530	$125	$210	$865	90	3	100
Test 33	Sale 33	P		12	L	0603	N	1	ST	500	10.0	$717		$140	$857	160	2	50
Test 39	Sale 39	P		12	L	0610	N	1	TR	250	25.0	$735	$50	$70	$855	140	3	100
Test 43	Sale 43	P		12	L	0701	N	1	TR	1,000	8.3	$805		$50	$855	180	2	100
Test 26	Sale 26	P		12	L	0508	N	1	TR	1,000	6.7	$640		$210	$850	130	3	100
Test 7	Sale G	P		08	S	0509	N	1	TR	200	11.0	$590	$50	$205	$845	140	3	91
Test 4	Sale D	P		12	L	0510	N	1	SS	5,000	12.9	$640		$200	$840	140	3	93
Test 9	Sale I	P		12	S	0602	N	1	TS	6,000	10.9	$680		$155	$835	160	2	86
Test 12	Sale L	P		12	L	0607	N	1	TR	1,050	9.6	$742		$90	$832	140	3	91
Test 49	Sale 49	P		12	L	0707	N	1	TR	275	11.0	$765	$50	$0	$815	110	3	100
Test 46	Sale 46	P		12	L	0703	N	1	TR	800	21.1	$780		$20	$800	130	3	100
Test 1	Sale A	P		12	L	0508	N	1	TR	560	11.2	$580		$210	$790	140	3	100
Test 35	Sale 35	P		12	L	0604	N	1	TR	1,500	7.5	$655		$120	$775	100	3	100
Test 42	Sale 42	P		12	L	0701	N	1	TR	150	10.0	$725		$40	$765	100	3	100
Test 13	Sale M	P		12	S	0605	N	1	TR	8,800	14.0	$654		$110	$764	120	3	90
Test 18	Sale R	P		12	S	0609	N	1	TR	200	3.0	$585	$75	$80	$740	118	3	100
Test 36	Sale 36	P		12	S	0607	N	1	TR	350	8.8	$650		$90	$740	120	3	100
Test 20	Sale T	P		12	L	0703	N	1	SS	1,890	7.7	$715		$20	$735	140	3	90
Test 40	Sale 40	P		12	L	0611	N	1	SS	1,300	23.3	$675		$60	$735	140	3	93
Test 16	Sale P	P		12	L	0604	N	1	TR	6,000	13.4	$600		$130	$730	160	2	90
Test 15	Sale O	P		12	S	0604	N	1	TR	2,200	8.8	$590		$130	$720	175	2	100
Test 19	Sale S	P		08	L	0701	N	1	TR	420	10.0	$680		$40	$720	125	3	100
Test 24	Sale X	P		12	L	0704	N	1	TR	2,000	10.6	$700		$15	$715	140	3	95

Table Continued on Next Page

TABLE 5-10 (Continued)
HARVEST VALUE ARRAY – TVA 01
RG

PLANCONT NUMBER	SALE NAME	OWN	FOR EST	CTY NO.	TYPE SALE	YYMM	REAL CATE	CONT LGTH	LOG SYS	SPP NTH VOLUME	VOL /AC	AVCAT IHV	DED ADJ	TIME ADJ	ADJ IHV	VOL /LOG	SIZE CODE	SPP PCT
Test 37	Sale 37	P		12	S	0608	N	1	TS	800	12.5	$620		$85	$705	130	3	80
Test 48	Sale 48	P		12	L	0705	N	1	TR	750	17.7	$689		$10	$699	90	3	88
Test 38	Sale 38	P		12	L	0609	N	1	TR	500	3.1	$590	$25	$80	$695	75	3	100
Test 45	Sale 45	P		12	L	0702	N	1	ST	400	7.4	$664		$30	$694	140	3	80
Test 17	Sale Q	P		12	L	0604	N	1	ST	3,050	10.8	$564		$120	$684	110	3	88
Test 41	Sale 41	P		12	L	0612	N	1	TR	550	12.0	$600		$50	$650	110	3	92
Test 21	Sale U	P		12	L	0705	N	1	TR	4,800	9.6	$635		$10	$645	167	2	100
Test 25	Sale Y	P		12	L	0707	N	1	TR	1,700	10.6	$645		$0	$645	170	2	100
Test 22	Sale U	P		12	L	0707	N	1	TR	220	5.8	$590	$50	$0	$640	100	3	100
Test 23	Sale W	P		12	S	0706	N	1	TR	190	9.5	$600		$5	$605	140	3	100
Test 44	Sale 44	P		12	L	0702	N	1	TR	80	4.0	$505		$30	$535	60	3	100

Total – All Sales 50 Sales 71,705 M

Average Value	$673/M	$803/M	
Standard Deviation	$74/M	$110/M	
Weighted Average Value		$791/M	
Indicated Average Volume Per Log – 50 Indicators			145 BF
Standard Deviation			51 BF

TABLE 5-11
SALES LISTING – TVA 01

PLANCONT	N.F.	SALE NAME	SALE DATE	OWNER	CTY	TERM	SYS	VOLUME	ACRES	VOL/AC.	SALV%
Test 1		Sale A	08/15/2005	Taxpayer A	12	1	TR	560	50	11.2	0
Test 10		Sale J	02/17/2006	Taxpayer J	08	1	TR	70	15	4.7	0
Test 11		Sale K	03/03/2006	Taxpayer K	12	1	TR	285	30	9.5	0
Test 12		Sale L	07/01/2006	Taxpayer L	12	1	TR	1,150	120	9.6	0
Test 13		Sale M	05/01/2006	Taxpayer M	12	1	TR	9,800	700	14.0	0
Test 14		Sale N	08/01/2006	Taxpayer N	12	1	TR	600	80	7.5	0
Test 15		Sale O	04/15/2006	Taxpayer O	12	1	TR	2,200	250	8.8	0
Test 16		Sale P	04/01/2006	Taxpayer P	12	1	TR	6,700	500	13.4	0
Test 17		Sale Q	04/27/2006	Taxpayer Q	12	1	ST	3,450	320	10.8	0
Test 18		Sale R	09/27/2006	Taxpayer R	12	1	TR	200	67	3.0	0
Test 19		Sale S	01/15/2007	Taxpayer S	08	1	TR	420	42	10.0	0
Test 2		Sale B	09/01/2005	Taxpayer B	12	1	TR	520	26	20.0	0
Test 20		Sale T	03/01/2007	Taxpayer T	12	1	SS	2,090	270	7.7	0
Test 21		Sale U	05/01/2007	Taxpayer U	12	1	TR	4,800	500	9.6	0
Test 22		Sale U	07/01/2007	Taxpayer U	12	1	TR	220	38	5.8	0
Test 23		Sale W	06/01/2007	Taxpayer W	12	1	TR	190	20	9.5	0
Test 24		Sale X	04/15/2007	Taxpayer X	12	1	TR	2,110	200	10.6	0
Test 25		Sale Y	07/01/2007	Taxpayer Y	12	1	TR	1,700	160	10.6	0
Test 26		Sale 26	08/03/2005	Taxpayer 26	12	1	TR	1,000	150	6.7	0
Test 27		Sale 27	08/05/2005	Taxpayer 27	12	1	TR	100	12	8.3	0
Test 28		Sale 28	08/08/2005	Taxpayer 28	12	1	TS	8,000	900	8.9	0
Test 29		Sale 29	08/15/2005	Taxpayer 29	08	1	TR	80	20	4.0	0
Test 3		Sale C	11/01/2005	Taxpayer C	12	1	ST	3,190	1,200	2.7	0
Test 30		Sale 30	08/22/2005	Taxpayer 30	08	1	TR	1,000	30	33.3	0
Test 31		Sale 31	08/30/2005	Taxpayer 31	12	1	TR	200	10	20.0	0
Test 32		Sale 32	09/01/2005	Taxpayer 32	08	1	TR	125	5	25.0	0
Test 33		Sale 33	03/05/2006	Taxpayer 33	12	1	ST	1,000	100	10.0	0
Test 34		Sale 34	04/30/2006	Taxpayer 34	12	1	TR	160	8	20.0	0
Test 35		Sale 35	04/30/2006	Taxpayer 35	12	1	TR	1,500	200	7.5	0
Test 36		Sale 36	07/15/2006	Taxpayer 36	12	1	TR	350	40	8.8	0
Test 37		Sale 37	08/31/2006	Taxpayer 37	12	1	TS	1,000	80	12.5	0
Test 38		Sale 38	09/01/2006	Taxpayer 38	12	1	TR	500	160	3.1	0
Test 39		Sale 39	10/05/2006	Taxpayer 39	12	1	TR	250	10	25.0	0
Test 4		Sale D	10/01/2005	Taxpayer D	12	1	SS	5,400	420	12.9	0
Test 40		Sale 40	11/30/2006	Taxpayer 40	12	1	SS	1,400	60	23.3	0
Test 41		Sale 41	12/01/2006	Taxpayer 41	12	1	TR	600	50	12.0	0
Test 42		Sale 42	01/01/2007	Taxpayer 42	12	1	TR	150	15	10.0	0
Test 43		Sale 43	01/15/2007	Taxpayer 43	12	1	TR	1,000	120	8.3	0

Table Continued on Next Page

TABLE 5-11 (Continued)
SALES LISTING – TVA 01

PLANCONT	N.F.	SALENAME	SALEDATE	OWNER	CTY	TERM	SYS	VOLUME	ACRES	VOL/AC.	SALV%
Test 44		Sale 44	02/01/2007	Taxpayer 44	12	1	TR	80	20	4.0	0
Test 45		Sale 45	02/20/2007	Taxpayer 45	12	1	ST	500	68	7.4	0
Test 46		Sale 46	03/01/2007	Taxpayer 46	12	1	TR	800	38	21.1	0
Test 47		Sale 47	04/01/2006	Taxpayer 47	12	1	TR	100	3	33.3	0
Test 48		Sale 48	05/01/2007	Taxpayer 48	12	1	TR	850	48	17.7	0
Test 49		Sale 49	07/01/2007	Taxpayer 49	12	1	TR	275	25	11.0	0
Test 5		Sale E	11/01/2005	Taxpayer E	12	1	TR	80	38	2.1	0
Test 50		Sale 50	09/15/2005	Taxpayer 50	12	1	TR	1,500	100	15.0	0
Test 6		Sale F	12/01/2005	Taxpayer F	12	1	TR	1,200	160	7.5	0
Test 7		Sale G	09/15/2005	Taxpayer G	08	1	TR	220	20	11.0	0
Test 8		Sale H	10/04/2005	Taxpayer H	12	1	TR	1,100	160	6.9	0
Test 9		Sale I	02/01/2006	Taxpayer I	12	1	TS	7,000	640	10.9	0

Legend:

PLANCONT	Permit (THP, NTMP, EX, or EM Number) or Contract Number
N.F.	National Forest Name
SALENAME	Name Given to Operation
SALEDATE	Month/Day/Year of Sale Date
OWNER	Timber Owner's Name
CTY	County Number
TERM	Number of Years in Contract
SYS	Logging System, Tractor (**TR**), Skyline/Tractor (**ST**), Skyline (**SS**)
VOLUME	Total Volume of Sale
ACRES	Harvest Acres of Sale
VOL/AC.	Total Volume, Divided by Harvest Acres
SALV%	Percent of Salvage in Sale

APPENDIX 6: SUMMARY TABLES

Board staff prepares several summary tables for the TAC members and other interested parties to assist them when analyzing the suggested immediate harvest values developed by the staff. The summary tables do not include raw data. The tables are arrayed in a source-neutral format to preclude divulging the parties involved in specific timber or log sales transactions.

The following are examples of the source-neutral tables developed by Board staff. The data may be fictitious, but the tables accurately display the information routinely provided to the TAC members.

TABLE 6-1
SALES SUMMARY TABLE G

HARVEST VALUE SUMMARY – 2H 2005												
Species		**TVA 1**	**TVA 2N**	**TVA 2S**	**TVA 3**	**TVA 4**	**TVA 5**	**TVA 6**	**TVA 7**	**TVA 8**	**TVA 9N**	**TVA 9S**
PPG 1	# Sales/Vol	*/*	0/0	0/0	0/0	*/*	*/*	0/0	*/*	*/*	*/*	0/0
	WTD/Suggested	*/320	-/290	-/270	-/400	*/470	-/530	-/480	*/530	*/480	*/460	-/180
PPG 2	# SalesVol	5/1042	*/*	*/*	*/*	6/1234	*/*	13/15871	32/17104	21/5900	16/5515	0/0
	WTD/Suggested	162/260	*/220	*/220	*/300	263/370	*/460	467/440	484/470	405/380	414/400	-/130
PPG 3	# Sales/Vol	*/*	0/0	0/0	13/3463	15/3711	*/*	38/32300	111/29329	72/19294	9/1265	0/0
	WTD/Suggested	*/180	-/185	-/150	194/200	259/250	*/240	326/340	314/320	344/320	268/290	-/110
FG	# Sales/Vol	59/28620	10/1755	0/0	13/3194	13/7993	*/*	50/71527	112/70784	55/7356	23/12490	*/*
	WTD/Suggest	170/160	91/80	-/70	158/160	176/170	*/130	252/260	214/210	159/160	197/200	*/50
DFG 1	# Sales/Vol	5/2439	*/*	*/*	0/0	*/*	*/*	0/0	*/*	0/0	0/0	0/0
	WTD/Suggested	433/420	*/350	*/310	-/380	*/450	-/430	-/460	*/490	-/430	-/240	-/90
DFG 2	# Sales/Vol	63/85148	6/3698	16/3630	*/*	8/4528	*/*	5/1222	11/5481	*/*	0/0	0/0
	WTD/Suggested	411/400	284/290	272/270	*/330	421/410	*/380	428/410	422/420	*/350	-/200	-/90
DFG 3	# Sales/Vol	113/72225	42/20457	39/4725	13/4773	20/9679	*/*	25/5202	91/23167	47/6290	0/0	0/0
	WTD/Suggested	360/360	284/280	272/260	282/300	332/320	*/310	400/400	372/370	323/320	-/190	-/90
ICG	# Sales/Vol	*/*	0/0		13/872	*/*	*/*	40/8262	116/13098	88/11386	22/3205	*/*
	WTD/Suggested	*/250	-/260		368/400	*/370	*/390	436/450	442/440	368/370	323/320	*/170
RG 1	# Sales/Vol	6/1778	*/*	*/*			*/*					
	WTD/Suggested	733/830	*/830	*/830			-/670					
RG 2	# Sales/Vol	32/14485	6/4070	21/15475			*/*					
	WTD/Suggested	808/780	747/720	719/720			*/570					
RG 3	# Sales/Vol	83/28054	53/31689	49/25690			*/*					
	WTD/Suggested	809/750	705/680	704/700			-/470					
PCG 1	# Sales/Vol	*/*			0/0	0/0						
	WTD/Suggested	*/1000			-/750	-/750						
PCG 2	# Sales/Vol	*/*			0/0	0/0						
	WTD/Suggested	*/300			-/300	-/300						

WTD = Weighted average indexed sales price

* So few sales that publication of sales information may disclose identities or business operations of individuals. Generally less than 5 sales.

TABLE 6-2
CHANGES TO TABLE 1 FOR TAC MEETING

		1H 2005	2H 2005			
		HARVEST VALUE	HARVEST VALUE		Sales	
SPECIES OR PRODUCT	SPECIES CODE	PER UNIT	PER UNIT	CHANGE	#/Volume	Weighted
Christmas trees, Natural Misc.	XNM	N/A	0.60	0.00	0/0	0.00
Christmas trees, Natural Red Fir	XNR	N/A	1.40	0.00	6/25990	1.40
Christmas trees, Natural White Fir	XNW	N/A	0.60	0.00	*/*	*
Christmas trees, Plantation	XP	N/A	1.50	0.00	*/*	*
Cull logs	CUL	5.00	5.00	0.00	*/*	*
Fuelwood, hardwood	FWH	35.00	35.00	0.00	*/*	*
Fuelwood, miscellaneous	FWM	30.00	30.00	0.00	9/1684	36.00
Pulp chipwood & hardwood logs	HW	1.00	1.00	0.00	0/0	0.00
Woods - produced fuel chips	CS	0.00	0.00	0.00	41/139891	0.00
Poles & pilings, small (20' – 40')	PS	0.60	0.60	0.00	*/*	*
Poles & pilings, medium (41' – 60')	PM	1.00	1.10	0.10	*/*	*
Poles & pilings, large (61' – up)	PL	1.60	1.70	0.10	0/0	0.00
Posts, round	PST	0.20	0.20	0.00	0/0	0.00
Split products, redwood	TR	75.00	75.00	0.00	0/0	0.00
Split products, miscellaneous	TM	10.00	10.00	0.00	0/0	0.00
Small sawlogs, miscellaneous	SSM	160.00	160.00	0.00	68/73637	155.00
Miscellaneous conifer species	CM	100.00	110.00	10.00	47/1805	110.00

* So few sales that publication of sales information may disclose identities of business operations of individuals. Generally less than 5 sales.

SUGGESTED VALUES AND CHANGES FROM THE PRIOR STAFF DRAFT

TABLE 6-3
TABLE G. TIMBER HARVEST VALUES

	TVA 01	TVA 2N	TVA 2S	TVA 03	TVA 04	TVA 05	TVA 06	TVA 07	TVA 08	TVA 9N	TVA 9S
PPG 1	320/ 0	290/ 0	270/ 0	400/ -40	470/ 0	530/ 0	480/ 0	530/ 0	480/ 0	460/ 0	180/ 0
PPG 2	260/ 0	220/ -20	220/ 0	300/ -40	370/ 0	460/ 0	440/ 20	470/ 20	380/ 0	400/ 0	130/ 0
PPG 3	180/ 0	185/ -15	150/ 0	200/ -40	250/ 10	240/ 0	340/ 20	320/ 10	320/ -10	290/ -10	110/ 0
FG	160/ 10	80/ 0	70/ 0	160/ -40	170/ 0	130/ 0	260/ 0	210/ -10	160/ -10	200/ 0	50/ 0
DFG 1	420/ -20	350/ 0	310/ -10	380/ -30	450/ 10	430/ 10	460/ 0	490/ 0	430/ 0	240/ 0	90/ 0
DFG 2	400/ 20	290/ 0	270/ 0	330/ -30	410/ 10	380/ 10	410/ 0	420/ 10	350/ 0	200/ 0	90/ 0
DFG 3	360/ 0	280/ 10	260/ 10	300/ -30	320/ 10	310/ 20	400/ 10	370/ 0	320/ 0	190/ 0	90/ 0
ICG	250/ -20	260/ -10	NA	400/ -30	370/ -20	390/ -20	450/ 0	440/ -20	370/ -10	320/ -10	170/ 0
RG 1	830/ 30	830/ 30	830/ 30	NA	NA	670/ 20	NA	NA	NA	NA	NA
RG 2	780/ 10	720/ 30	720/ 40	NA	NA	570/ 20	NA	NA	NA	NA	NA
RG 3	750/ 30	680/ 40	700/ 40	NA	NA	470/ 20	NA	NA	NA	NA	NA
PCG 1	1,000/ 0	NA	NA	750/ 0	750/ 0	NA	NA	NA	NA	NA	NA
PCG 2	350/ 50	NA	NA	300/ 0	300/ 0	NA	NA	NA	NA	NA	NA

TABLE 6-4
TABLE S. SALVAGE HARVEST VALUES

	TVA 01	TVA 2N	TVA 2S	TVA 03	TVA 04	TVA 05	TVA 06	TVA 07	TVA 08	TVA 9N	TVA 9S
PPS 1	240/ 0	220/ 0	200/ 0	300/ -30	350/ 0	400/ 0	320/ -40	400/ 10	360/ 0	340/ 0	1/ 0
PPS 2	200/ 0	160/ -20	160/ 0	220/ -40	280/ 0	340/ 0	280/ -40	350/ 10	280/ 0	300/ 0	1/ 0
PPS 3	140/ 0	140/ -10	110/ 0	150/ -30	190/ 10	180/ 0	200/ -40	240/ 10	240/ -10	220/ 0	1/ 0
FS	120/ 10	60/ 0	50/ 0	120/ -30	130/ 0	100/ 0	130/ -30	130/ 0	140/ -10	80/ -20	1/ 0
DFS 1	320/ -10	260/ 0	230/ -10	280/ -30	340/ 10	320/ 0	340/ 0	370/ 0	320/ 0	180/ 0	1/ 0
DFS 2	300/ 10	220/ 0	200/ 0	250/ -20	310/ 10	280/ 0	310/ 0	320/ 10	260/ 0	150/ 0	1/ 0
DFS 3	280/ 0	210/ 10	190/ 0	220/ -30	240/ 10	230/ 10	300/ 10	280/ 0	240/ 0	140/ 0	1/ 0
ICS	190/ -10	200/ 0	NA	300/ -20	280/ -10	290/ -20	340/ 0	330/ -10	280/ 0	240/ -10	1/ 0
RS 1	620/ 20	620/ 20	620/ 20	NA	NA	500/ 10	NA	NA	NA	NA	NA
RS 2	580/ 0	540/ 20	540/ 30	NA	NA	430/ 20	NA	NA	NA	NA	NA
RS 3	560/ 20	510/ 30	520/ 20	NA	NA	350/ 10	NA	NA	NA	NA	NA
PCS 1	750/ 0	NA	NA	560/ 0	560/ 0	NA	NA	NA	NA	NA	NA
PCS 2	260/ 40	NA	NA	220/ 0	220/ 0	NA	NA	NA	NA	NA	NA

TABLE 6-5
TIMBER SALES SUMMARY
STAFF DRAFT

REGULAR SALES								
	NUMBER OF SALES			VOLUME (MBF)			LOGGING COSTS	
TVA	TOTAL	GVT	PVT	TOTAL	GVT	PVT	TRACTOR	HAUL
01	261	2	259	241,188	5,499	235,689	166	54
2N	60	2	58	68,443	17,477	50,966	185	73
2S	76	0	76	51,115	0	51,115	155	82
03	16	2	14	14,880	4,604	10,276	150	58
04	29	2	27	28,867	4,238	24,629	130	68
05	8	0	8	21,747	0	21,747	167	86
06	55	2	53	144,053	11,916	132,137	100	63
07	147	7	140	167,238	9,629	157,609	142	56
08	96	3	93	50,787	355	50,432	157	55
9N	29	1	28	22,970	940	22,030	148	80
9S	1	0	1	45	0	45	225	150
Subtotals	778	21	757	811,333	54,658	756,675	157	75
Percent	100%	3%	97%	100%	7%	93%		

HELICOPTER SALES							
Subtotals	15	1	14	20,389	1,850	18,539	
Percent	100%	7%	93%	100%	9%	91%	

STATEWIDE TOTALS							
Subtotals	793	22	771	831,722	56,508	775,214	
Percent	100%	3%	97%	100%	7%	93%	

TABLE 6-6
REPORT OF TIME ADJUSTMENTS

COASTAL REGION

Date	Pp1	Pp2	Pp3	F	Df1	Df2	Df3	Ic	R1	R2	R3	CM
0508	0	0	0	45	15	20	30	0	120	215	210	0
0509	0	0	0	45	25	30	40	0	115	210	205	0
0510	0	0	0	40	30	35	45	0	110	210	200	0
0511	0	0	0	40	40	45	25	0	100	190	190	0
0512	0	0	0	35	50	55	5	0	90	180	180	0
0601	0	0	0	35	60	65	85	0	80	170	160	0
0602	0	0	0	40	40	45	75	0	70	155	140	0
0603	0	0	0	45	30	35	65	0	60	140	130	0
0604	0	0	0	50	20	25	55	0	50	130	120	0
0605	0	0	0	50	10	15	45	0	45	120	110	0
0606	0	0	0	40	5	10	35	0	40	110	100	0
0607	0	0	0	35	0	5	25	0	30	100	90	0
0608	0	0	0	30	-10	-5	15	0	20	90	85	0
0609	0	0	0	20	-15	-10	10	0	10	85	80	0
0610	0	0	0	10	-20	-25	5	0	0	80	70	0
0611	0	0	0	5	-10	-10	15	0	-10	75	60	0
0612	0	0	0	0	0	5	20	0	-20	70	50	0
0701	0	0	0	0	10	15	25	0	-30	50	40	0
0702	0	0	0	0	10	15	25	0	-35	40	30	0
0703	0	0	0	0	10	15	25	0	-40	30	20	0
0704	0	0	0	0	10	15	25	0	-30	10	15	0
0705	0	0	0	-5	5	15	15	0	-25	10	10	0
0706	0	0	0	-5	5	10	10	0	-20	5	5	0
0707	0	0	0	-10	0	10	5	0	-10	0	0	0
0708	0	0	0	0	0	0	0	0	0	0	0	0

GLOSSARY OF TERMS

Term	Definition
Accessibility to Point of Conversion	Access to a processing facility. Processing facility may include, for example, a sort yard or reloads.
Basal Area	The cross-sectional area of a single stem, including the bark, measured at breast height (4.5 feet).
Biomass Components	Wood products obtained from in-woods chipping of all or some portion of trees, including limbs, tops, and submerchantable stems, usually for energy production.
Breast Height Age	The age of a tree at a point 4.5 feet above average ground level.
Bucking	The act of cutting a downed tree into segments.
Camp Run Prices	Sales prices not segregated by log size, grade, or species.
Compatible Use	Any use which does not significantly detract from the use of the property for growing and harvesting timber.
Conversion	A factor applied to measurement of logs by a nonstandard method to convert those measurements to the standard method of measurement.
Highest and Best Use	The most profitable use of a property at the time of the appraisal; that available use and program of future utilization that produces the highest present land value; must be legal, physically possible, financially feasible, and maximally profitable.
Immediate Harvest Value	The amount that each species or subclassification of timber would sell for on the stump at a voluntary sale made in the ordinary course of business for purposes of immediate harvest.
Indexing	The adjustment of prices or costs for changes in the market over time.
Logging System	The method of removing logs from the stump to the landing or truck.
Sale Date	A timber contract execution date.
Salvage Timber	Dead, dying, or fatally damaged trees that are to be, or have been, harvested.

Term	Definition
Saw Kerf	The thickness of saw teeth.
Sawlogs	Logs that will be cut into dimension lumber, such as two-by-fours.
Scaling	Measuring logs to determine the volume of sound wood.
Scaling Date	The date when the quantity of timber harvested, by species, is first definitely determined.
Scaling Defect	A measurement of the estimated amount of defect material (for example, knots, crooks, conks, decay, splits, sweep, bad sawing, or injury) subtracted from gross volume to obtain the amount of wood that meets grading standards.
Scribner Short-Log Scale	A board foot log rule based on inscribed end cross sections of 1" thick boards spaced ¼" apart to allow for saw kerf diagramed as through and through cutting (parallel) within circular drawings of the inside bark diameter of the small end of a saw log. The sum of the calculated end areas of the boards is extended to board foot volume by multiplying by the log length (thickness 1") x width (inches ÷ 12) x length (feet) = board foot volume). The series of circular drawings are in 1" diameter increments. Decimal C refers to the tabulated scale being represented in tens of board feet, e.g., 2 = 20 board feet, 21 = 210 board feet.
Skidding Costs	The cost of transporting logs from the harvest area to a landing.
Skyline Logged	Transportation of logs from the harvest area to a landing by use of a cable from a stationary tower. See also yarder logged.
Stumpage Value	The value of trees standing in the woods with access and all permits in place.
Timber	Trees of any species maintained for eventual harvest for forest products purposes, whether planted or of natural growth, standing or down, including Christmas trees, on privately or publicly owned land, but does not mean nursery stock.
Timber Advisory Committee (TAC)	A standing committee appointed by the Board which consists of county assessors, timber industry representatives, and government representatives.

Term	Definition
Timber Harvesting Plan	A document filed with the Board of Forestry and Fire Protection that identifies timber stand conditions and intended harvest methods.
Timber Owner	The person or entity responsible for reporting and paying the timber yield tax.
Timber Value Areas	A geographical area of California having common timber growing, harvesting, and marketing conditions.
Timberland	Privately or publicly owned land which is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, and which is capable of growing an average annual volume of wood fiber of at least 15 cubic feet per acre per year.
Timberland Production Zone (TPZ)	An area which has been zoned pursuant to sections 51112 or 51113 and is devoted to and used for growing and harvesting timber or compatible uses.
Yarder	A system of power-operated winches and a tower used to haul logs from a stump to a landing.
Yarder Logged	Transportation of logs from the harvest area to a landing by use of a cable from a stationary tower. See also skyline logged.
Yarding	To move logs or trees to a landing, particularly by cable, balloon, or helicopter logging systems.
Yield Tax	The dollar amount derived by multiplying the net volume of harvested timber by the appropriate immediate harvest value per unit and by the yield tax rate.