# The Impact of Federal and State Income Taxes on Forest Landowners: An Examination of Tax Liabilities and Tax Planning

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**(ABSTRACT)**

Federal and state income tax laws pertaining to forest landowners are examined. Income tax liabilities are calculated for hypothetical forest landowners in two income brackets across the 41 states in the U.S. which impose a comprehensive income tax. The income tax liability is calculated to illustrate the effects of differential state tax treatment on a representative forest landowner with two different income levels ($50,000 and $110,000) who harvests $200,000 worth of timber in a given tax year. After-tax land expectation values for a forest landowner are also calculated to illustrate the effects of tax planning on returns to timber investment over time.

Twenty-eight states utilize the federal adjusted gross income (AGI) as their tax base. Thirty-three states provide a personal exemption in the form of a credit or deduction. A standard deduction is allowed in twenty-six states. The minimum tax rates range from zero percent in Delaware to six percent in Minnesota and North Carolina. Maximum rates range from 4.5 percent in Connecticut to 11 percent in Montana. Four states allow a capital gains exclusion while two others have maximum capital gains rates that are lower than the highest ordinary state tax rate.

In the South, landowners have the lowest state tax liability in Louisiana and the highest liability in North Carolina for both income levels. In the Midwest and Northeast,

landowners in the medium income ($50,000) level have the lowest tax liability in North Dakota and the highest in Minnesota. Landowners in the high income level ($110,000) have the lowest tax liability in Pennsylvania and the highest liability in Minnesota. In the West, medium-income level Idaho and Montana landowners have the lowest and highest state tax liabilities, respectively. High level income landowners have the lowest liability in Arizona and the highest liability in Montana.

The effects of tax planning on a forest landowner's potential revenues are calculated using land expectation methodology. Six different scenarios are used to examine the effect of common omissions and mistakes made by a typical landowner. In each successive scenario, the landowners forego certain tax benefit(s) that, in turn, lower their LEV. Different representative state tax rates and discount rates are used as a sensitivity analysis to find a range of values that could potentially occur. The treatment of timber revenue as an ordinary gain provides the largest decline in land expectation value in most cases.

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# Chapter 1

# Introduction

"Taxes have a pervasive impact on our lives. They affect every individual in the United States from birth to death, and even beyond death..."(Willis and Davis 1998). In 1913, Congress passed the sixteenth amendment to the Constitution. The amendment gave the federal government the power to impose an income tax on the people of the United States. Its influence would permeate through the social, political, and economic workings of the twentieth century.

Taxes are a levy imposed on the public to pay for goods that benefit society. The federal tax system is used to raise revenues, encourage certain economic behaviors, and t promote social objectives. This mixing of goals has led to a very complicated tax system in the U.S. that is very difficult for the average taxpayer to comprehend.

The federal government collected 1.4 trillion dollars in taxes in 1994 (U.S.Census 1998a). Thirty-nine percent ($543 billion) of the federal tax revenue was collected through the personal income tax. States collected a total of 443 billion dollars, or $1,660 per person, in taxes in 1996 (U.S. Census 1998b). Individual income taxes accounted for $145 billion (33%) of total state revenue.

The Taxpayer Relief Act of 1997 and, to a lesser extent, the IRS Restructuring and Reform Act of 1998 created changes in the tax law that affect millions of taxpayers. New credits, lower capital gains rates, and estate tax changes were some of the major revisions in the 1997 Act. Overall, the 1997 Act is expected to provide $152 billion in tax cuts between the date of passage and 2002 (Haney and Siegel 1998). The 1998 Act's major contribution to tax policy was the revision of the long-term capital gains holding period back to more than 12 months.

The strong economy of the late 1990's has allowed most state governments to have strong fiscal years. The increase in revenue collection as well as a slowdown in spending is increasing state tax revenue. The excess tax revenue is propelling state political leaders to share the economic windfall with their constituents. State spending is projected to fall to the third-lowest level in the last 19 years (NGA 1988). Personal

income tax reductions in 26 states will save taxpayers close to $1 billion in taxes in fiscal year 1998 (NCSL 1998).

Tax incentives used to encourage forest management including nonindustrial private forest landowners (NIPF's) began with the provision of Section 117(k) in 1943. These were later recodified as Section 631. Cost-share payments for reforestation and the reforestation and investment tax credits were relatively new ideas when introduced in the 1970's and 1980's. These provisions should increase the productivity and health of the forests in the United States, however, anecdotal evidence suggests that these provisions were not fully adopted. The incentives can be used to alter the amount of income tax paid upon harvest or change the tax treatment of reforestation costs, the greatest cost in forest management. The lack of information on potential cash flows to the forest landowner and complicated tax provisions have been a hindrance to the incorporation of incentives into tax law.

Income taxes have a great impact on NIPF's and forest management. In the recent past, many states have adopted laws that conform their regulations to the federal rules. Forest landowners and investors need to be aware of the effect income taxes can have on potential timberland revenues. A change in the income tax rates on the federal or state level can alter the harvest cycle or shift the attractiveness of forestry in one state compared to another state. Comprehensive research has been compiled on federal and state income taxes in relation to forestry activities, but is often outdated by new tax laws and revisions. Therefore, the following study will re-examine the federal-state tax liability for NIPF's as well as the effects of tax planning on land value.

## *Objectives*

The first objective of the study is to determine the current federal and state tax liability for a representative timberland owner in the United States. The second objective is to identify tax laws that are important to NIPF's. The third objective is to explore the relevance of tax rules to forest landowners through a land expectation value (LEV) analysis. The final objective is to analyze regional variations in state tax laws.

In Chapter 2, the relevant literature on tax laws and their effect on private forest landowners is reviewed. A brief overview of the analyses performed in Chapters 4, 5,

and 6 is provided in Chapter 3. The federal and state tax liability for landowners in the South is examined in Chapter 4. A land expectation format is used to analyze common mistakes or omissions landowners can make in their tax planning in this chapter. The analysis performed in Chapter 4 is repeated in Chapters 5 and 6 for states in the Midwest and Northeast, and West, respectively. A regional comparison of the results is presented in Chapter 7. Chapters 4, 5, 6, and 7 were written to be submitted for publication. Therefore, some information in each chapter may be redundant. Finally, in Chapter 8, conclusions on the effects of taxes on NIPF landowners are examined. The Appendices contain outlines of the federal and state tax laws and a sample of the cover letter and mail-out questionnaire sent to each state tax office.

# Chapter 2

# Literature Review

Timberland owners have multiple objectives for owning forest land (Bliss and Martin 1988). Changes in the federal and state income tax laws can affect the management regime, intensity of management, and inflow/outflow of land devoted to forest practices on nonindustrial private forest (NIPF) holdings. Modifications to the income tax code have the potential to impact many aspects of forest management over time.

Tax law and policy on forestry is important to the federal government because nonindustrial private forest landowners hold 59 percent of U.S. timberland and account for 49 percent of the volume harvested in 1991 (USDA Forest Service 1994). Total demand for domestic softwood is expected to increase 35 percent by the year 2040 (USDA Forest Service 1989). Nationally, NIPF's will have an increasingly important role in forest management as more harvests on private lands, which are expected to increase 70 percent by the year 2040 (USDA Forest Service 1989), are needed to offset reductions in harvests on public lands.

Investment in timberland typically represents a long-term venture and entails considerable risk due to the lack of liquidity of the investment (Stier 1997). The sporadic realization of revenue from timberland is another monetary problem facing timberland owners. Therefore, taxes are an important consideration for a landowner when completing a financial analysis of his or her forest land. DeCoster (1995) states "if landowners are going to invest in taking better long-term care of their trees, they have to use income that doesn't come from forests." The use of income from outside sources has great policy implications for forest land management that the federal government must take into account when creating new tax laws.

Informing private landowners about the wide array of the forest management opportunities and how to incorporate tax issues into a management regime may increase the available timber supply in the future (USDA Forest Service 1988). Landowner assistance programs (LAP's), consulting foresters, and extension agents can help educate

the private landowner about tax issues and policies.

Many studies have addressed the effects of timber tax incentives on landowners. Boyd and Hyde (1989), Greene (1998), Sunley (1972), and Chang (1983a) have studied the effects of incentives on forest management. Sunley (1972) concluded that timber tax incentives are not effective in increasing the supplies of timber. Chang (1983a) also found that tax incentives had little effect on the reforestation efforts of private timberland owners. Boyd and Hyde (1989) found that preferential capital gains treatment does encourage landowners and increase overall output. Greene (1998) examines many policy incentives that alter the amount of tax due from a timber sale and the treatment of reforestation expenses. He concludes that many incentives will provide the landowner with benefits, but all must be weighed heavily in the policy arena to determine the effect on government revenue.

Income taxes lower a landowner's financial return on an investment. Lower returns can discourage investment in forest land and encourage investors to place their capital in other, more profitable, ventures. Moving investment funds away from timberland can, in turn, lower timber quality and supply. Federal and state income tax laws that pertain to forestry, as well as the effects of income tax on forestry investments, will be examined in the following sections.

## *Federal income tax law pertaining to NIPF's*

Siegel et al. (1995) and Hoover (1998) extensively cover many of the federal tax issues that apply to landowners. Because many of the articles published on timberland tax issues are of an informational nature, this section will predominantly address the specific tax law pertaining to timberland. The economic aspects of taxes and their effects on forestry investments will be addressed in the next section. The provisions that will be examined in this review focus on the laws pertaining to the following study.

### Ordinary income

Ordinary income is income that can be characterized as noncapital in nature. Salaries, royalties, interest, and many other types of income are taxed as ordinary income under IRS rules.

The individual tax rate for ordinary income has been in constant transition since the inception of the modern income tax in 1913. Rates have ranged from as little as one percent in 1916 to 94 percent in 1944 (Willis and Davis 1998). They currently (1997) range from 15 percent to 39.6 percent of taxable income for an individual.

Standing timber can be treated as either an ordinary asset or a capital asset (Siegel et al. 1995). Refer to the section entitled “Capital gains” for more information on the differentiation of ordinary and capital gains. Treatment of timber as an ordinary asset has certain disadvantages. First, the highest ordinary tax rate is 39.6 percent while the highest capital gain rate is 20 percent. Second, losses from forest land can only offset up to $3,000 of ordinary income per year whereas they can be offset against capital gains without limit. Finally, if a landowner is considered to be a business or partner in a business, then they are subject to the self-employment tax on ordinary income, while capital gains are not subject to the self-employment tax.

## Passive loss rules

The Tax Reform Act of 1986 (TRA ’86) enacted provisions for passive activity rules. The rules were enacted to close many of the tax shelters and loopholes that wealthier Americans were using to exploit the tax system. The passive loss rules govern whether losses from one investment activity, such as timberland, can be used to offset the gain from another investment activity (Siegel 1989). They apply to individuals, estates and trusts, closely held C corporations, and owner-employees of personal service corporations who own 10% or more of the stock (Schell and Keiser 1988).

The rules specify that income from any activity needs to be classified into one of three categories: active, passive, or investment. In a landowner’s case, active income includes profit from a trade or business in which the taxpayer is a material participant (Willis and Davis 1998). Passive income is derived from any trade or business in which the taxpayer does not materially participate. Investment income is profit derived from an investment that is not part of a trade or business. Only landowners who have income from an active source can fully deduct all management expenses against income from any source each year as incurred (Siegel 1989). Active participants can also apply credits (i.e., reforestation credit) to taxes associated with income from any source.

The treasury created seven tests, six of which apply to forest landowners, that help investors determine if they are a material participant in a business. In order to be considered a material participant, a taxpayer needs to meet only one of the tests in a given year. A landowner and spouse can be considered as one "taxpayer" for satisfaction of the rules even if both file separate tax returns. The following rules for material participation were adapted from Siegel (1989), Siegel et al. (1995), and Jennings and Bolar (1989). A taxpayer is considered a material participant in an investment if:

1. The taxpayer participates in an activity more than 500 hours in a tax year.

2. A taxpayer's participation constitutes substantially all of the participation (including that of all other individuals) for the tax year.

3. The taxpayer participates in the activity for more than 100 hours, and not less than any other individual.

4. The taxpayer's aggregate participation in all significant participation activities during the year exceeds 500 hours. An activity is a "significant participation activity" if the taxpayer participates more than 100 hours in a trade or business during the tax year. Therefore, a taxpayer can be a material participant even if another co-owner or individual participates in the timberland activity more than the taxpayer in question.

5. The taxpayer materially participated (as determined by the other five tests) in the activity for any five of the previous ten tax years.

6. The taxpayer participates in the activity on a regular, continuous, and substantial basis during the tax year. The regulations do not define what constitutes regular, continuous, and substantial participation. However, they state that a taxpayer will not be a material participant if the taxpayer pays someone for management activities or if the taxpayer's management services are exceeded by those performed by someone else. Finally, a landowner will not be considered a material participant if he or she participate in the activity for 100 hours or less during the tax year.

Any work performed in connection with a forest land holding counts as time towards material participation in the activity. Formal recordkeeping is not required by the landowner and proof of participation can come in the form of calendars, appointment books, etc. A good set of records is required to make a landowner's case if the stakes are high.

### Capital gains

Standing timber has always been classified as a capital asset since the inception of the income tax (Siegel 1977). Capital gains were taxed at a lower preferential rate from 1922 until 1986. The preferential treatment of capital gains was re-established in 1990 and modified in 1993 and 1997. The maximum long-term capital gains rate today (1998) is 20 percent.

Until 1943, the lower rates only applied to timber that was cut under a lump sum sale. Only lump sum transactions were considered a disposal of a capital asset at the time as long as the holding period was met and it was not part of inventory (goods held for sale in the normal operation of a business) for a business. Gains from pay-as-cut contracts or from gains recognized by landowners cutting and selling their own timber were considered ordinary income and taxed at the ordinary rates. In 1943, Section 117(k) of the Internal Revenue Code was passed. The section provided capital gains treatment of timber that landowners cut and processed on their own. In 1954, Section 117(k) was recodified as Section 631. Section 631 is the current statute that governs capital gains treatment of forestry income.

The capital gains treatment of timber income today is highly complicated, but generally depends on three general factors. First, the primary purpose for holding the timber can affect the capital gains status of any timber income. Second, the disposal, or type of sale, affects the treatment of income. Finally, the length of time can affect the capital gains status of timberland (Haney and Siegel 1998). Siegel et al. (1995) provide a thorough discussion of the treatment of capital gains for forest landowners.

### Reforestation investment tax credit and associated amortization

As a general rule, reforestation costs, or costs for site preparation, seedlings, planting, and early stand development, have to be capitalized into the cost basis of timberland and then deducted from harvest revenue when the stand is cut. However, since 1980, IRS rules allow an annual 10 percent investment tax credit and 84-month amortization period (eight tax years) for reforestation costs up to $10,000 (Siegel 1985). The credit and amortization are allowed for all individuals, estates, partnerships, and corporations. To qualify for the credit and amortization, the timberland property must be

larger than one acre in size and located in the United States (Siegel et al. 1995).

The reforestation tax credit directly reduces the amount of taxes owed dollar for dollar. Taxpayers are eligible for the maximum amount of $10,000 in reforestation costs, or a $1,000 credit, for a married couple filing jointly ($5,000 for married filing separate) every year. If the timberland owner is classified as a passive business, the credit can only be used to offset any taxes associated with income from passive activities (Haney and Siegel 1998). Any unused credit can be applied to returns from the previous two years and then applied to any taxes due in the next 20 years. If the trees are disposed of before 5 years, the credit may be subject to recapture by the IRS (Siegel et al. 1995).

Section 194 provides that the maximum amount of reforestation costs allowed for amortization is $10,000 in each tax year. Any amount over $10,000 must be capitalized into the basis for later recovery. The maximum amortizable amount must be reduced by one-half of the investment credit taken. Therefore, the maximum amortizable amount is $9,500 if the entire tax credit is used. The amortization deduction is spread over eight tax years with one-fourteenth deducted in year one, one-seventh deducted in years two through seven, and one-fourteenth deducted in year eight (Siegel 1985). If the trees are disposed of within 10 years, all of the amortization deductions may be subject to recapture as ordinary income (Siegel et al. 1995).

### Expense deductibility

The extent to which expenses are allowed as a deduction is dependent upon the classification of the timberland activity. If it is classified as an active trade or business, all “ordinary and necessary” [I.R.C. Sec 162(a)] business expenses are allowed as a deduction (Haney 1987).

If the activity is classified as passive, businesses are allowed deductions only to the extent of the business’ income from all other passive activities. Any deductions exceeding passive income for the tax year may be carried forward and used when other passive income is recognized or when the timber is sold (Haney and Siegel 1998).

If it is classified as an investment, expenses are subject to the two percent AGI hurdle. Investors are allowed to deduct “ordinary and necessary expenses incurred for the production or collection of income and for management, conservation, or

maintenance of income [I.R.C. Sec. 212(1),(2)] (Haney and Peters 1995).

### Timber basis and depletion

Taxpayers are permitted to recover their investment, or basis, in a property, tax-free, when the property is sold. Timberland owners are afforded the same rules when they sell their timber. The basis, or part of the basis, can be deducted from the gross amount realized through the sale of timber.

Basis in the timber is established by separating the cost of the timber from the cost of the land and capital structures. A timber cruise can be used to determine the volume of standing timber. The volume can then be multiplied by the fair market price for timber, according to product class, determined at the time of purchase to establish an original basis for the timber (Siegel 1986).

The original basis is adjusted for casualty losses or changes made due to other timber sales. The basis is increased when management costs are capitalized, rather than deducted (Siegel 1986). Increases in the basis can also occur due to timber purchases and transfers from young growth accounts.

A timber depletion deduction is allowed any time timber is cut from a landowner's property. The value of the deduction is dependent on the size of the timber sale. If the entire tract of timber is cut, then the allowable deduction is the total adjusted basis. However, if only a part of the timber is sold, then a depletion unit must be calculated. The depletion unit is calculated by dividing the adjusted basis by the total volume of timber at the time of sale (Haney and Siegel 1998). The depletion deduction is then found by multiplying the depletion unit by the number of units sold in the timber sale.

Stier (1997) created a model to help consulting foresters determine the role of basis in tax savings. He created three equations that will help foresters determine the potential federal-state tax savings by being able to reconstruct the basis.

## *Federal income tax effects on forestry investments*

Substantial research has been completed in many areas on the effects of taxes on forestry investments (FICTVT Various, Hansen 1986, Clements et al. 1986, Amacher et

al. 1991, Amacher 1997). Hansen (1986) cautions landowners about the appropriate tax rate to use when analyzing forestry investments. The tax rate has a significant impact on net present value and should be chosen carefully. Clements et al. (1986) discuss the current status of timber harvest tax laws on a state-by-state basis. Severance taxes and yield taxes are another method for states to increase revenue through forest taxation. Amacher et al. (1991) investigate the impact of taxes on initial stand investment and rotation length using an LEV (Faustmann) methodology. Amacher (1997) reviews past literature on tax research and proposes new avenues for research in forest taxation and economics. The following review examines the effect of taxes on forest investments and how taxes impact timberland management decisions.

A yield tax is a tax that is levied upon the forest landowner at the time of sale. It is usually charged as a percentage of the stumpage value that has been harvested during the year. Yield tax is a generic term for taxes such as the income tax and capital gains tax. Chang (1983b) describes the impacts of yield taxes as lowering the landowner's expected income from a timber sale. Therefore, if the revenue exceeds tax costs, a yield tax would likely increase the rotation age of harvest and lower the planting density of trees/acre (initial stand investment).

Max and Lehman (1988) reach the same conclusion on yield taxes as Chang. Specifically, they conclude that "stumpage sales [will] decrease in earlier time periods." One can infer from the authors conclusion that, for an economically optimal rotation with a yield tax, forest landowners would want to increase their rotation length or sell more of their stumpage at a later date. Englin and Klan (1990) also conclude that yield taxes will always increase the rotation length and that they produce an incentive for delaying the harvest.

Amacher et al. (1991) again utilize the Faustmann formula (LEV) to compute the effects of yield taxes on rotation age and initial stand investment. The authors find that, as long as net present value is positive, "a yield tax increases rotation age and decreases initial stand investment." In their case examples, rotation age increases were typically 0.5 year or less while initial stand investments decreased significantly.

Mendelsohn (1993) examined the effect of nonlinear taxes on forest rotations using a Faustmann (LEV) model. A nonlinear tax is a tax system with different tax rates.

A two-tiered tax rate schedule was used on a loblolly pine and a Douglas-fir model to determine whether policy makers could design a neutral tax schedule. He determined that a slightly progressive tax schedule can correct the distortions associated with the implementation of an income tax. He explained that further studies needed to be done on the rate schedule and that tax policy would need to be determined on a local level.

Greene (1995) completed a case study of six different states that examined the effects of yield taxes on rotation lengths. He concluded that "none of the [yield tax] rates examined shortened the economically optimal rotation length." As with property taxes, yield taxes reduced returns to management, by two percent for a low tax rate (one percent of yield), eight percent for a moderate rate (five percent of yield), and 15 to 17 percent for a high rate (ten percent of yield)."

Guertin and Rideout (1987) evaluated the effects of tax on optimal planting densities, rotation age, and utilization of marginal lands for corporate landowners. They utilized an LEV framework to analyze the effects of capital gains taxes on hypothetical loblolly pine and Douglas-fir plantations. In general, they found that higher capital gains rates decreased the optimal planting density and rotation periods for landowners. Higher tax rates also increase the minimum site index productivity of a site that can be classified as "economically productive."

Campbell and Colletti (1990) studied the effects of using a general after-tax discount rate when analyzing investment decisions. They found that an investment evaluation must use both after-tax cash flows as well as after-tax discount rates if the effects of taxation are to be correctly analyzed in an investment comparison. The rule-of-thumb method ($d^* = [d(1-t)]$, where $d^*$ is the after-tax discount rate, d is the before-tax rate, and t is the marginal income tax rate) when used in investment decision-making is not accurate if the investment possesses depletable or tax-deferred assets. Many factors such as income tax rate, inflation, and investment period affect the accuracy of returns. They conclude that by using the rule-of-thumb method, an investor needs to use caution because the rule-of-thumb method usually underestimates the correct after-tax return.

Flick (1985) examined the effects of losing capital gains treatment on a timber sale. A timberland owner can lose capital gains treatment of sale income if a he or she sells timber lump-sum and is considered in the trade or business of growing timber for

sale. He found that stumpage prices would need to increase by 15 to 60 percent, depending on the landowner's marginal tax rate, to offset the lost capital gains treatment. He also discusses a method by which taxpayers can gain the benefits of a lump-sum sale but still qualify the sale under Section 631(b) provisions. IRS Revenue Ruling 78-104 allows the timber volume to be measured by a cruise of the standing timber. The timber then disposed of is the difference between the cruised volume before the cutting minus the cruised volume of any timber that was not cut.

Dangerfield and Gunter (1991) utilized equal annual equivalents (EAE) to determine the effect of TRA '86 on noncorporate timber producers. They created models for loblolly pine in different regions of the South. In all cases examined, timber income was lower after the TRA '86. They speculate that forest landowners may reduce planting expenses to maintain the same returns they achieved before the Act while others will exit the market altogether. However, Klemperer (1987) reasoned that changes in forest land ownership would not occur because the most profitable use for forest land after the Act was still growing timber. He concluded that the intensity of management would change, but not land usage.

Klemperer (1989) studied the effects of income tax on the maximum bid and ask prices of forest land. He stated that any LEV calculations will usually create a higher asking price for land than what can be found in the market because land sales usually create a tax for the seller. Taxes, therefore, increase the amount a seller is asking for a tract of land because the seller is trying to receive a fair price for the land with all taxes included in the asking price. Klemperer (1989) concluded that income taxes place a "wedge" between the bid/ask price for mid-rotation land from 30 to over 40 percent.

Gamponia and Mendelsohn (1987) analyzed the excess burden imposed by yield taxes on forest landowners in the South and West. They find that the excess burden imposed by yield taxes is rather small (0.1 percent excess burden per dollar tax revenue). They conclude that yield taxes of 40 percent or below represent a small tax burden and are an efficient method for collecting taxes on forestry revenue.

### *State income tax effects on forestry investments*

The TRA '86 greatly affected state income tax structures and many states have taken years to conform to the changes made in the act. Siegel and Haney (1983) state that many states, prior to 1986, offered timberland owners tax savings through special capital gains rates and treatment of expenses. Since then, many states have altered their tax rules so that they shadow the federal code.

McGee et al. (1982, 1984), McGee (1982), Bettinger et al. (1989), Bettinger (1989), and Siegel et al. (1996) examined the impacts of state income taxes on NIPF's throughout the United States. McGee and Bettinger outline state income tax provisions affecting forestry investments and the state percentage of total income tax liability in certain hypothetical situations. They also reported on each state's tax base, deductibility of federal taxes on a state return, and capital gains exclusions. However, states have been continuously working to conform their code to the federal income tax code. Therefore, the conclusions of McGee and Bettinger's work may have changed in the recent past.

Holley (1988) reports that state income taxes are an important consideration for NIPF's, but that state taxes are probably the lowest tax burden for a forest landowner. However, considerable differences in tax liability exist including the range of tax rates and special tax provisions granted by each state. Holley (1988) maintains that a region-wide analysis of the impacts of state income taxes would be difficult because of the differences in state tax law. McGee et al. (1984) and Bettinger (1989) make assumptions in their models to overcome the differences among state tax systems.

# Chapter 3

# Introduction to Regional Analyses

The goal of the analyses in Chapters 4, 5, and 6 is to illustrate how differential state taxation can affect returns to timber investments in the South, Midwest and Northeast, and West, respectively. The chapters will (1) provide an overview of federal and state income tax laws applicable to timberland owners in each area, (2) analyze the federal and state income tax implications of a timber sale for a forest landowner in each area, and (3) examine the effects of tax planning throughout a timber rotation. Any redundancy among chapters is to retain a consistency between regions for publication purposes.

## *Federal and State Income Tax Laws*

Characteristics of each state's tax structure in each region are examined. Each state's tax rates, bases, differences in deductibility of certain items, and any differential long-term capital gains treatment are reviewed. Primary information was collected using a survey sent to all states in the spring of 1998 (Appendix A). The survey asks specific questions pertaining to forestry and requests that the taxing agency send any forms required for a forest landowner filing a tax return in the state. The surveys and forms were then analyzed and information was compiled for each state. Supplemental information was obtained through CCH's *State Tax Guide* (1998), BNA Income Tax Planner with 50 States for Windows (1998), and personal communication with state tax agencies.

## *Part I: Tax Costs of a Timber Sale*

The federal and state tax liability for a hypothetical landowner case will be calculated for each region. The objective, in each region, is to focus on the impact of state income taxes. Therefore, it is assumed that the landowner's income and timberland purchase price are standardized in each region. Management costs, property taxes, and

depletion deductions have been manipulated to maintain the same federal adjusted gross income and federal taxable income across all regions. Finally, it is assumed that the landowners elect to use the standard deduction in the analysis. This eliminates the need to manage the phase out of itemized deductions and the variations across states regarding deductibility of particular items.

### Southern Region

A loblolly pine (*Pinus taeda*) plantation is modeled for the landowners in the South. Loblolly pine is chosen for its wide range and common use in plantation forestry across the south. Regional price data from *Timber-Mart South* (University of Georgia) is also readily available for loblolly pine.

### Midwestern and Northeastern Region

Red pine (*Pinus resinosa*) is used for landowners in the midwestern and northeastern region. The species is chosen because it is common in plantation forestry across the lake states and reliable price data can be obtained from Michigan's Department of Natural Resources. The significance of having a definitive species for the entire region causes a concern. However, in reviewing state and federal tax implications, landowners need to focus on the financial numbers more than species choice.

### Western Region

A Douglas-fir (*Pseudotsuga menziesii*) tract is modeled for the west. Douglas-fir is a common industrial species found throughout the west. Reliable price data can be obtained from the Oregon State Department of Forestry. Once again, species choice is not the main focus for this section--obviously Douglas-fir is not found in either Hawaii or Alaska. The main goal of the section is to examine federal and state income tax implications for landowners.

## *Part II: Land Expectation Value Analysis*

In this section of Chapters 4, 5, and 6, land expectation value (LEV) methodology is used to illustrate the effects of different tax treatments on a hypothetical landowner's

management regime. LEV is the net present value of bare land used to produce perpetual rotations of timber under a stated management regime. LEV is useful for estimating the maximum bid price for bare land. Changes in value due to different tax treatments can be calculated using this methodology. Regional management regimes in this section are specific in application and the LEV's are only intended for the stated models.

The six LEV scenarios in each region represent common omissions and mistakes that landowners can make while owning forest land. In each successive scenario, the landowners forego certain tax benefits that model taxpayer mistakes and omissions.

### Southern Region

The LEV model for the South is a region-wide case study of the tax issues that landowners might encounter while managing their land. Loblolly pine is a common plantation species in all of the states in the region. Price and cost data from *Timber-Mart South* (University of Georgia) and *Forest Landowner 31st Manual Edition* (Dubois et al. 1997) are easily attainable on a regional level. The state tax rates are chosen to represent the states with the lowest and highest tax rates in the region. Two nominal (including inflation) after-tax interest rates of six and eight percent are used in the analysis to account for any risk in the model.

### Midwestern and Northeastern Region

The model in Chapter 5 is a case study for a landowner in the Northern Lower Peninsula (NLP) of Michigan. The study is restricted to the NLP because timber price series, costs, and property taxes are not easily obtainable on a regional level. Red pine is also not commonly found in some states of the Midwest and Northeast. However, red pine stumpage prices, management costs, and property taxes for the NLP are obtainable through various sources (see Chapter 5). The lowest (0%) and highest (10%) state tax rates from the region are used in the LEV analysis because Michigan's flat state tax of 4.40% falls within the tax rates for the region. An analysis of the extremes allows extrapolation of the data to examine tax effects for each state in the region. Two nominal (including inflation) after-tax interest rates of six and eight percent are used in the

analysis to account for any risk in the model.

### Western Region

The model for the West is a case study for hypothetical landowners in western Oregon. Douglas-fir prices and management costs are obtainable on a statewide level. However, Oregon's property tax structure limits the analysis to either western Oregon or eastern Oregon. Western Oregon is a logical choice for the case study because it has a majority of the state's prime timberland. Property taxes and severance taxes for western Oregon are discussed in Chapter 6. Even though the case study only analyzes western Oregon, the LEV scenarios use the lowest and highest state tax rates from the region. Oregon's maximum tax rate of 9.00% falls within the lowest (0%) and highest (11%) regional rates. Therefore, the LEV's for Oregon can be extrapolated from the current LEV analyses. The nominal (including inflation) after-tax interest rates are raised from six and eight percent in the previous models to eight and ten percent in the West model because of the higher risks and societal pressure on forest practices in the West.

# Chapter 4

# Federal and State Income Tax Considerations for Forest Landowners in the South: A Case Study on Tax Planning

This section provides two different analyses on the effects of federal and state income tax on returns to timberland investors in the South. The first analysis considers the tax cost of a timber sale. The second analysis examines the effects of various tax planning (or lack of planning) scenarios on the expected value of a timber investment over an infinite number of rotations.

A hypothetical taxpayer profile is used to examine the tax costs associated with a timber sale. The taxpayer invests in loblolly pine (*Pinus taeda*) forest land in the South. The land is assumed to be of average quality (site index 60 - base age 25) and management techniques that are common for the region are employed. Important federal and state tax laws are examined before analyzing the combined effect of federal and state income taxes on private forest landowners.

## *Important Federal and State Income Tax Laws*

The 14 southern states analyzed in this study are: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. All of these states, except Florida, Tennessee, and Texas, have a comprehensive income tax. Seven of those 11 states use federal adjusted gross income (AGI) as their tax base (Table 4-1). North Carolina and South Carolina use federal taxable income as their tax base while Alabama and Arkansas require taxpayers to compute income from all sources. Deductibility of federal income tax, standard deductions, personal exemptions, tax rates, and long-term capital gains exclusions are detailed for each state in Table 4-1.

## Table 4-1. General income tax provisions for southern states.[a]

| | Federal adjusted gross income used as tax base | Federal income tax deductible | Personal exemption[b] | Standard deduction[b] | Abbreviated tax rate schedule[b] | | | | Proportion of long-term capital gain taxable | Maximum effective long-term capital gains tax rate |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | From | Of the first | To | Of the amount over | | |
| | | | ($) | ($) | (%) | ($) | (%) | ($) | (%) | (%) |
| Alabama | NO | YES | 3,000 | 4,000 [c] | 2.00 | 1,000 | 5.00 | 6,000 | 100 | 5.00 |
| Arkansas | NO | NO | 40 [d] | 1,000 [e] | 1.00 | 2,999 | 7.00 | 25,000 | 100 | 6.00[f] |
| Florida | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ----- |
| Georgia | YES | NO | 3,000 | 3,000 | 1.00 | 1,000 | 6.00 | 10,000 | 100 | 6.00 |
| Kentucky | YES | NO | 40 [d] | 900 | 2.00 | 3,000 | 6.00 | 8,000 | 100 | 6.00 |
| Louisiana | YES | YES | 9,000 | Combined [g] | 2.00 | 20,000 | 6.00 | 100,000 | 100 | 6.00 |
| Mississippi | YES | NO | 9,500 | 3,400 | 3.00 | 10,000 | 5.00 | 20,000 | 100 | 5.00 |
| North Carolina | NO[h] | NO | 300 [i] | 5,000 [j] | 6.00 | 21,250 | 7.75 | 100,000 | 100 | 7.75 |
| Oklahoma | YES | YES | 2,000 | 2,000 [k] | 0.50 | 2,000 | 7.00 | 21,000 | 100 | 7.00 |
| South Carolina | NO[h] | NO | ------- [l] | ------- [l] | 2.50 | 2,280 | 7.00 | 11,400 | 44[m] | 3.08 |
| Tennessee | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ----- |
| Texas | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ----- |
| Virginia | YES | NO | 1,600 | 5,000 | 2.00 | 3,000 | 5.75 | 17,000 | 100 | 5.75 |
| West Virginia | YES | NO | 4,000 | none [n] | 3.00 | 10,000 | 6.50 | 60,000 | 100 | 6.50 |

[a] As of April 1998. The sources of information used in collecting this data were: BNA Income Tax Planner with 50 States for Windows (1998), state tax forms, a survey of state tax departments, and correspondence with state tax offices.

[b] The personal exemption, standard deduction, and tax rate schedules are for married taxpayers filing a joint return.

[c] If AGI is less than $20,000, the deduction is 20% of AGI.

[d] A tax credit of $20 ($40 per couple) is used instead of a personal exemption.

[e] If gross income is less than $10,000, the deduction is 10% of gross income.

[f] Maximim tax rate on capital gains is 6 percent.

[g] Louisiana uses a combined personal exemption/standard deduction.

[h] Tax base is federal taxable income.

[i] The exemption is phased out if federal AGI is over $100,000.

[j] North Carolina limits standard deduction to the pre-inflation adjusted federal amount.

[k] Deduction is 15% of Oklahoma AGI up to a maximum of $2,000.

[l] The federal personal exemption and standard deduction amounts are passed through to the taxpayers by the state using federal taxable income as the tax base.

[m] The long-term capital gain holding period for South Carolina is two years.

[n] Both standard and itemized deductions were eliminated in 1987.

## *Part I: Tax Costs of a Timber Sale*

The hypothetical taxpayers, a husband and wife, age 60 with no dependents, are representative of a general forest landowner (Birch 1997). The income tax effects are shown for: a medium income level of $50,000 and a high income level of $110,000, before timber revenues. To maintain comparability across states, it is assumed that the landowners use the standard deduction (if itemized deductions were used, they would differ across states due to different state income tax deductions on the federal return).

The owners purchased 500 acres of loblolly pine forest land ten years ago. They are actively involved and have timber management as their primary objective. The business is operated as a sole proprietorship. Other objectives include wildlife management, aesthetics, and value appreciation.

A timber sale is completed in the current year (1997 tax rates and law are assumed for purposes of this analysis). At the time, the owners make estimated tax payments based on the sales proceeds. The expenses of sale (consulting forester fees) are assumed to be six percent of the sale price. This percentage falls within the range of large sales which generally command a fee of 4-8%. It is assumed that the owners will not reforest the land until the following year. Therefore, no amortization of reforestation costs or investment tax credits are included in the analysis. The annual property tax for the landowners is assumed to be $1,000 (500 acres * $2/acre) and the annual management costs are $2,500 (500 acres * $5/acre) (Dubois et al. 1997). Both annual costs are fully deductible because the landowners are actively involved in the management of the forest land.

The purchase price of the timberland ten years ago was $500,000, or $1,000 per acre. The land contained old-field loblolly pine with an average age between 20 and 25 years. The landowners allocated the purchase price (basis) between the land ($215,000, or $430 per acre) and the timber ($285,000, or $570 per acre). The total growing stock on the land at the time of purchase was 11,129 cords (22.25 cords per acre). The landowners are using the Scribner log rule and an averaging convention of 3.3 cords/MBF for depletion unit purposes (Oderwald 1998). All timber volumes are calculated with WINYIELD (Hepp 1997).

The sale is a clearcut of 72 acres which produces 2,738 cords (38 cords per acre)

of wood. The landowners receive $285 per MBF for sawtimber, $75 per cord for chip-n-saw, and $26 per cord for pulpwood (University of Georgia 1997). Total sales proceeds are $200,000.

The total adjusted growing stock is 20,076 cords. Therefore, the growth since the purchase of the land is 8,947 cords. The depletion unit is calculated by dividing the purchase price allocated to the timber's adjusted basis by the total adjusted growing stock since purchase. The depletion unit for the landowners is $14.20 ($285,000/20,076) per cord. The depletion unit calculation assumes that all expenses are deducted as incurred rather than capitalized. Total depletion for the sale is $38,880 ($14.20*2,738).

## Federal Tax Analysis

The calculation of the federal tax liability for the hypothetical landowners is summarized in Table 4-2. An after-tax net income model is used in the analysis. The personal exemption for the taxpayers in both income levels is reduced because part of the personal exemption is phased out after the taxpayers' AGI reaches $181,800 (Willis and Davis 1998).

The long-term capital gains tax on the sale differs between the medium and high income landowners in two respects. First, some of the capital gain is taxed at the 10% capital gains rate for the medium income level taxpayers. This occurs because the lower ten percent rate applies until the additional capital gains income moves the taxpayer into the 28% marginal federal tax bracket (over $41,200 in taxable income for 1997) and the corresponding 20% capital gains bracket. Second, the landowners in the high income level are subject to the alternative minimum tax (AMT).

The alternative minimum tax (AMT) is a separate tax calculation with a proportional tax rate that is applied each year to a taxpayer's income. Certain tax deductions are calculated differently for AMT purposes. If the deduction for regular income tax purposes exceeds that allowed for AMT purposes, then a liability for AMT may be incurred. If the tentative minimum tax is greater than the regular income tax, the taxpayer must pay the regular tax plus the AMT (Willis and Davis 1998). The AMT for individuals is calculated on IRS Form 6251.

Table 4-2. Federal income tax calculation for the hypothetical landowners in the South.[a]

| | | Income Level | |
|---|---|---|---|
| **INCOME:** | | Medium | High |
| Personal income | | $50,000 | $110,000 |
| Revenue from timber sale | $200,000 | | |
| Less deductions | | | |
| Expense of sale | ($12,000) | | |
| Depletion | ($38,880) | | |
| Taxable long-term capital gain on sale | | $149,120 | $149,120 |
| Less deductions | | | |
| Property tax | ($1,000) | | |
| Management costs | ($2,500) | | |
| Total deductions | | ($3,500) | ($3,500) |
| **Adjusted gross income** | | **$195,620** | **$255,620** |
| Standard deduction | | ($6,900) | ($6,900) |
| Personal exemptions | | ($4,664) | ($2,120) |
| **Taxable income** | | **$184,056** | **$246,600** |
| **TAXES:** | | | |
| Taxable income | | $184,056 | $246,600 |
| Less taxable capital gain on sale | | ($149,120) | ($149,120) |
| Ordinary income | | $34,936 | $97,480 |
| **Ordinary income tax** | | **$5,239** | **$21,937** |
| Taxable long-term capital gain on sale | | $149,120 | $149,120 |
| Capial gains tax | 10 Percent | $626 | $0 |
| | 20 Percent | $28,571 | $29,824 |
| **Total capital gains tax** | | **$29,197** | **$29,824** |
| **Alternative minimum tax** | | **$0** | **$918** |
| **Total federal income tax** | | **$34,436** | **$52,679** |

[a]Calculations completed with BNA Income Tax Planner with 50 States for Windows (1998).

### State Tax Analysis

State taxes are allowed as a deduction on a taxpayer's federal return if the taxpayers' business itemizes deductions on Schedule C of federal Form 1040. As previously stated, the hypothetical taxpayers elect to take the federal standard deduction on their tax returns. The use of the standard deduction maintains the same federal tax liability for the taxpayers in each state. This makes state computations more comparable.

The amount of state tax the hypothetical landowner must pay on a timber sale varies greatly due to differences in state tax laws (Table 4-3). Taxable income, income tax, and combined federal-state tax liability for the hypothetical landowners in each state are shown. As noted previously, Florida, Tennessee, and Texas do not have state income taxes and therefore have no state income tax liability. For those states with an income tax, the highest state tax liability is incurred in North Carolina ($13,472) and the lowest in Louisiana ($7,091) for the medium income landowner. North Carolina has the highest tax rate schedule and the highest minimum tax rate (6%) among the southern states. The low tax liability in Louisiana results from three factors: the allowable deduction of federal income taxes, a high personal exemption/standard deduction, and a favorable tax rate schedule. These relationships are similar for the high income level taxpayer.

## *Part II: Land Expectation Value Analysis*

In this section, the effect of income taxes on the value of a timber investment over a perpetual number of rotations is examined. A land expectation value (LEV) methodology is used. LEV is defined as the net present value of bare land used to produce perpetual rotations of timber. Land expectation value is a useful tool for estimating the maximum bid price for bare forest land (Gunter and Haney 1984).

This analysis will continue with the hypothetical landowner model developed in the previous section. For this analysis, the time period covers the year subsequent to the timber sale and all subsequent rotations. Only one income level will be examined. It is assumed that the landowners have $70,000 per year in wages for each year of the rotation. This places them in the 28% federal marginal tax bracket for ordinary income. The landowners use a management rotation (Table 4-4) which gives them a high net

Table 4-3. Federal and state income tax for landowners in the South.[a]

| | State taxable income [b] | | State income tax | | Combined state & federal income tax | |
|---|---|---|---|---|---|---|
| | Medium income level | High income level | Medium income level | High income level | Medium income level | High income level |
| | ($) | ($) | ($) | ($) | ($) | ($) |
| Alabama | 154,184 | 195,941 | 7,629 | 9,717 | 42,065 | 62,396 |
| Arkansas | 194,620 | 254,620 | 11,422 | 15,622 | 45,858 | 68,301 |
| Florida | ------- | ------- | 0 | 0 | 34,436 | 52,679 |
| Georgia | 189,620 | 249,620 | 11,117 | 14,717 | 45,553 | 67,396 |
| Kentucky | 193,820 | 253,820 | 11,389 | 14,989 | 45,825 | 67,668 |
| Louisiana | 161,184 | 202,941 | 7,091 | 9,596 | 41,527 | 62,275 |
| Mississippi | 182,720 | 242,720 | 8,986 | 11,986 | 43,422 | 64,665 |
| North Carolina | 186,256 | 248,800 | 13,472 | 18,320 | 47,908 | 70,999 |
| Oklahoma | 191,620 | 251,620 | 12,698 | 16,898 | 47,134 | 69,577 |
| South Carolina | 118,443 | 180,987 | 7,960 | 12,338 | 42,396 | 65,017 |
| Tennessee | ------- | ------- | 0 | 0 | 34,436 | 52,679 |
| Texas | ------- | ------- | 0 | 0 | 34,436 | 52,679 |
| Virginia | 189,020 | 249,020 | 10,611 | 14,061 | 45,047 | 66,740 |
| West Virginia | 191,620 | 251,620 | 11,330 | 15,230 | 45,766 | 67,909 |

[a]Calculations completed with BNA Income Tax Planner with 50 States for Windows (1998).

[b]The federal taxable income was $184,056 and $246,600 for the middle and high income levels, respectively.

Table 4-4. Forest-related costs, revenues, and management regime used in LEV analysis of federal-state income taxes in the South.

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## Forest-related costs

| | |
|---|---|
| Reforestation expense | $200/acre |
| Herbicide release cost | $70/acre |
| Sale administration cost | 6% of stumpage price |
| Property taxes | $2/acre |
| Annual management expenses | $5/acre |

## Forest-related revenues

| | |
|---|---|
| Pulpwood stumpage price | $26/cord |
| Chip-n-saw stumpage price | $65/cord |
| Sawtimber stumpage price | $269/MBF |

## Forest management regime

| | | |
|---|---|---|
| Year 1: | Reforest stand | |
| Year 3: | Herbicide release spraying | |
| Year 15: | Commercial thinning (80 Residual BA)... | 8.3 cords/acre pulpwood |
| | | 1.0 cords/acre chip-n-saw |
| Year 30: | Final harvest............................................ | 11.9 cords/acre pulpwood |
| | | 23.9 cords/acre chip-n-saw |
| | | 2 MBF/acre sawtimber |

Site index = 60@25 years
Initial planted trees per acre = 550

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present value translating into a good return on their investment (Cafferata 1997). They prepare the site and plant with genetically improved loblolly seedlings. The landowners utilize a herbicide release in the third year of the rotation. A thinning in year 15 of the rotation produces about 8.5 cords of pulpwood and one cord of chip-n-saw per acre. The final harvest occurs in year 30 of the rotation and produces approximately 12 cords of pulpwood, 24 cords of chip-n-saw, and two thousand board feet (MBF) per acre (Table 4-4). Management costs were obtained from the *Forest Landowner 31st Manual Edition* (Dubois et al. 1997). Timber prices were calculated by using simple linear regression techniques on ten years of *Timber Mart-South* (University of Georgia 1987-1997) southern regional average prices.

Assumptions related to land expectation values are: (1) revenues and costs are assumed to be constant and will only increase with the 3 percent inflation rate assumed in the analysis, (2) tax laws and rates are assumed to be constant throughout the rotation, (3) an after-tax net income model is used, (4) two nominal (including inflation) after-tax interest rates of six and eight percent are used in the analysis to account for any uncertainty or risk in the model, and (5) two general state tax rates of zero and 7.8 percent are chosen to model the minimum and maximum state tax rate implications for the southern model.

## Planning Scenarios

Six different tax planning scenarios are evaluated to determine the effects of tax provisions on land expectation value (Table 4-5). The first scenario (base case) illustrates the effect of the maximum use of currently available tax provisions. In each successive scenario, the landowners forego certain tax benefit(s) that, in turn, lower their LEV. These reflect common omissions and mistakes made by typical forest landowners.

Under scenario one, the landowners, who are cash basis taxpayers, pay $10,000 of their reforestation costs in each of the first two years. Reforestation costs are thus spread over two tax years allowing the landowners to maximize their use of the available reforestation amortization and the investment tax credit. The landowners deduct their management expenses, including the herbicide release (assumes the stand is established), and property taxes. Under current tax provisions, an active business is allowed to fully

Table 4-5. Summary of tax planning scenarios for LEV analysis of the South.

| | Reforestation costs | | Investment tax credit | | Management expenses & property taxes | | | Timber sale revenue treated as | |
|---|---|---|---|---|---|---|---|---|---|
| | spread over two years and amortized | All costs in 1st year | used | not used | deducted currently | capitalized | neither deducted nor capitalized | capital gain | ordinary income |
| **Scenario 1** | X | | X | | X | | | X | |
| **Scenario 2** | X | | X | | | X | | X | |
| **Scenario 3** | X | | X | | | | X | X | |
| **Scenario 4** | X | | X | | X | | | | X |
| **Scenario 5** | | X | | X | | | X | X | |
| **Scenario 6** | | X | | X | | | X | | X |

deduct any ordinary and necessary expense from any current income. The owners sell the timber under a "pay-as-cut" contract (Section 631(b) of the Internal Revenue Code). As long as the one year holding period has been met, Section 631(b) provisions allow the net gain from the thinning and clearcut to be taxed as long-term capital gains. Because the timber sale income is treated as long-term capital gains, it is not subject to self-employment tax.

In scenario two, management costs and property taxes are capitalized. These expenses are then recovered through the depletion deduction when the timber is harvested. The landowners' basis in the timber is composed of management costs and property taxes because they have already amortized the reforestation expenses. Suspension (or capitalization) of these expenses is required if a landowner's business is classified as passive, unless the landowner has offsetting passive income from other sources. Therefore, this scenario represents the tax effects for a timber investment that is classified as passive, as compared to an active business (scenario one).

Scenario three differs from scenario one in that the management expenses and property taxes are neither deducted nor capitalized. All other variables remain the same. Failure to maintain proper records and receipts or lack of awareness of the tax rules can cause a landowner to fail to take advantage of expense deductibility and fall into this scenario.

Scenario four is exactly the same as scenario one except that the revenue from the timber harvests is treated as ordinary gain. Treatment of timber revenues as ordinary

gains can occur if the landowners sell timber in a "lump sum sale." Gains from a "lump sum" timber sale are treated as ordinary gains if the timber investment is classified as a business. Because the sale revenue is treated as an ordinary gain, the final timber harvest moves the landowners into the 39.6 percent tax bracket. Due to the uncertainty of future tax rates, however, the ordinary rate is held constant at 28 percent in the analysis. The Medicare portion (2.9%) of the self-employment tax on total ordinary income above $65,400 is also omitted from the analysis for purposes of consistency. Therefore, these results are conservative estimates under current law.

Scenarios five and six illustrate the extreme cases of failure to take advantage of favorable tax treatment available to the landowner. In scenario five, the owners spend all $200 per acre in reforestation costs in the first year. These expenses are neither amortized nor capitalized. Consequently, the associated reforestation investment tax credit is not taken. Management expenses and property taxes are neither deducted nor capitalized. The provisions of Section 631(b) allow the long-term capital gain treatment of timber sales.

Scenario six is the same as scenario five, except the timber sale revenue is treated as an ordinary gain instead of a long-term capital gain. Timber sale revenue will be treated as ordinary gains if the landowners sell the timber as a "lump sum" sale.

## Effects of Tax Planning on LEV

The base case scenario produces land expectation values from $272 to $739 (Table 4-6). This means that a timberland buyer would be willing to pay between 272 and 739 dollars per acre for bare land in the South using the previously stated loblolly pine management regime, depending on the discount rate and state tax rate.

Land expectation values in scenarios two and three range from $201 to $690. Capitalizing expenses (scenario two) rather than currently deducting these expenses decreases the LEV between seven and 19 percent depending on interest rates and state tax rates.

Scenario three illustrates the impact of losing both the capitalization and deduction of management expenses. Failure to keep records can decrease land expectation values by 10 to 26 percent.

Table 4-6. Land expectation values and changes among tax planning scenarios, per acre.[a]

| | Six percent interest rate [b] | | Eight percent interest rate [b] | |
|---|---|---|---|---|
| | No state tax | 7.8 percent state tax | No state tax | 7.8 percent state tax |
| Scenario 1 | $739 | $667 | $302 | $272 |
| Scenario 2 | $690 | $608 | $260 | $220 |
| Change in value between 1 and 2 | 7% | 9% | 14% | 19% |
| Scenario 3 | $667 | $576 | $247 | $201 |
| Change in value between 1 and 3 | 10% | 14% | 18% | 26% |
| Scenario 4 | $630 | $559 | $243 | $213 |
| Change in value between 1 and 4 | 15% | 16% | 20% | 22% |
| Scenario 5 | $586 | $480 | $173 | $116 |
| Change in value between 1 and 5 | 21% | 28% | 43% | 57% |
| Scenario 6 | $477 | $372 | $114 | $56 |
| Change in value between 1 and 6 | 35% | 44% | 62% | 79% |

[a]All calculations made with WINYIELD (Hepp 1997).

[b]Interest rate is nominal and includes an assumed inflation rate of 3%.

Forest landowners who do not take advantage of long-term capital gains treatment (scenario four) can expect to lose between 15 to 22 percent of their land expectation value. Long-term capital gains can be lost by neglect or ignorance of the tax law governing the relationship between being an active business and the Section 631(b) rules for selling timber. The value loss could be even greater if a landowner's ordinary tax rate is higher than the assumed 28 percent.

Land expectation values drop substantially in scenarios five and six. LEV's range from $56 to $586. Percentage decreases from the LEV's in scenario one range from 21 percent to 79 percent depending on state tax rates and interest rates.

# Chapter 5

# Federal and State Income Tax Considerations for Forest Landowners in the Midwest and Northeast: A Case Study on Tax Planning

This section provides two different analyses on the effects of federal and state income tax on returns to timberland investors in the Midwest and Northeast. The first analysis considers the tax cost of a timber sale. The second analysis examines the effects of various tax planning (or lack of planning) scenarios on the expected value of a timber investment over an infinite number of rotations.

A hypothetical taxpayer profile is used to examine the tax costs associated with a timber sale. The taxpayer invests in red pine (*Pinus resinosa*) forest land in the Midwest or Northeast. Red Pine is utilized as the example species in the study because it is a commercial species common throughout the Lake states. The significance of having a definitive species for the entire region causes a concern, however, in reviewing state and federal tax implications, landowners need to focus on the financial information more than species choice. The tree species is only used as a realistic reference point for landowner decisions. The land is assumed to be of average quality (site index 65 - base age 50) and management techniques that are common for the region are employed. Important federal and state tax laws are examined before analyzing the combined effect of federal and state income taxes on private forest landowners.

## *Important Federal and State Income Tax Laws*

The 23 states analyzed in this section are: Connecticut, Delaware, Illinois, Indiana, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Pennsylvania, Rhode Island, South Dakota, Vermont, and Wisconsin. All of these states, except New Hampshire and South Dakota, have a comprehensive income tax. Thirteen of the remaining 21 states use federal adjusted gross income (AGI) as their tax base (Table 5-1).

# Table 5-1. General income tax provisions for midwestern and northeastern states.[a]

| | Federal adjusted gross income used as tax base | Federal income tax deductible | Personal exemption[b] | Standard deduction[b] | Abbreviated tax rate schedule[b] From | Of the first | To | Of the amount over | Proportion of long-term capital gain taxable | Maximum effective long-term capital gains tax rate |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | ($) | ($) | (%) | ($) | (%) | ($) | (%) | (%) |
| Connecticut | YES | NO | 24,000 [c] | ------ | 3.00 | 12,500 | 4.50 | 12,500 | 100 | 4.50 |
| Delaware | YES | NO | 200 [d] | 1,600 | 0.00 | 2,000 | 6.90 | 60,000 | 100 | 6.90 |
| Illinois | YES | NO | 2,000 | ------ | | 3.00% [e] | | | 100 | 3.00 |
| Indiana | YES | NO | 2,000 | ------ | | 3.40% [e] | | | 100 | 3.40 |
| Iowa | NO | YES | 40 [g] | 3,480 | 0.40 | 1,112 | 9.98 | 50,050 | 55[h] | 9.98[i] |
| Kansas | YES | NO | 4,000 | 5,000 | 3.50 | 30,000 | 6.45 | 60,000 | 100 | 6.45 |
| Maine | YES | NO | 4,300 | 6,900 | 2.00 | 8,250 | 8.50 | 33,000 | 100 | 8.50 |
| Maryland | YES | NO | 2,400 | 4,000 [j] | 2.00 | 1,000 | 5.00[k] | 3,000 | 100 | 5.00 |
| Massachusetts | NO[l] | NO | 5,260 | ------ | 5.95 [l] | ------- | ----- | ------- [l] | 100 | 4.00[l] |
| Michigan | YES | NO | 5,000 | ------ | | 4.40% [e] | | | 100 | 4.40 |
| Minnesota | NO | NO | ------- [m] | ------ [m] | 6.00 | 24,140 | 8.50 | 95,920 | 100 | 8.50 |
| Missouri | YES | YES[n] | 2,400 | 6,900 | 1.50 | 1,000 | 6.00 | 9,000 | 100 | 6.00 |
| Nebraska | YES | NO | 172 [o] | 6,900 [p] | 2.51 | 4,000 | 6.68 | 46,750 | 100 | 6.68 |
| New Hampshire | ------- | ------- | ------- | ------ | ----- | ------- | ----- | ------- | ---- | ---- |
| New Jersey | NO | NO | 2,000 | ------ | 1.40 | 20,000 | 6.37 | 150,000 | 100 | 6.37 |
| New York | YES | NO | ------ | 13,000 | 4.00 | 16,000 | 6.85 | 40,000 | 100 | 6.85 |
| North Dakota | NO | NO | ------- [m] | ------ [m] | | 14.0% [q] | | | 100 | 2.80 |
| Ohio | YES | NO | 850 [rs] | ------ | 0.713 | 5,000 | 7.201 | 200,000 | 100 | 7.201 |
| Pennsylvania | NO | NO | ------- | ------ | | 2.80% [e] | | | 100 | 2.80 |
| Rhode Island | NO | NO | ------- [m] | ------ [m] | | 27.5% [q] | | | 100 | 5.50 |
| South Dakota | ------- | ------- | ------- | ------ | ----- | ------- | ----- | ------- | ---- | ---- |
| Vermont | NO | NO | ------- [m] | ------ [m] | | 25.0% [q] | | | 100 | 5.00 |
| Wisconsin | YES | NO | ------- | ------ [tu] | 4.90 | 10,000 | 6.93 | 20,000 | 40 | 2.77 |

[a]As of April 1998. The sources of information used in collecting this data were: BNA Income Tax Planner with 50 States for Windows (1998), state tax forms, a survey of state tax departments, and correspondence with state tax offices.

[b]The personal exemption, standard deduction, and tax rate schedules are for married taxpayers filing a joint return.

[c]The personal exemption begins a phase out over $48,000 of state AGI and is eliminated after $71,000. A personal tax credit using a percentage of AGI is also available for joint filers with AGI less than $100,500.

[d]Delaware has a credit of $100 per exemption in lieu of a personal exemption.

[e]A flat tax across all income brackets.

[f]Counties impose an income tax on Indiana Taxable income ranging from 0 - 1.25% for residents.

[g]Iowa allows a $40 personal exemption credit for joint returns.

[h]Iowa allows a partial capital gain deduction for timber held by a taxpayer for at least one year; up to a maximum of $17,500.

[i]Iowa only allows a partial deduction up to a maximum of $17,500. Maximum long-term capital gain rate is unaffected.

[j]Maryland standard deduction is 15% of State AGI, up to $4,000, but not less than $3,000.

[k]Maryland levies a local county income tax ranging between 20 to 60% of the state tax liability. Not included in stated 5% state income tax.

[l]Massachusetts has four categories for tax rates. A 4% tax is placed on all long-term capital gains held over two years. A 5% tax is placed on all capital gains held between one year and two years. A 12% rate is placed on interest, dividends, and short-term (held for less than one year) capital gains. A 5.95% rate is placed on all other income.

[m]The federal personal exemption and standard deduction amounts are passed through to taxpayers by the state using federal taxable income as the tax base (Minnesota) or by using federal tax liability (North Dakota, Rhode Island, and Vermont).

[n]Limited to $10,000 for taxpayers filing a joint return.

[o]Nebraska gives a tax credit for personal exemptions which is phased out by $5 for every $5,000 over $101,000 of state AGI.

[p]Phased out by $1 for every $10 of excess federal AGI over $121,200.

[q]The flat tax rate is calculated on federal income tax liability.

[r]A joint filing credit of up to a maximum of $650 is allowed if both spouses have more than $500 in wages.

[s]An additional exemption tax credit of $20 ($40 per couple) is also allowed.

[t]A married couple credit equal to 2.17% of the first $14,000 of earnings of the lower-earning spouse, up to a maximum of $304, is available.

[u]The standard deduction for joint returns with state AGI less than $10,000 is $8,900. For state AGI between $10,000 and $55,000, the deduction is $8,900 - [(state AGI - $10,000) * 19.778%]. The deduction is completely phased out after state AGI is $55,000.

North Dakota, Rhode Island, and Vermont have a flat tax on federal tax liability. The effective state income tax rate for states with flat taxes on federal tax liability is calculated by multiplying the federal tax rate by the state tax rate. For example, North Dakota's effective state tax rate, assuming the taxpayers are in the 28 percent federal tax bracket, is 3.92 (.14 * .28) percent. Deductibility of federal income tax, standard deductions, personal exemptions, tax rates, and long-term capital gains exclusions are detailed for each state in Table 5-1.

## *Part I: Tax Costs of a Timber Sale*

The hypothetical taxpayers, a husband and wife, age 60 with no dependents, are representative of a general forest landowner (Birch 1997). The income tax effects are shown for: a medium income level of $50,000 and a high income level of $110,000, before timber revenues. To maintain comparability across states, it is assumed that the landowners use the standard deduction (if itemized deductions were used, they would differ across states due to different state income tax deductions on the federal return).

The owners purchased 300 acres of red pine timberland ten years ago. They are actively involved and have timber management as their primary objective. The business is operated as a sole proprietorship. Other objectives include wildlife, aesthetics, and value appreciation.

A thinning is completed in the current tax year (1997 tax rates and law are assumed for purposes of this analysis). At the time, the owners make estimated tax payments based on the sale receipts. The expenses of sale (consulting forester fees) are assumed to be six percent of the sale price. This percentage falls within the range of large sales which generally command a fee of 4-8%. It is assumed that the owners will not reforest the land until the following year. The annual property tax for the landowners is assumed to be $2,000 (300 acres * $6.67/acre) and the annual management costs are $1,500 (300 acres * $5/acre). Both annual costs are fully deductible because the landowners hold an active business involved in the management of the forest land.

The purchase price of the timberland ten years ago was $500,000, or $1,667 per acre. The land contained red pine with an average age between 25 and 40 years. The landowners allocated the purchase price (basis) between the land ($135,000, or $450 per

acre) and the timber ($365,000, or $1,217 per acre). The total growing stock on the land at the time of purchase was three million board feet, or 10 thousand board feet (MBF) per acre. The landowners are using the International 1/4 log rule for depletion unit purposes. All timber volumes are calculated with RPGROW$ (Hyldahl and Grossman 1993).

The landowners make a sale-by-the-unit [Section 631(b)] sale of $200,000 in the current year. As long as the one year holding period has been met, Section 631(b) provisions allow the net gain from the thinning and clearcut to be taxed as long-term capital gains for an active timber business. Because the timber sale income is treated as long-term capital gain, it is not subject to self-employment tax. The sale is a thinning of 94 acres which produces 789.28 MBF (8.35 MBF per acre) of wood. The landowners receive $238 per MBF for sawtimber (Michigan DNR 1997).

The total adjusted growing stock is 7,410 MBF. Therefore, the growth since the purchase of the land is 4,410 MBF. The depletion unit is calculated by dividing the purchase price allocated to the timber's adjusted basis by the total adjusted growing stock since purchase. The depletion unit for the landowners is $49.26 ($365,000/7,410) per MBF. The depletion unit calculation assumes that all expenses are deducted as incurred rather than capitalized. Total depletion for the sale is $38,880 ($49.26*789.28).

## Federal Tax Analysis

The calculation of the federal tax liability for the hypothetical landowners is summarized in Table 5-2. An after-tax net income model is used in the analysis. The personal exemption for the taxpayers in both income levels is reduced because part of the personal exemption is phased out after the taxpayers' AGI reaches $181,800 (Willis and Davis 1998).

The long-term capital gains tax on the sale differs between the medium and high income landowners in two respects. First, some of the capital gain is taxed at the 10% capital gains rate for the medium income level taxpayers. This occurs because the lower ten percent rate applies until the additional capital gains income moves the taxpayer into the 28% marginal federal tax bracket (over $41,200 in taxable income for 1997) and the corresponding 20% capital gains bracket. Second, the landowners in the high income level are subject to the alternative minimum tax (AMT).

Table 5-2. Federal income tax calculation for the hypothetical landowners in the Midwest and Northeast.[a]

| INCOME: | | Income Level Medium | High |
|---|---|---|---|
| Personal income | | $50,000 | $110,000 |
| Revenue from timber sale | $200,000 | | |
| Less deductions | | | |
| Expense of sale | ($12,000) | | |
| Depletion | ($38,880) | | |
| Taxable long-term capital gain on sale | | $149,120 | $149,120 |
| Less deductions | | | |
| Property tax | ($1,000) | | |
| Management costs | ($2,500) | | |
| Total deductions | | ($3,500) | ($3,500) |
| **Adjusted gross income** | | **$195,620** | **$255,620** |
| Standard deduction | | ($6,900) | ($6,900) |
| Personal exemptions | | ($4,664) | ($2,120) |
| **Taxable income** | | **$184,056** | **$246,600** |
| TAXES: | | | |
| Taxable income | | $184,056 | $246,600 |
| Less taxable capital gain on sale | | ($149,120) | ($149,120) |
| Ordinary income | | $34,936 | $97,480 |
| **Ordinary income tax** | | **$5,239** | **$21,937** |
| Taxable long-term capital gain on sale | | $149,120 | $149,120 |
| Capial gains tax | 10 Percent | $626 | $0 |
| | 20 Percent | $28,571 | $29,824 |
| **Total capital gains tax** | | **$29,197** | **$29,824** |
| **Alternative minimum tax** | | **$0** | **$918** |
| **Total federal income tax** | | **$34,436** | **$52,679** |

[a]Calculations completed with BNA Income Tax Planner with 50 States for Windows (1998).

The alternative minimum tax (AMT) is a separate tax calculation with a proportional tax rate that is applied each year to a taxpayer's income. Certain tax deductions are calculated differently for AMT purposes. If the deduction for regular income tax purposes exceeds that allowed for AMT purposes, then a liability for AMT may be incurred. If the tentative minimum tax is greater than the regular income tax, the taxpayer must pay the regular tax plus the AMT (Willis and Davis 1998). The AMT for individuals is calculated on IRS Form 6251.

## State Tax Analysis

State taxes are allowed as a deduction on a taxpayer's federal return if the taxpayers' business itemizes deductions on Schedule C of federal Form 1040. As previously stated, the hypothetical taxpayers elect to take the federal standard deduction on their tax returns. The use of the standard deduction maintains the same federal tax liability for the taxpayers in each state. This makes state computations more comparable.

The amount of state tax the hypothetical landowner must pay on a timber sale varies greatly (Table 5-3). Taxable income, income tax, and combined federal-state tax liability for the hypothetical landowners in each state are shown. As noted previously, New Hampshire and South Dakota do not have state income taxes. For those states with an income tax, the landowners in the medium income level have the highest state tax liability in Minnesota ($14,682) and the lowest in North Dakota ($4,821). Minnesota's minimum tax rate of 6% and maximum rate of 8.5% contribute to the state's high tax liability . The low tax liability in North Dakota results from the low flat tax rate of 14% (which equates to 2-4% of taxable income) on federal tax liability.

Minnesota remains the state with the highest tax liability ($19,999) for the landowners in the high income level while the state with the lowest tax liability is Pennsylvania ($7,157). The AMT for the high income level taxpayers makes North Dakota's flat tax on the federal tax liability higher than Pennsylvania's flat tax on state AGI.

Table 5-3. Federal and state income tax for landowners in the Midwest and Northeast.[a]

| | State taxable income [b] | | State income tax | | Combined state & federal income tax | |
|---|---|---|---|---|---|---|
| | Medium income level | High income level | Medium income level | High income level | Medium income level | High income level |
| | ($) | ($) | ($) | ($) | ($) | ($) |
| Connecticut | 195,620 | 255,620 | 8,615 | 11,315 | 43,051 | 63,994 |
| Delaware | 194,020 | 254,020 | 12,663 | 16,803 | 47,099 | 69,482 |
| Illinois | 193,620 | 253,620 | 5,809 | 7,609 | 40,245 | 60,288 |
| Indiana | 193,620 | 253,620 | 6,583 [c] | 8,623 [c] | 41,019 | 61,302 |
| Iowa | 149,829 | 191,586 | 13,434 | 17,601 | 47,870 | 70,280 |
| Kansas | 186,620 | 246,620 | 11,092 | 14,962 | 45,528 | 67,641 |
| Maine | 184,420 | 244,420 | 14,562 | 19,662 | 48,998 | 72,341 |
| Maryland | 184,420 | 244,420 | 9,401 [d] | 12,401 [d] | 43,837 | 65,080 |
| Massachusetts | 41,240 [e] | 101,240 [e] | 8,419 | 11,989 | 42,855 | 64,668 |
| Michigan | 190,620 | 250,620 | 8,387 | 11,027 | 42,823 | 63,706 |
| Minnesota | 184,056 | 246,600 | 14,682 | 19,999 | 49,118 | 72,678 |
| Missouri | 176,320 | 236,320 | 10,354 | 13,954 | 44,790 | 66,633 |
| Nebraska | 195,620 | 255,620 | 12,067 | 16,538 [f] | 46,503 | 69,217 |
| New Hampshire | ------- | ------- | 0 | 0 | 34,436 | 52,679 |
| New Jersey | 193,620 | 253,620 | 8,291 | 12,113 | 42,727 | 64,792 |
| New York | 182,620 | 242,620 | 12,509 | 16,619 | 46,945 | 69,298 |
| North Dakota | ------- [g] | ------- [g] | 4,821 | 7,375 | 39,257 | 60,054 |
| Ohio | 193,920 | 253,920 | 10,603 [h] | 14,889 [h] | 45,039 | 67,568 |
| Pennsylvania | 195,620 | 255,620 | 5,477 | 7,157 | 39,913 | 59,836 |
| Rhode Island | ------- [i] | ------- [i] | 9,470 | 14,487 | 43,906 | 67,166 |
| South Dakota | ------- | ------- | 0 | 0 | 34,436 | 52,679 |
| Vermont | ------- [i] | ------- [i] | 8,609 | 13,170 | 43,045 | 65,849 |
| Wisconsin | 106,148 | 166,148 | 7,115 [h] | 11,273 [h] | 41,551 | 63,952 |

[a]Calculations completed with BNA Income Tax Planner with 50 States for Windows (1998).

[b]The federal taxable income was $184,056 and $246,600 for the middle and high income levels, respectively.

[c]Does not include county taxes.

[d]Does not include local income taxes.

[e]Does not include capital gains income. See Table 1 on Massachusetts tax specifications.

[f]Includes $272 in state minimum tax.

[g]Form 37-S, which calculates a tax of 14% of the federal income tax liability, is used.

[h]Does not include joint filer credit.

[i]Piggybacks on federal income tax liability.

## *Part II: Land Expectation Value Analysis – Michigan Northern Lower Peninsula Study*

In this section, income tax issues that landowners might encounter while managing forest land are examined using land expectation value (LEV) methodology. The effects on land expectation value of different tax treatments are covered. LEV is the net present value of bare land used to produce perpetual rotations of even-aged timber. Land expectation value is also a useful tool for estimating the maximum bid price for bare forest land (Gunter and Haney 1984).

This analysis will continue with the hypothetical landowner model developed in the previous section. The scope of the analysis is now limited to the Northern Lower Peninsula (NLP) of Michigan to accurately model all costs and revenues. For this analysis, the time period covers the year subsequent to the timber sale and all subsequent rotations. Only one income level will be examined. It is assumed that the landowners have $70,000 per year in wages for each year of the rotation. This places them in the 28 percent federal marginal tax bracket for ordinary income.

The landowners use a red pine management regime (Table 5-4) modified from Grossman and Potter-Witter (1991). They prepare the site and plant with red pine seedlings. The landowners utilize a chemical release in the third year of the rotation. A thinning in year 30 produces about 12.9 cords of pulpwood and 0.2 MBF of sawtimber per acre. Another thinning in year 45 yields 6.5 cords of pulpwood and 3.8 MBF of sawtimber per acre. The last thinning at age 60 generates 0.4 cords of pulpwood and 8.5 MBF of sawtimber per acre. The final harvest, in year 70 of the rotation, produces 24.4 MBF of sawtimber per acre (Table 5-4). Management costs were obtained from Grossman and Potter-Witter (1991) and modified to reflect current trends. Timber prices were calculated using simple linear regression techniques on ten years (1987-1997) of Michigan Department of Natural Resources (Northern Lower Peninsula) regional average prices (1998).

Assumptions related to land expectation values are: (1) revenues and costs are assumed to be constant and only increase with the 3 percent inflation rate assumed in the analysis, (2) tax laws and rates are assumed to be constant throughout the rotation, (3) an after-tax net income model is used, (4) two nominal (including inflation) after-tax interest

Table 5-4. Forest-related costs, revenues, and management regime used in LEV analysis of federal-state income taxes in the Midwest and Northeast.

## Forest-related costs

| | |
|---|---|
| Reforestation expense | $230/acre |
| Chemical release cost | $70/acre |
| Sale administration cost | 6% of stumpage price |
| Property taxes | $1.10/acre[a] |
| Annual management expenses | $5/acre |

## Forest-related revenues

| | |
|---|---|
| Pulpwood stumpage price | $35/cord |
| Sawtimber stumpage price | $238/MBF |

## Forest management regime

| | | |
|---|---|---|
| Year 1: | Reforest stand | |
| Year 3: | Herbicide release spraying | |
| Year 30: | Commercial thinning............................. | 12.9 cords/acre pulpwood |
| | | 0.2 MBF/acre sawtimber |
| Year 45: | Commercial thinning............................. | 6.5 cords/acre pulpwood |
| | | 3.8 MBF/acre sawtimber |
| Year 60: | Commercial thinning............................. | 0.4 cords/acre pulpwood |
| | | 8.5 MBF/acre sawtimber |
| Year 70: | Final harvest.......................................… | 24.4 MBF/acre sawtimber |

Site index = 65@50 years
Initial planted trees per acre =680

[a]Assumes land is enrolled in Michigan's Commercial Forest Act**.**

rates of six and eight percent are used in the analysis to account for risk in the model, and (5) two general state tax rates of zero and 10 percent model the minimum and maximum state tax rate implications of the model.

## Planning Scenarios

Six different tax planning scenarios are evaluated to determine the effects of tax provisions on land expectation value. The first scenario (base case) illustrates the effect of the maximum use of the currently available tax provisions. In each successive scenario, the landowners forego certain tax benefit(s) that, in turn, generally lower their LEV (Table 5-5). These reflect common omissions and mistakes made by typical forest landowners.

Table 5-5. Summary of tax planning scenarios for LEV analysis of the Midwest and Northeast.

| | Reforestation costs | | Investment tax credit | | Management expenses & property taxes | | | Timber sale revenue treated as | |
|---|---|---|---|---|---|---|---|---|---|
| | spread over two years and amortized | All costs in 1st year | used | not used | deducted currently | capitalized | neither deducted nor capitalized | capital gain | ordinary income |
| **Scenario 1** | X | | X | | X | | | X | |
| **Scenario 2** | X | | X | | | X | | X | |
| **Scenario 3** | X | | X | | | | X | X | |
| **Scenario 4** | X | | X | | X | | | | X |
| **Scenario 5** | | X | | X | | | X | X | |
| **Scenario 6** | | X | | X | | | X | | X |

Under scenario one (base case scenario), the landowners, who are cash basis taxpayers, pay $13,000 of their reforestation costs in the first year and the other $10,000 in the second year. Reforestation costs are thus spread over two tax years allowing the landowners to maximize their use of the available reforestation amortization and the investment tax credit. The remaining $3,000 ($13,000 - $10,000 allowable) that cannot be amortized in the first year is capitalized into the timber basis for recovery through

depletion. The landowners deduct their management expenses, including the chemical release (assumes the stand is established), and property taxes. Under current tax provisions, an active business is allowed to fully deduct any ordinary and necessary expense from any current income. The owners sell the timber under a "pay-as-cut" contract (Section 631(b) of the Internal Revenue Code). As long as the one year holding period has been met, Section 631(b) provisions allow the net gain from the thinning and clearcut to be taxed as long-term capital gains. Because the timber sale income is treated as long-term capital gain, it is not subject to self-employment tax.

In scenario two, management costs and property taxes are capitalized. These expenses, along with the $3,000 in reforestation costs, are then recovered through the depletion deduction when the timber is harvested. Suspension (or capitalization) of these expenses is required if a landowner's business is classified as passive unless the landowner has offsetting passive income from other sources. Therefore, this scenario represents the tax effects for a timber investment that is classified as passive, as compared to an active business (scenario one).

Scenario three differs from scenario one in that management expenses and property taxes are neither deducted nor capitalized. All other variables remain the same. Poor record keeping or lack of awareness of the tax rules can cause a landowner to fail to take advantage of expense deductibility and fall into this scenario.

Scenario four is exactly the same as scenario one except that the revenue from any timber harvest is treated as ordinary gain. Treatment of timber revenues as ordinary gain can occur if the landowners sell timber in a "lump sum" sale. Gains from a "lump sum" timber sale are treated as ordinary gains if the timber investment is classified as a business. Because the sale revenue is treated as an ordinary gain, the final timber harvest moves the landowners into the 39.6 percent tax bracket. Due to the uncertainty of future tax rates, however, the ordinary rate is held constant at 28 percent in the analysis. The Medicare portion (2.9%) of the self-employment tax on total ordinary income above $65,400 is also omitted from the analysis for purposes of consistency. Therefore, these results are conservative estimates under current law.

Scenarios five and six illustrate the extreme cases of failure to take advantage of favorable tax treatment available to the landowner. In scenario five, the owners spend all

$230 per acre on reforestation costs in the first year. These expenses are neither amortized nor capitalized. Consequently, the associated reforestation investment tax credit is not taken. Management expenses and property taxes are neither deducted nor capitalized. The provisions of Section 631(b) allow the long-term capital gain treatment of timber sales.

Scenario six is the same as scenario five, except the timber sale revenue is treated as an ordinary gain instead of a long-term capital gain. Timber sale revenue will be treated as ordinary gains if the landowner's business sells the timber "lump sum".

### Effects of Tax Planning on LEV

The base case scenario produces land expectation values from $117 to $920 (Table 5-6). A timberland buyer would be willing to pay between 117 and 920 dollars per acre for bare land in Michigan using the previously stated red pine management regime, depending on the discount rate and state tax rate.

Table 5-6. Land expectation values and changes among tax planning scenarios, per acre.[a]

| | Six percent interest rate [b] | | Eight percent interest rate [b] | |
|---|---|---|---|---|
| | No state tax | 10 percent state tax | No state tax | 10 percent state tax |
| Scenario 1 | $920 | $803 | $139 | $117 |
| Scenario 2 | $854 | $713 | $88 | $48 |
| Change in value between 1 and 2 | 7% | 11% | 37% | 59% |
| Scenario 3 | $848 | $705 | $86 | $46 |
| Change in value between 1 and 3 | 8% | 12% | 38% | 61% |
| Scenario 4 | $793 | $676 | $95 | $73 |
| Change in value between 1 and 4 | 14% | 16% | 32% | 37% |
| Scenario 5 | $780 | $621 | $20 | ($35) |
| Change in value between 1 and 5 | 15% | 23% | 86% | 130% |
| Scenario 6 | $653 | $494 | ($24) | ($79) |
| Change in value between 1 and 6 | 29% | 38% | 117% | 167% |

[a]All calculations made with WINYIELD (Hepp 1997).

[b]Interest rate is nominal and includes an assumed inflation rate of 3%.

Land expectation values in scenarios two and three range from $46 to $854. Capitalizing expenses (scenario two) rather than currently deducting these expenses decreases the LEV between seven and 59 percent depending on interest rates and state tax rates. Losing both the capitalization and deduction of management expenses in scenario three causes the LEV's to decline eight to 61 percent from the base case scenario.

Forest landowners who neglect to take advantage of long-term capital gains treatment (scenario four) can expect to lose between 14 to 37 percent of their land expectation value. LEV's in scenario four range from $73 to $793. Long-term capital gains can be lost by neglect or ignorance of the tax law governing the relationship between being an active business and the Section 631(b) rules for selling timber. The value loss could be even greater if a landowner's ordinary tax rate is higher than the assumed 28 percent.

Land expectation values drop substantially in scenarios five and six. LEV's range from -$79 to $780. Percentage decreases from the LEV's in scenario one range from 15 percent to 167 percent depending on state tax rates and interest rates.

# Chapter 6

# Federal and State Income Tax Considerations for Forest Landowners in the West: A Case Study on Tax Planning

This section provides two different analyses on the effects of federal and state income tax on returns to timberland investors in the West. The first analysis considers the tax cost of a timber sale. The second analysis examines the effects of various tax planning (or lack of planning) scenarios on the expected value of a timber investment over an infinite number of rotations.

A hypothetical taxpayer profile is used to examine the tax costs associated with a timber sale. The taxpayer invests in Douglas-fir (*Pseudotsuga menziesii*) forest land in the West. Douglas-fir is utilized as the example species in the study because it is a commercial species common throughout the Northwest. The significance of having a definitive species for the entire region causes a concern, however, in reviewing state and federal tax implications, landowners need to focus on the financial information more than species choice. The tree species is only used as a realistic reference point for landowner decisions. The land is assumed to be of average quality (site class III) and management techniques that are common for the region are employed. Important federal and state tax laws are examined before analyzing the combined effect of federal and state income taxes on private forest landowners.

## *Important Federal and State Income Tax Laws*

The 13 states analyzed in this study are: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming. All of these states, except Alaska, Nevada, Washington, and Wyoming, have a comprehensive income tax. Eight of the remaining nine states use federal adjusted gross income (AGI) as their tax base (Table 6-1). Colorado uses federal taxable income as it's tax base. Deductibility of federal income tax, standard deductions, personal

exemptions, tax rates, and long-term capital gains exclusions are detailed for each state in Table 6-1.

Table 6-1. General income tax provisions for western states.[a]

| | Federal adjusted gross income used as tax base | Federal income tax deductible | Personal exemption[b] | Standard deduction[b] | Abbreviated tax rate schedule[b] | | | | Proportion of long-term capital gain taxable | Maximum effective long-term capital gains tax rate |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | From | Of the first | To | Of the amount over | | |
| | | | ($) | ($) | (%) | ($) | (%) | ($) | (%) | (%) |
| Alaska | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |
| Arizona | YES | NO | 4,200 | 7,200 | 2.90 | 20,000 | 5.17 | 300,000 | 100 | 5.17 |
| California | YES | NO | 136 [c] | 5,166 | 1.00 | 10,032 | 9.30 | 65,832 | 100 | 9.30 |
| Colorado | NO | NO | ------- | ------- | | 5.00% [d] | | | 100 | 5.00 |
| Hawaii | YES | NO | 2,080 | 1,900 | 2.00 | 3,000 | 10.00 | 41,000 | 100 | 7.25 [e] |
| Idaho | YES | NO | 5,300 [f] | 6,900 | 2.00 | 2,000 | 8.20 | 50,000 | 40[g] | 3.28 |
| Montana | YES | NO | 3,100 | 5,820 [h] | 2.00 | 1,900 | 11.00 | 67,900 | 100 | 11.00 |
| Nevada | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |
| New Mexico | YES | NO | 5,300 [f] | 6,900 [i] | 1.70 | 8,000 | 8.50 | 100,000 | 100 | 8.50 |
| Oregon | YES | YES[j] | 256 [k] | 3,000 | 5.00 | 4,500 | 9.00 | 50,000 | 100 | 9.00 |
| Utah | YES | YES[l] | Federal [m] | 6,900 [i] | 2.30 | 1,500 | 7.00 | 7,500 | 100 | 7.00 |
| Washington | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |
| Wyoming | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |

[a]As of April 1998. The sources of information used in collecting this data were: BNA Income Tax Planner with 50 States for Windows (1998), state tax forms, and correspondence with state tax offices.

[b]The personal exemption, standard deduction, and tax rate schedules are for married taxpayers filing a joint return.

[c]A credit of $68 per exemption is allowed. Credit is phased out after Federal AGI reaches $255,805

[d]Colorado has a flat 5% tax rate across all income brackets.

[e]Hawaii has a maximum capital gains rate of 7.25%.

[f]Limited to the phase out rules for the federal personal exemption.

[g]Timber must be held more than 24 months.

[h]20% of Montana AGI, not to exceed $5,820 for married filing jointly.

[i]Standard deduction is equal to the amount claimed on federal return.

[j]A $3,000 maximum deduction is allowed.

[k]A credit of $128 per exemption is used.

[l]One-half of federal taxes (including AMT) are allowed as a deduction.

[m]Utah uses the federal personal exemption amount limited under the phase out rules multiplied by 0.75.

## *Part I: Tax Costs of a Timber Sale*

The hypothetical taxpayers, a husband and wife, age 60 with no dependents, are representative of a general forest landowner (Birch 1997). The income tax effects are shown for: a medium income level of $50,000 and a high income level of $110,000, before timber revenues. To maintain comparability across states, it is assumed that the landowners use the standard deduction (if itemized deductions were used, they would differ across states due to different state income tax deductions on the federal return).

The landowners purchased 400 acres of Douglas-fir forest land ten years ago. They are actively involved and have timber management as a primary objective. The business is operated as a sole proprietorship. Other objectives include wildlife management, aesthetics, and value appreciation.

A thinning is completed in the current year (1997 tax rates and law are assumed for purposes of this analysis). At the time, the owners make estimated tax payments based on the sale proceeds. The expenses of sale (consulting forester fees) are assumed to be six percent of the sale price. This percentage falls within the range of large sales which generally command a fee of 4-8%. The annual property tax for the landowners is assumed to be $1,500 (400 acres * $3.75/acre) and the annual management costs are $2,000 (400 acres * $5/acre). Both annual costs are fully deductible because the landowners hold an active business involved in the management of the forest land.

The purchase price of the timberland ten years ago was $500,000, or $1,250 per acre. The land contained naturally seeded Douglas-fir with an average age between 20 and 25 years. The stand was pre-commercially thinned at age 15. The landowners allocated the purchase price (basis) between the land ($160,000, or $400 per acre) and the timber ($340,000, or $850 per acre). The total growing stock on the land at the time of purchase was 2.4 million board feet or 6 thousand board feet (MBF) per acre. The landowners are using the Scribner log rule. All timber volumes are calculated with DFSIM Version 1.0 (Oregon State University 1985).

The sale is a thinning of 229 acres which produces 640 MBF (2.8 MBF per acre) of wood. The landowners receive $313 per MBF for sawtimber (Oregon Department of Forestry 1998). Total sale proceeds are $200,000.

The total adjusted growing stock is 5,597 MBF. Therefore, the growth since the

purchase of the land is 4,400 MBF. The depletion unit is calculated by dividing the purchase price allocated to the timber's adjusted basis by the total adjusted growing stock. The depletion unit for the landowners is $60.75 ($340,000/5,597) per MBF. The depletion unit calculation assumes that all expenses are deducted as incurred rather than capitalized. Total depletion for the sale is $38,880 ($60.75*640).

## Federal Tax Analysis

The calculation of the federal tax liability for the hypothetical landowners is summarized in Table 6-2. An after-tax net income model is used in the analysis. The personal exemption for the taxpayers in both income levels is reduced because part of the personal exemption is phased out after the taxpayers' AGI reaches $181,800 (Willis and Davis 1998).

The long-term capital gains tax on the sale differs between the medium and high income landowners in two respects. First, some of the capital gain is taxed at the 10% capital gains rate for the medium income level taxpayers. This occurs because the lower ten percent rate applies until the additional capital gains income moves the taxpayer into the 28% marginal federal tax bracket (over $41,200 in taxable income for 1997) and the corresponding 20% capital gains bracket. Second, the landowners in the high income level are subject to the alternative minimum tax (AMT).

The alternative minimum tax (AMT) is a separate tax calculation with a proportional tax rate that is applied each year to a taxpayer's income. Certain tax deductions are calculated differently for AMT purposes. If the deduction for regular income tax purposes exceeds that allowed for AMT purposes, then a liability for AMT may be incurred. If the tentative minimum tax is greater than the regular income tax, the taxpayer must pay the regular tax plus the AMT (Willis and Davis 1998). The AMT for individuals is calculated on IRS Form 6251.

Table 6-2. Federal income tax calculation for the hypothetical landowners in the West.[a]

| | | Income Level | |
|---|---|---|---|
| **INCOME:** | | Medium | High |
| Personal income | | $50,000 | $110,000 |
| Revenue from timber sale | $200,000 | | |
| Less deductions | | | |
| Expense of sale | ($12,000) | | |
| Depletion | ($38,880) | | |
| Taxable long-term capital gain on sale | | $149,120 | $149,120 |
| Less deductions | | | |
| Property tax | ($1,000) | | |
| Management costs | ($2,500) | | |
| Total deductions | | ($3,500) | ($3,500) |
| **Adjusted gross income** | | **$195,620** | **$255,620** |
| Standard deduction | | ($6,900) | ($6,900) |
| Personal exemptions | | ($4,664) | ($2,120) |
| **Taxable income** | | **$184,056** | **$246,600** |
| **TAXES:** | | | |
| Taxable income | | $184,056 | $246,600 |
| Less taxable capital gain on sale | | ($149,120) | ($149,120) |
| Ordinary income | | $34,936 | $97,480 |
| **Ordinary income tax** | | **$5,239** | **$21,937** |
| Taxable long-term capital gain on sale | | $149,120 | $149,120 |
| Capial gains tax | 10 Percent | $626 | $0 |
| | 20 Percent | $28,571 | $29,824 |
| **Total capital gains tax** | | **$29,197** | **$29,824** |
| **Alternative minimum tax** | | **$0** | **$918** |
| **Total federal income tax** | | **$34,436** | **$52,679** |

[a]Calculations completed with BNA Income Tax Planner with 50 States for Windows (1998).

## State Tax Analysis

State taxes are allowed as a deduction on a taxpayer's federal return if the taxpayers' business itemizes deductions on Schedule C of federal Form 1040. As previously stated, the hypothetical taxpayers elect to take the federal standard deduction on their tax returns. The use of the standard deduction maintains the same federal tax liability for the taxpayers in each state. This makes state computations more comparable.

The amount of state tax the hypothetical landowner must pay on a timber sale varies greatly due to differences in state tax laws (Table 6-3). Taxable income, income tax, and combined federal-state tax liability for the hypothetical landowners in each state are shown. As noted previously, Alaska, Nevada, Washington, and Wyoming do not have state income taxes. Montana and Idaho landowners in the medium income level have the highest state tax liability ($18,597) and the lowest ($7,249), respectively. Montana's high tax rate of 11% contributes to the high state tax liability. The low tax liability in Idaho results from the state's capital gains exclusion.

Montana remains the state with the highest tax liability ($25,197) for the landowners in the high income level. The high income level landowners in Arizona have the lowest tax liability ($10,443). Arizona's low tax rate schedule (5.17% for taxable income over $300,000) favors taxpayers with more ordinary income.

Table 6-3. Federal and state income tax for landowners in the West.[a]

| | State taxable income[b] | | State income tax | | Combined state & federal income tax | |
|---|---|---|---|---|---|---|
| | Medium income level | High income level | Medium income level | High income level | Medium income level | High income level |
| | ($) | ($) | ($) | ($) | ($) | ($) |
| Alaska | ------- | ------- | 0 | 0 | 34,436 | 52,679 |
| Arizona | 184,220 | 244,220 | 7,563 | 10,443 | 41,999 | 63,122 |
| California | 190,454 | 250,454 | 14,352 | 20,064 | 48,788 | 72,743 |
| Colorado | 184,056 | 246,600 | 9,203 | 12,330 | 43,639 | 65,009 |
| Hawaii | 191,640 | 251,640 | 14,139 | 20,138 | 48,575 | 72,817 |
| Idaho | 94,584 | 157,128 | 7,249 | 12,378 | 41,685 | 65,057 |
| Montana | 186,700 | 237,680 | 18,597 | 25,197 | 53,033 | 77,876 |
| Nevada | ------- | ------- | 0 | 0 | 34,436 | 52,679 |
| New Mexico | 184,056 | 246,600 | 13,421 | 18,737 | 47,857 | 71,416 |
| Oregon | 189,620 | 249,620 | 16,492 | 21,892 | 50,928 | 74,571 |
| Utah | 168,003 | 220,790 | 11,550 | 15,245 | 45,986 | 67,924 |
| Washington | ------- | ------- | 0 | 0 | 34,436 | 52,679 |
| Wyoming | ------- | ------- | 0 | 0 | 34,436 | 52,679 |

[a]Calculations completed with BNA Income Tax Planner with 50 States for Windows (1998).
[b]The federal taxable income was $184,056 and $246,600 for the middle and high income levels, respectively.

## *Part II: Land Expectation Value Analysis – Western Oregon Case Study*

In this section, income tax issues that landowners might encounter while managing forest land are examined using land expectation value (LEV) methodology. The effects on land expectation value of different tax treatments are covered. LEV is the net present value of bare land used to produce perpetual rotations of even-aged timber. Land expectation value is a useful tool for estimating the maximum bid price for bare forest land (Gunter and Haney 1984).

This analysis will continue with the hypothetical landowner model developed in the previous section. The scope of the model is now limited to western Oregon to accurately model all costs and revenues. For this analysis, the time period covers the

year subsequent to the timber sale and all subsequent rotations. Only one income level will be examined. It is assumed that the landowners have $70,000 per year in wages for each year of the rotation. This places them in the 28 percent federal marginal tax bracket for ordinary income. The landowners use the management regime found in Table 6-4 (Brodie 1998). They prepare the site and establish a Douglas-fir plantation. The landowners pre-commercially thin to 300 trees per acre (TPA) in year 15 of the rotation. A commercial thinning in year 35 of the rotation produces about 2.8 MBF of sawtimber per acre. Another thinning in year 45 yields 5.5 MBF of sawtimber per acre. The final harvest, in year 65 of the rotation, produces 54.4 MBF of sawtimber per acre (Table 6-4).

Management costs were obtained from Brodie (1998). Timber prices were calculated using simple linear regression techniques on ten years (1987-1997) of Oregon Department of Forestry (1998) average prices. The land is assumed to be enrolled under the Western Oregon Forest Land and Privilege Tax (WOFLAPT) program. The 1997-98 assessed value for forest land class FD (Site Class III) in western Oregon is $72 per acre (Toman 1998). The tax rate in the landowners' district is assumed to be $15 per $1,000 of assessed value. The annual property tax is approximately $110 {[($72 * 100 acres)/$1,000] * $15 per $1,000 of assessed value}, or $1.10 per acre. The landowners must pay the Western Oregon Privilege Tax (3.2% of stumpage value) when any timber is harvested. The Forest Products Harvest Tax (FPHT) is also paid when any timber is cut from the land. The FPHT tax in 1998 is $4.01 per 1,000 board feet with an allowed 25 MBF exemption (Oregon Department of Revenue 1998).

Assumptions related to land expectation values are: (1) revenues and costs are assumed to be constant and only increase with the 3 percent inflation rate assumed in the analysis, (2) tax laws and rates are assumed to be constant throughout the rotation, (3) an after-tax net income model is used, (4) two nominal (including inflation) after-tax interest rates of eight and ten percent are used in the analysis to account for risk in the model, and (5) two general state tax rates of zero and 11 percent model the minimum and maximum state tax rate implications for the model.

Table 6-4. Forest-related costs, revenues, and management regime used in LEV analysis of federal-state income taxes in the West.

## Forest-related costs

| | |
|---|---|
| Establishment expenses | $200/acre |
| Pre-commercial thinning expense | $100/acre |
| Sale administration cost | 6% of stumpage price |
| Annual management expenses | $5/acre |
| Property taxes | $1.10/acre[a] |
| Western Oregon privilege tax | 3.2% of stumpage price |
| Forest products harvest tax | $4.01/MBF with 25 MBF exemption |

## Forest-related revenues

| | |
|---|---|
| Sawtimber stumpage price | $365/MBF |

## Forest management regime

| | | |
|---|---|---|
| Year 1: | Establish stand | |
| Year 15: | Pre-commercial thinning, leaving≈300 trees per acre (TPA) | |
| Year 35: | Commercial thinning (leave≈200 TPA)..... | 2.8 MBF/acre sawtimber |
| Year 45: | Commercial thinning (leave≈100 TPA)..... | 5.5 MBF/acre sawtimber |
| Year 65: | Final Harvest............................................ | 54.4 MBF/acre sawtimber |

Site class III
Forest land class FD

[a]Assumes land is enrolled under the Western Oregon Forest Land and Privilege Tax (ORS 321.352-321-375) and local property tax rate is $15/$1,000 of assessed value.

## Planning Scenarios

Six different tax planning scenarios are evaluated to determine the effects of tax provisions on land expectation value (Table 6-5). The first scenario (base case) illustrates the effect of the maximum use of the currently available tax provisions. In each successive scenario, the landowners forego certain tax benefit(s) that, in turn, generally lower their LEV. These are caused by common omissions and mistakes made by typical forest landowners.

Under scenario one (base case scenario), the landowners, who are cash basis taxpayers, pay $10,000 of their reforestation costs in each of the first two years. Reforestation costs are thus spread over two tax years allowing the landowners to maximize their use of the available reforestation amortization and the investment tax credit. The landowners deduct their management expenses, including the pre-commercial thinning, and property taxes. Under current tax provisions, an active business is allowed to fully deduct any ordinary and necessary expense from any current income. The owners dispose of the timber under a "pay-as-cut" contract (Section 631(b) of the Internal Revenue Code). As long as the one year holding period has been met, Section 631(b) provisions allow the net gain from the thinnings and clearcut to be taxed as long-term capital gains. Because the timber sale income is treated as long-term capital gain, it is not subject to self-employment tax.

In scenario two, management costs and property taxes are capitalized. These expenses are then recovered through the depletion deduction when the timber is harvested. The landowners' basis in the timber is composed of management costs and property taxes because they have already amortized the reforestation expenses. Suspension (or capitalization) of these expenses is required if a landowner's business is classified as passive, unless the landowner has offsetting passive income from other sources.

Scenario three differs from scenario one in that management expenses and property taxes are neither deducted nor capitalized. All other variables remain the same. Poor record keeping or lack of awareness of the tax rules can cause a landowner to fail to take advantage of expense deductibility.

Table 6-5. Summary of tax planning scenarios for LEV analysis of the West.

| | Reforestation costs | | Investment tax credit | | Management expenses & property taxes | | | Timber sale revenue treated as | |
|---|---|---|---|---|---|---|---|---|---|
| | spread over two years and amortized | All costs in 1st year | used | not used | deducted currently | capitalized | neither deducted nor capitalized | capital gain | ordinary income |
| **Scenario 1** | X | | X | | X | | | X | |
| **Scenario 2** | X | | X | | | X | | X | |
| **Scenario 3** | X | | X | | | | X | X | |
| **Scenario 4** | X | | X | | X | | | | X |
| **Scenario 5** | | X | | X | | | X | X | |
| **Scenario 6** | | X | | X | | | X | | X |

Scenario four is exactly the same as scenario one except that the revenue from any timber harvest is treated as ordinary gain. Treatment of timber revenues as ordinary gain can occur if the landowners sell timber in a “lump sum sale”. Gains from a “lump sum” timber sale are treated as ordinary gains if the timber investment is classified as a business. Because the sales revenue is treated as an ordinary gain, the final timber harvest moves the landowners into the 39.6 percent tax bracket. Due to the uncertainty of future tax rates, however, the ordinary rate is held constant at 28 percent in the analysis. The Medicare portion (2.9%) of the self-employment tax on total ordinary income above $65,400 is also omitted from the analysis for purposes of consistency. Therefore, these results are conservative estimates under current law.

In the scenario five, the owners spend $200 per acre on reforestation costs in the first year. These expenses are neither amortized nor capitalized. Consequently, the associated reforestation investment tax credit is not taken. Management expenses and property taxes are neither deducted nor capitalized. The provisions of Section 631(b) allow the long-term capital gain treatment of timber sales.

Scenario six is the same as scenario five, except the timber sale revenue is treated as an ordinary gain instead of a long-term capital gain. Timber sale revenue could be treated as ordinary gain if the landowner’s business sells the timber “lump sum”.

## Effects of Tax Planning on LEV

The base case scenario produces land expectation values from $97 to $707 (Table 6-6). A timberland buyer would be willing to pay between 97 and 707 dollars per acre for bare land in western Oregon using the previously stated Douglas-fir management regime, depending on the discount rate and state tax rate.

Land expectation values in scenarios two and three range from $46 to $659. Capitalizing expenses (scenario two) rather than currently deducting these expenses decreases the LEV between seven and 52 percent depending on interest rates and state tax rates. Losing both the capitalization and deduction of management expenses in scenario three causes the LEV's to decline seven to 53 percent from the base case scenario.

Forest landowners who neglect to take advantage of long-term capital gains treatment (scenario four) can expect to lose between 14 to 36 percent of their land expectation value. Long-term capital gains can be lost by neglect or ignorance of the tax law governing the relationship between being an active business and the Section 631(b) rules for selling timber. The value loss could be even greater if a landowner's ordinary tax rate is higher than the assumed 28 percent.

Land expectation values drop substantially in scenarios five and six. LEV's range from -$70 to $591. Percentage decreases from the LEV's in scenario one range from 16 percent to 172 percent depending on state tax rates and interest rates.

Table 6-6. Land expectation values and changes among scenarios, per acre.[a]

| | Eight percent interest rate[b] | | Ten percent interest rate[b] | |
|---|---|---|---|---|
| | No state tax | 11 percent state tax | No state tax | 11 percent state tax |
| Scenario 1 | $707 | $607 | $116 | $97 |
| Scenario 2 | $659 | $541 | $80 | $46 |
| Change in value between 1 and 2 | 7% | 11% | 31% | 52% |
| Scenario 3 | $657 | $538 | $79 | $46 |
| Change in value between 1 and 3 | 7% | 11% | 32% | 53% |
| Scenario 4 | $608 | $508 | $81 | $62 |
| Change in value between 1 and 4 | 14% | 16% | 30% | 36% |
| Scenario 5 | $591 | $456 | $14 | ($34) |
| Change in value between 1 and 5 | 16% | 25% | 88% | 136% |
| Scenario 6 | $492 | $357 | ($21) | ($70) |
| Change in value between 1 and 6 | 30% | 41% | 118% | 172% |

[a]All calculations made with WINYIELD (Hepp 1997).

[b]Interest Rate is nominal and includes an assumed inflation rate of 3%.

# Chapter 7

# 50 State Comparison

The state income tax provisions and tax cost for a hypothetical landowner in all 50 states are compared. The timber harvest financial numbers in each regional chapter were arranged so that all states could be easily compared. Income levels, expense of sale, and the depletion deduction were kept constant across all states and regions to facilitate comparison. This section only focuses on the tax law and tax costs of a timber sale. It does not address land expectation value on a national level.

Nine states (Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington, and Wyoming) have no comprehensive income tax. Twenty-eight of the remaining 41 states use federal adjusted gross income (AGI) as their tax base (Table 7-1).

Seven states (Alabama, Iowa, Louisiana, Missouri, Oklahoma, Oregon and Utah) allow residents to deduct federal income taxes from state taxable income. Each of these states has a different method for determining the amount of federal taxes that are allowed as a deduction. Most states place limits on the amount of federal tax a landowner is allowed to deduct.

Twenty-five states allow a personal exemption deduction while eight states provide a tax credit as a personal exemption. Colorado, Minnesota, and South Carolina pass the federal personal exemption amount through to taxpayers by using federal taxable income as their state tax base. North Dakota, Rhode Island, and Vermont pass the federal personal exemption amount through by using federal tax liability as their state tax base. New York, Pennsylvania, and Wisconsin do not have a personal exemption. Personal exemptions for a married couple filing jointly range from a low of $1,600 in Virginia to a high of $24,000 in Connecticut.

Twenty-six states allow a standard deduction. The standard deduction is different for each state depending on conformity with federal regulations. For example, North Carolina allows a standard deduction, but limits the deduction amount to the pre-inflation adjusted federal amount. New Mexico and Oregon use the standard deduction amount

# Table 7-1. General income tax provisions for all states.[1]

| | Federal adjusted gross income used as tax base | Federal income tax deductible | Personal exemption[2] | Standard deduction[2] | Abbreviated tax rate schedule[2] From | Of the first | To | Of the amount over | Proportion of long-term capital gain taxable | Maximum effective long-term capital gains tax rate |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | ($) | ($) | (%) | ($) | (%) | ($) | (%) | (%) |
| Alabama | NO | YES | 3,000 | 4,000 [3] | 2.00 | 1,000 | 5.00 | 6,000 | 100 | 5.00 |
| Alaska | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |
| Arizona | YES | NO | 4,200 | 7,200 | 2.90 | 20,000 | 5.17 | 300,000 | 100 | 5.17 |
| Arkansas | NO | NO | 40 [4] | 1,000 [5] | 1.00 | 2,999 | 7.00 | 25,000 | 100 | 6.00[6] |
| California | YES | NO | 136 [7] | 5,166 | 1.00 | 10,032 | 9.30 | 65,832 | 100 | 9.30 |
| Colorado | NO[8] | NO | ------- [9] | ------- [9] | | 5.00% [10] | | | 100 | 5.00 |
| Connecticut | YES | NO | 24,000 [11] | ------- | 3.00 | 12,500 | 4.50 | 12,500 | 100 | 4.50 |
| Delaware | YES | NO | 200 [12] | 1,600 | 0.00 | 2,000 | 6.90 | 60,000 | 100 | 6.90 |
| Florida | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |
| Georgia | YES | NO | 3,000 | 3,000 | 1.00 | 1,000 | 6.00 | 10,000 | 100 | 6.00 |
| Hawaii | YES | NO | 2,080 | 1,900 | 2.00 | 3,000 | 10.00 | 41,000 | 100 | 7.25[13] |
| Idaho | YES | NO | 5,300 [14] | 6,900 | 2.00 | 2,000 | 8.20 | 50,000 | 40[15] | 3.28 |
| Illinois | YES | NO | 2,000 | ------- | | 3.00% [10] | | | 100 | 3.00 |
| Indiana | YES | NO | 2,000 | ------- | | 3.40% [10,16] | | | 100 | 3.40 |
| Iowa | NO | YES | 40 [17] | 3,480 | 0.40 | 1,112 | 9.98 | 50,050 | 55[18] | 9.98[19] |
| Kansas | YES | NO | 4,000 | 5,000 | 3.50 | 30,000 | 6.45 | 60,000 | 100 | 6.45 |
| Kentucky | YES | NO | 40 [4] | 900 | 2.00 | 3,000 | 6.00 | 8,000 | 100 | 6.00 |
| Louisiana | YES | YES | 9,000 | Combined [20] | 2.00 | 20,000 | 6.00 | 100,000 | 100 | 6.00 |
| Maine | YES | NO | 4,300 | 6,900 | 2.00 | 8,250 | 8.50 | 33,000 | 100 | 8.50 |
| Maryland | YES | NO | 2,400 | 4,000 [21] | 2.00 | 1,000 | 5.00[22] | 3,000 | 100 | 5.00 |
| Massachusetts | No[23] | NO | 5,260 | ------- | 5.95[23] | ------ | ----- | ------ [23] | 100 | 4.00[23] |
| Michigan | YES | NO | 5,000 | ------- | | 4.40% [10] | | | 100 | 4.40 |
| Minnesota | NO[8] | NO | ------- [9] | ------- [9] | 6.00 | 24,140 | 8.50 | 95,920 | 100 | 8.50 |
| Mississippi | YES | NO | 9,500 | 3,400 | 3.00 | 10,000 | 5.00 | 20,000 | 100 | 5.00 |
| Missouri | YES | YES[24] | 2,400 | 6,900 | 1.50 | 1,000 | 6.00 | 9,000 | 100 | 6.00 |
| Montana | YES | NO | 3,100 | 5,820 [25] | 2.00 | 1,900 | 11.00 | 67,900 | 100 | 11.00 |
| Nebraska | YES | NO | 172 [26] | 6,900 [27] | 2.51 | 4,000 | 6.68 | 46,750 | 100 | 6.68 |
| Nevada | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |
| New Hampshire | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |
| New Jersey | NO | NO | 2,000 | ------- | 1.40 | 20,000 | 6.37 | 150,000 | 100 | 6.37 |
| New Mexico | YES | NO | 5,300 [14] | 6,900 [28] | 1.70 | 8,000 | 8.50 | 100,000 | 100 | 8.50 |
| New York | YES | NO | ------- | 13,000 | 4.00 | 16,000 | 6.85 | 40,000 | 100 | 6.85 |
| North Carolina | NO[8] | NO | 300 [29] | 5,000 [30] | 6.00 | 21,250 | 7.75 | 100,000 | 100 | 7.75 |
| North Dakota | NO[31] | NO | ------- [9] | ------- [9] | | 14.0% [32] | | | 100 | 2.80 |
| Ohio | YES | NO | 850 [33,34] | ------- | 0.713 | 5,000 | 7.201 | 200,000 | 100 | 7.201 |
| Oklahoma | YES | YES | 2,000 | 2,000 [35] | 0.50 | 2,000 | 7.00 | 21,000 | 100 | 7.00 |
| Oregon | YES | YES[36] | 256 [37] | 3,000 | 5.00 | 4,500 | 9.00 | 50,000 | 100 | 9.00 |
| Pennsylvania | NO | NO | ------- | ------- | | 2.80% [10] | | | 100 | 2.80 |
| Rhode Island | NO | NO | ------- [9] | ------- [9] | | 27.5% [32] | | | 100 | 5.50 |
| South Carolina | NO[h] | NO | ------- [9] | ------- [9] | 2.50 | 2,280 | 7.00 | 11,400 | 44[38] | 3.08 |
| South Dakota | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |
| Tennessee | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |
| Texas | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |
| Utah | YES | YES[39] | Federal [40] | 6,900 [28] | 2.30 | 1,500 | 7.00 | 7,500 | 100 | 7.00 |
| Vermont | NO | NO | ------- [9] | ------- [9] | | 25.0% [32] | | | 100 | 5.00 |
| Virginia | YES | NO | 1,600 | 5,000 | 2.00 | 3,000 | 5.75 | 17,000 | 100 | 5.75 |
| Washington | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |

## Table 7-1. General income tax provisions for all states[1] (continued).

| | Federal adjusted gross income used as tax base | Federal income tax deductible | Personal exemption[2] | Standard deduction[2] | Abbreviated tax rate schedule[2]: From | Of the first | To | Of the amount over | Proportion of long-term capital gain taxable | Maximum effective long-term capital gains tax rate |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | ($) | ($) | (%) | ($) | (%) | ($) | (%) | (%) |
| West Virginia | YES | NO | 4,000 | none [41] | 3.00 | 10,000 | 6.50 | 60,000 | 100 | 6.50 |
| Wisconsin | YES | NO | ------- | ------- [42,43] | 4.90 | 10,000 | 6.93 | 20,000 | 40 | 2.77 |
| Wyoming | ------- | ------- | ------- | ------- | ----- | ------- | ----- | ------- | ---- | ---- |

[1]As of April 1998. The sources of information used in collecting this data were: BNA Income Tax Planner with 50 States for Windows (1998), state tax forms, a survey of state tax departments, and correspondence with state tax offices.
[2]The personal exemption, standard deduction, and tax rate schedules are for married taxpayers filing a joint return.
[3]If AGI is less than $20,000, the deduction is 20% of AGI.
[4]A tax credit of $20 ($40 per couple) is used instead of a personal exemption.
[5]If gross income is less than $10,000, the deduction is 10% of gross income.
[6]Maximim tax rate on capital gains is 6 percent.
[7]A credit of $68 per exemption is allowed. Credit is phased out after Federal AGI reaches $255,805
[8]Tax base is federal taxable income.
[9]The federal personal exemption and standard deduction amounts are passed through to taxpayers by the state using federal taxable income as the tax base (Colorado, Minnesota, South Carolina) or by using federal tax liability (North Dakota, Rhode Island, and Vermont).
[10]A flat tax across all income brackets.
[11]The personal exemption begins a phase out over $48,000 of state AGI and is eliminated after $71,000. A personal tax credit using a percentage of AGI is also available for joint filers with AGI less than $100,500.
[12]Delaware has a credit of $100 per exemption in lieu of a personal exemption.
[13]Hawaii has a maximum capital gains rate of 7.25%.
[14]Limited to the phase out rules for the federal personal exemption.
[15]Timber must be held more than 24 months.
[16]Counties impose an income tax on Indiana Taxable income ranging from 0 - 1.25% for residents.
[17]Iowa allows a $40 personal exemption credit for joint returns.
[18]Iowa allows a partial capital gain deduction for timber held by a taxpayer for at least one year; up to a maximum of $17,500.
[19]Iowa only allows a partial deduction up to a maximum of $17,500. Maximum long-term capital gain rate is unaffected.
[20]Louisiana uses a combined personal exemption/standard deduction.
[21]Maryland standard deduction is 15% of State AGI, up to $4,000, but not less than $3,000.
[22]Maryland levies a local county income tax up to 60% of total state tax liability. Not included in stated 5% state income tax.
[23]Massachusetts has four categories for tax rates. A 4% tax is placed on all long-term capital gains held over two years. A 5% tax is placed on all capital gains held between one year and two years. A 12% rate is placed on interest, dividends, and short-term (held for less than one year) capital gains. A 5.95% rate is placed on all other income.
[24]Limited to $10,000 for taxpayers filing a joint return.
[25]20% of Montana AGI, not to exceed $5,820 for married filing jointly.
[26]Nebraska gives a tax credit for personal exemptions which is phased out by $5 for every $5,000 over $101,000 of state AGI.
[27]Phased out by $1 for every $10 of excess federal AGI over $121,200.
[28]Standard deduction is equal to the amount claimed on federal return.
[29]The exemption is phased out if federal AGI is over $100,000.
[30]North Carolina limits standard deduction to the pre-inflation adjusted federal amount.
[31]Tax base is federal tax liability.
[32]The flat tax rate is calculated on federal income tax liability.
[33]A joint filing credit of up to a maximum of $650 is allowed if both spouses have more than $500 in wages.
[34]An additional exemption tax credit of $20 ($40 per couple) is also allowed.
[35]Deduction is 15%of Oklahoma AGI up to a maximum of $2,000.
[36]A $3,000 maximum deduction is allowed.
[37]A credit of $128 per exemption is used.
[38]The long-term capital gain holding period for South Carolina is two years.
[39]One-half of federal taxes (including AMT) are allowed as a deduction.

Table 7-1. General income tax provisions for all states[1] (continued).

[40]Utah uses the federal personal exemption amount limited under the phase out rules multiplied by 0.75.
[41]Both standard and itemized deductions were eliminated in 1987.
[42]A married couple credit equal to 2.17% of the first $14,000 of earnings of the lower-earning spouse, up to a maximum of $304, is available.
[43]The standard deduction for joint returns with state AGI less than $10,000 is $8,900. For state AGI between $10,000 and $55,000, the deduction is $8,900 - [(state AGI - $10,000) * 19.778%]. The deduction is completely phased out after state AGI is $55,000.

claimed on a taxpayer's federal return. Colorado, Minnesota, and South Carolina pass the federal standard deduction amount through to taxpayers by using federal taxable income as the state tax base. North Dakota, Rhode Island, and Vermont pass the federal standard deduction amount through by using federal tax liability as the state tax base. Connecticut, Illinois, Indiana, Massachusetts, Michigan, New Jersey, Ohio, Pennsylvania, and West Virginia do not have a standard deduction. Standard deduction amounts range from $900 in Kentucky to $13,000 in New York.

The lowest state tax rates for states with tax rate schedules range from zero percent in Delaware to six percent in Minnesota and North Carolina on taxable income up to $2,000, $24,140, and $21,250, respectively. Maximum tax rates range from 4.50 percent in Connecticut to 11 percent in Montana. The maximum tax rate applies to taxable income of the amount over $12,500 in Connecticut and $67,900 in Montana. Colorado, Illinois, Indiana, Michigan, and Pennsylvania have flat tax rates on all state taxable income of 5.00, 3.00, 3.40, 4.40, 2.80, respectively. North Dakota, Rhode Island, and Vermont have a flat tax on federal tax liability. The effective state income tax rate for states with flat taxes on federal tax liability is calculated by multiplying the effective federal tax rate by the state tax rate. For example, North Dakota's effective state tax rate, assuming the taxpayers are in the 28 percent federal tax bracket, is 3.92 (.14 * .28) percent. Median low and maximum state tax rates for all states, except those with a flat tax on federal tax liability, are two and 6.5 percent, respectively.

The TRA '86, which eliminated the 60% exclusion of long-term capital gains, ended the favorable tax treatment of capital gains for most states. Idaho, Iowa, South Carolina, and Wisconsin are the only states that currently allow a long-term capital gain exclusion. Each state applies different guidelines for the exclusion of capital gains.

North Dakota, Rhode Island, and Vermont pass the preferential federal capital gains rate through to their taxpayers by using federal tax liability as their state tax base. Arkansas and Hawaii have maximum capital gains rates that are lower the state's maximum ordinary tax rate. Massachusetts also taxes long-term capital gains at a preferential rate. All other states now treat long-term capital gains as ordinary income.

### *Federal Tax Analysis*

The calculation of the federal tax liability for the hypothetical landowners is summarized in Table 7-2. An after-tax net income model is used in the analysis. The personal exemption for the taxpayers in both income levels is reduced because part of the personal exemption is phased out after the taxpayers' AGI reaches $181,800 (Willis and Davis 1998).

The long-term capital gains tax on the sale differs between the medium and high income landowners in two respects. First, some of the capital gain is taxed at the 10% capital gains rate for the medium income level taxpayers. This occurs because the lower ten percent rate applies until the additional capital gains income moves the taxpayer into the 28% marginal federal tax bracket (over $41,200 in taxable income for 1997) and the corresponding 20% capital gains bracket. Second, the landowners in the high income level are subject to the alternative minimum tax (AMT).

The alternative minimum tax (AMT) is a separate tax calculation with a proportional tax rate that is applied each year to a taxpayer's income. Certain tax deductions are calculated differently for AMT purposes. If the deduction for regular income tax purposes exceeds that allowed for AMT purposes, then a liability for AMT may be incurred. If the tentative minimum tax is greater than the regular income tax, the taxpayer must pay the regular tax plus the AMT (Willis and Davis 1998). The AMT for individuals is calculated on IRS Form 6251.

Table 7-2. Federal income tax calculation for the hypothetical landowners in all states.[a]

| INCOME: | | Income Level Medium | Income Level High |
|---|---|---|---|
| Personal income | | $50,000 | $110,000 |
| Revenue from timber sale | $200,000 | | |
| Less deductions | | | |
| Expense of sale | ($12,000) | | |
| Depletion | ($38,880) | | |
| Taxable long-term capital gain on sale | | $149,120 | $149,120 |
| Less deductions | | | |
| Property tax | ($1,000) | | |
| Management costs | ($2,500) | | |
| Total deductions | | ($3,500) | ($3,500) |
| **Adjusted gross income** | | **$195,620** | **$255,620** |
| Standard deduction | | ($6,900) | ($6,900) |
| Personal exemptions | | ($4,664) | ($2,120) |
| **Taxable income** | | **$184,056** | **$246,600** |
| TAXES: | | | |
| Taxable income | | $184,056 | $246,600 |
| Less taxable capital gain on sale | | ($149,120) | ($149,120) |
| Ordinary income | | $34,936 | $97,480 |
| **Ordinary income tax** | | **$5,239** | **$21,937** |
| Taxable long-term capital gain on sale | | $149,120 | $149,120 |
| Capial gains tax | 10 Percent | $626 | $0 |
| | 20 Percent | $28,571 | $29,824 |
| **Total capital gains tax** | | **$29,197** | **$29,824** |
| **Alternative minimum tax** | | **$0** | **$918** |
| **Total federal income tax** | | **$34,436** | **$52,679** |

[a]Calculations completed with BNA Income Tax Planner with 50 States for Windows (1998).

## *State Tax Analysis*

State taxes are allowed as a deduction on a taxpayer's federal return if the taxpayers' business itemizes deductions on Schedule C of federal Form 1040. As previously stated, the hypothetical taxpayers elect to take the federal standard deduction on their tax returns. The use of the standard deduction maintains the same federal tax liability for the taxpayers in each state. This makes comparisons across states easier.

The amount of state tax the hypothetical landowner must pay on a timber sale varies greatly (Table 7-3). The state taxable income, state income tax, and combined federal-state tax liability for the hypothetical landowners in each state are shown. As noted previously, Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington, and Wyoming do not have state income taxes. The landowners in the medium income level have the highest state tax liability in Montana ($18,597) and the lowest in Idaho ($4,821). Montana's high tax rate of 11% contributes to the high state tax liability. The low tax liability in North Dakota results from the low flat tax rate of 14% (which equates to 2-4% of taxable income) on federal tax liability.

Montana remains the state with the highest income tax liability ($25,197) for landowners in the high income level. Pennsylvania has the lowest tax liability ($7,157) for high income level landowners. Pennsylvania's low flat tax rate of 2.80% on state taxable income contributes to the low state tax liability.

Table 7-3. Federal and state income tax for landowners in all states.[a]

| | State taxable income [2] | | State income tax | | Combined state & federal income tax | |
|---|---|---|---|---|---|---|
| | Medium income level | High income level | Medium income level | High income level | Medium income level | High income level |
| | ($) | ($) | ($) | ($) | ($) | ($) |
| Alabama | 154,184 | 195,941 | 7,629 | 9,717 | 42,065 | 62,396 |
| Alaska | ----- | ----- | 0 | 0 | 34,436 | 52,679 |
| Arizona | 184,220 | 244,220 | 7,563 | 10,443 | 41,999 | 63,122 |
| Arkansas | 194,620 | 254,620 | 11,422 | 15,622 | 45,858 | 68,301 |
| California | 190,454 | 250,454 | 14,352 | 20,064 | 48,788 | 72,743 |
| Colorado | 184,056 | 246,600 | 9,203 | 12,330 | 43,639 | 65,009 |
| Connecticut | 195,620 | 255,620 | 8,615 | 11,315 | 43,051 | 63,994 |
| Delaware | 194,020 | 254,020 | 12,663 | 16,803 | 47,099 | 69,482 |
| Florida | ----- | ----- | 0 | 0 | 34,436 | 52,679 |
| Georgia | 189,620 | 249,620 | 11,117 | 14,717 | 45,553 | 67,396 |
| Hawaii | 191,640 | 251,640 | 14,139 | 20,138 | 48,575 | 72,817 |
| Idaho | 94,584 | 157,128 | 7,249 | 12,378 | 41,685 | 65,057 |
| Illinois | 193,620 | 253,620 | 5,809 | 7,609 | 40,245 | 60,288 |
| Indiana | 193,620 | 253,620 | 6,583 [3] | 8,623 [3] | 41,019 | 61,302 |
| Iowa | 149,829 | 191,586 | 13,434 | 17,601 | 47,870 | 70,280 |
| Kansas | 186,620 | 246,620 | 11,092 | 14,962 | 45,528 | 67,641 |
| Kentucky | 193,820 | 253,820 | 11,389 | 14,989 | 45,825 | 67,668 |
| Louisiana | 161,184 | 202,941 | 7,091 | 9,596 | 41,527 | 62,275 |
| Maine | 184,420 | 244,420 | 14,562 | 19,662 | 48,998 | 72,341 |
| Maryland | 184,420 | 244,420 | 9,401 [4] | 12,401 [4] | 43,837 | 65,080 |
| Massachusetts | 41,240 [5] | 101,240 [5] | 8,419 | 11,989 | 42,855 | 64,668 |
| Michigan | 190,620 | 250,620 | 8,387 | 11,027 | 42,823 | 63,706 |
| Minnesota | 184,056 | 246,600 | 14,682 | 19,999 | 49,118 | 72,678 |
| Mississippi | 182,720 | 242,720 | 8,986 | 11,986 | 43,422 | 64,665 |
| Missouri | 176,320 | 236,320 | 10,354 | 13,954 | 44,790 | 66,633 |
| Montana | 186,700 | 237,680 | 18,597 | 25,197 | 53,033 | 77,876 |
| Nebraska | 195,620 | 255,620 | 12,067 | 16,538 [6] | 46,503 | 69,217 |
| Nevada | ----- | ----- | 0 | 0 | 34,436 | 52,679 |
| New Hampshire | ----- | ----- | 0 | 0 | 34,436 | 52,679 |
| New Jersey | 193,620 | 253,620 | 8,291 | 12,113 | 42,727 | 64,792 |
| New Mexico | 184,056 | 246,600 | 13,421 | 18,737 | 47,857 | 71,416 |
| New York | 182,620 | 242,620 | 12,509 | 16,619 | 46,945 | 69,298 |
| North Carolina | 186,256 | 248,800 | 13,472 | 18,320 | 47,908 | 70,999 |
| North Dakota | ----- [7] | ----- [7] | 4,821 | 7,375 | 39,257 | 60,054 |
| Ohio | 193,920 | 253,920 | 10,603 [8] | 14,889 [8] | 45,039 | 67,568 |
| Oklahoma | 191,620 | 251,620 | 12,698 | 16,898 | 47,134 | 69,577 |
| Oregon | 189,620 | 249,620 | 16,492 | 21,892 | 50,928 | 74,571 |
| Pennsylvania | 195,620 | 255,620 | 5,477 | 7,157 | 39,913 | 59,836 |
| Rhode Island | ----- [9] | ----- [9] | 9,470 | 14,487 | 43,906 | 67,166 |
| South Carolina | 118,443 | 180,987 | 7,960 | 12,338 | 42,396 | 65,017 |
| South Dakota | ----- | ----- | 0 | 0 | 34,436 | 52,679 |
| Tennessee | ----- | ----- | 0 | 0 | 34,436 | 52,679 |
| Texas | ----- | ----- | 0 | 0 | 34,436 | 52,679 |
| Utah | 168,003 | 220,790 | 11,550 | 15,245 | 45,986 | 67,924 |

Table 7-3. Federal and state income tax for landowners in the all states[a] (continued).

| | State taxable income [2] | | State income tax | | Combined state & federal income tax | |
|---|---|---|---|---|---|---|
| | Medium income level | High income level | Medium income level | High income level | Medium income level | High income level |
| | ($) | ($) | ($) | ($) | ($) | ($) |
| Vermont | ----- [9] | ----- [9] | 8,609 | 13,170 | 43,045 | 65,849 |
| Virginia | 189,020 | 249,020 | 10,611 | 14,061 | 45,047 | 66,740 |
| Washington | ----- | ----- | 0 | 0 | 34,436 | 52,679 |
| West Virginia | 191,620 | 251,620 | 11,330 | 15,230 | 45,766 | 67,909 |
| Wisconsin | 106,148 | 166,148 | 7,115 [8] | 11,273 [8] | 41,551 | 63,952 |
| Wyoming | ----- | ----- | 0 | 0 | 34,436 | 52,679 |

[1]Calculations completed with BNA Income Tax Planner with 50 States for Windows (1998).

[2]The federal taxable income was $184,056 and $246,600 for the middle and high income levels, respectively.

[3]Does not include county taxes.

[4]Does not include local income taxes.

[5]Does not include capital gains income. See Table 1 on Massachusetts tax specifications.

[6]Includes $272 in state minimum tax.

[7]Form 37-S, which calculates a tax of 14% of the federal income tax liability, is used.

[8]Does not include joint filer credit.

[9]Piggybacks on federal income tax liability.

# Chapter 8

# Conclusion

The lingering effects of the Tax Reform Act of 1986 (TRA '86) are still found in many state income tax codes. The trend has been for states to adopt total conformity with the federal laws set forth in the act, however, many still use their own system for calculating taxes. Out of 41 states that have a comprehensive income tax, twenty-eight states now use federal AGI as their tax base. This is an increase of five states from the previous study of 1988 tax law conducted in 1989 (Bettinger 1989). Seven states allow a full or partial deduction of federal income taxes; down from 12 in 1988. The number of states that permit a capital gains exclusion has decreased from eight to four.

The tax costs of a timber sale analyses reveal that tax rates have the greatest impact on a landowner's state tax liability. Landowners in states with low maximum tax rates and low flat tax rates recurrently have lower overall tax liabilities than in states with high tax rates. Deductibility of federal taxes, personal exemptions, standard deductions, and even long term capital gains exclusions have a much smaller impact on landowners' state tax liability.

The land expectation value analyses confirmed that there are many tax issues a landowner must address in managing timberland. The treatment a timber sale as an ordinary gain usually causes the most significant loss of revenue for a forest landowner. The analyses also revealed that multiple tax mistakes can cause a landowner to realize a negative land expectation value, therefore making investment in forest land unwarranted.

The assumptions in both analyses are a cause for some debate. Assuming landowners are 60 years old provides implications (especially in the LEV analyses) that were not examined in the study. There is a great potential for revenue loss across generations from the federal estate tax because of the infinite rotation period in the LEV assumptions. The landowners' management regime may also change to reflect retirement expectations. Tax rates, timber prices, inflation, and management costs all have the potential to change over time. A change in any one factor could cause changes in the specific conclusions and, if large enough, in landowner behavior.

Other factors that were not included in the study may enter into a landowner's investment decision. Severance taxes and other timber taxes could potentially lower expected revenue from timberland. General state taxes such as sales taxes, gasoline taxes, and real estate taxes can also be influential when making a timber investment decision. Landowners must keep in mind that a high or low state income tax burden does not mean a high or low overall state tax burden.

Some public policy implications can be gathered from this study as well. The government could index the reforestation credit to inflation. The credit has been the same dollar amount since it was introduced in 1980. Increasing the amount of credit and indexing for inflation has the potential to encourage landowners to reforest their land after cutting. Maintaining a low capital gains rate (as compared to the maximum ordinary rate) will allow forest landowners to benefit from the special treatment of timberland as capital gains. The passive loss rules are also a common problem for forest landowners. IRS rulings on passive activities are shaping the landscape for timberland owners, but more could be done to address the rules and forestry investments.

Future research may involve examining a wider range of tax burdens imposed on timberland owners. Property taxes and severance taxes could potentially pose a higher tax burden to forest landowners than income taxes. Specific time analyses of tax rate changes and timber harvest patterns on a regional scale could be analyzed to determine whether rate changes affect harvest patterns. Forestry provisions on a state-by-state level could be examined for any non-tax benefits that landowners might receive.

Forest landowners must have a working knowledge of the tax provisions affecting timberland, or need to hire a qualified accountant familiar with forestry assets. Misunderstanding and ignorance of tax provisions can cause landowners to lose a significant amount of potential revenue over time. Assessment of management activities and good record keeping are essential for landowners to fully realize their forestry investment's potential. By investing in tax planning, landowners can save a considerable amount of money over the lifetime of their timberland ownership.

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# Appendix A

# Cover Letter and Mail Out Survey

February 13, 1998

SUBJECT: State Income Taxes

Dear Sir or Madam:

I am working on a cooperative research project between the Department of Forestry, Virginia Polytechnic Institute and State University and the USDA Forest Service, Southern Research Station. The project will analyze the application of federal and state income taxes and how they influence the management of nonindustrial private forestlands. The objective of the study is to provide forest landowners with current tax information on state income tax laws that affect investment and management of forest land. A comparison of state provisions and income tax impacts among the states will be prepared.

Forest landowners are placed into numerous situations where federal and state taxes play a role in their management decisions. Taxes have the potential to influence timber harvests, hunting leases, and forest management operations because these activities alter a landowner's taxable income.

Please send a copy of all applicable income tax forms and instructions necessary to file a complete return for a forest landowner in your state. In addition to the forms, please complete and return the enclosed questionnaire on forestry-related tax issues. We have included a self-addressed stamped envelope for your convenience. If there is pending legislation on income taxes or any special income tax provisions related to forestry, please also advise us of it.

The project's results will form the basis of my Master of Science thesis. The principal investigators on the project are Dr. Harry L. Haney, Jr. for Virginia Tech and Dr. John L. Greene for the USDA Forest Service. If you have any questions regarding this request or the overall project, please call me or Dr. Haney at (540) 231-5212. If you would like a copy of the final results or publications from this work, please indicate on the enclosed form.

Thank you for your cooperation.

Sincerely yours,

Philip D. Bailey,
Graduate Research Assistant
Enclosure

cc: Harry L. Haney, Jr., John L. Greene

## STATE INCOME TAX QUESTIONNAIRE

February 1998

Please attach additional sheets if there is not enough space to completely answer questions.

1. How does your state calculate taxable income for individuals?
   (Please attach forms and instructions)

2. If your state uses federal AGI to calculate state taxable income are there items which must be added back into federal AGI to determine taxable income? What are they?

3. What are your current state income tax rates for 1998?
   (You may omit this question if rates are included with the state tax forms and instructions)

4. Are there any state laws which permit differential treatment of ordinary income and capital gains? (If so, please provide criteria for capital gains treatment and capital gains tax rates)

For questions 5 through 11, if the answer is YES, please provide details.

5. Does your state have any special provisions for recovering invested capital in forestry by:

   a) Timber (cost) depletion?

   b) Depreciation?

6. Are there any state provisions for amortizing reforestation costs?

7. Does your state have provisions for investment tax credits on reforestation expenditures?

8. Does the state have cost-share incentive payments for forestry?

9. If you have cost-share incentive payments at the state level, are these included in income and have any been approved for exclusion from federal AGI?

10. Does the state permit any exemptions or deductions for forestry-related management expenditures?

11. Does the state permit any special treatment for casualty, theft, or involuntary conversions regarding forestry?

12. Does your state law permit subsections (i.e., counties, cities, towns, districts) of the state to levy personal income taxes? If yes, do any of these subsections currently impose personal income taxes?

13. Please provide details of any other current provisions or pending legislation on personal income taxes.

# Appendix B

# Federal Income Tax Laws

This appendix contains a general overview of the provisions of the federal income tax as it applies to individuals. The information contained in this appendix is only to serve as a basis for understanding state tax law and how states conform to the federal law. By no means is the information in this appendix complete. The following information was obtained from Willis and Davis (1998).

The Internal Revenue Service defines gross income broadly as "except as otherwise provided..., all income from whatever source derived."

**Partial list of gross income:**

- Alimony
- Bonuses
- Breach of contract damages
- Business income
- Commissions
- Compensation for services
- Dividends
- Farm income
- Fees
- Gains from sale of property
- Hobby income
- Interest
- Partnership income
- Pensions
- Rents
- Salaries
- Tips and gratuities
- Wages

**Partial list of exclusions from gross income:**

- Accident and health insurance proceeds
- Annuity payments (to the extent that proceeds represent recovery of investment)
- Fringe benefits of employees
- Gifts and inheritances received
- Interest from state and local bonds
- Life insurance paid on death of insured
- Social security benefits

- Workers' compensation benefits

**Deductions for AGI include, but are not limited to, the following:**

- Ordinary and necessary expenses incurred in a trade or business
- One-half of self-employment tax
- Alimony paid
- Certain payments to Individual Retirement Accounts and Medical Savings Accounts
- Moving expenses
- The capital loss deduction (limited to $3,000)

**Itemized deductions include, but are not limited to, the following:**

- Medical expenses that exceed 7.5% of taxpayer's AGI
- Personal property taxes
- Real estate taxes
- State and local income taxes
- Investment interest
- Qualified residence interest
- Charitable contributions
- Miscellaneous itemized deductions, to the extent that they exceed 2% of taxpayer's AGI

**Standard deductions (1997):**

- Single - $4,150
- Married, filing jointly and surviving spouse - $6,900
- Head of household - $6,050
- Married, filing separately - $3,450

**Personal exemptions (1997):**

- $2,650 for taxpayer, taxpayer's spouse, and each dependent

**Tax rates (1997):**

Single:

| | | | |
|---|---|---|---|
| $0 | to | $24,650 | 15% |
| $24,650 | to | $59,750 | 28% |
| $59,750 | to | $124,650 | 31% |
| $124,650 | to | $271,050 | 36% |
| $271,050 | and over | | 39.6% |

Married filing jointly or qualifying widow(er):

| | | | |
|---|---|---|---|
| $0 | to | $41,200 | 15% |
| $41,200 | to | $99,600 | 28% |
| $99,600 | to | $151,750 | 31% |
| $151,750 | to | $271,050 | 36% |
| $271,050 | and over | | 39.6% |

Head of household:

| | | | |
|---|---|---|---|
| $0 | to | $33,050 | 15% |
| $33,050 | to | $85,350 | 28% |
| $85,350 | to | $138,200 | 31% |
| $138,200 | to | $271,050 | 36% |
| $271,050 | and over | | 39.6% |

Married filing separately:

| | | | |
|---|---|---|---|
| $0 | to | $20,600 | 15% |
| $20,600 | to | $49,800 | 28% |
| $49,800 | to | $75,875 | 31% |
| $75,875 | to | 135,525 | 36% |
| $135,525 | and over | | 39.6% |

# Appendix C

# State Income Tax Laws

This appendix contains a general overview of the provisions of each state's income tax as it applies to individuals. By no means is the information in this appendix complete. The following information was obtained from the *State Tax Guide* (CCH 1998) and state income tax forms.

## Alabama

Adjusted gross income is income from all sources,

Less:

1. Property acquired by gift, bequest, demise, or descent.
2. Interest on federal and state obligations, securities of the federal Farm Loan Act or bonds issued by the war finance corporation.
3. Gain from the sale of a personal residence, as allowed for federal income tax purposes.
4. Amounts received under life insurance contracts by reason of death.
5. Other.

Deductions:

1. Standard deduction: married filing jointly --20% of AGI or $4,000, whichever is lesser; single, head of household, married filing separate 20% of AGI or $2,000, whichever is lesser.
2. Ordinary and necessary business expenses.
3. Uninsured losses if incurred in a trade or business.
4. In the case of mines, oil and gas wells, other natural deposits and timber, a reasonable allowance for depletion and for depreciation of improvements.
5. Interest accrued on indebtedness.
6. Income taxes, estate taxes, gift taxes, etc.
7. Reasonable expenses for depreciation, obsolescence and depletion.
8. Other.

Credits and Exemptions:

1. Personal exemptions: single or married person not living together ($1,500); head of family or married filing jointly ($3,000); dependents ($300).
2. Other.

Tax Rates (married filing jointly):

| | | |
|---|---|---|
| First | $1,000 | 2% |
| Next | $5,000 | 4% |
| Over | $6,000 | 5% |

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## Alaska

The net income tax for Alaska individuals and fiduciaries was repealed, effective January 1, 1979.

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## Arizona

Adjusted gross income is federal AGI,

Less:

1. Any distributions from an IRA.
2. Interest income received on obligations of the U.S.
3. In the case of property held for the production of income that is sold or otherwise disposed of during the tax year, other than depreciable property used in a trade or business, the amount by which the adjusted basis of the property computed under the income tax law exceeds the adjusted basis of the property computed for federal purposes.
3. Income tax refunds received from other states, which were included in federal AGI.
4. Other.

Plus:

1. The ordinary income portion of a lump sum distribution that was excluded from adjusted gross income.
2. In the case of property held for the production of income that is sold or otherwise disposed of during the tax year, other than depreciable property used in a trade or business, the amount by which the adjusted basis of the property computed under the income tax law exceeds the adjusted basis of the property computed for federal purposes.
3. A beneficiary's share of trust or estate deductions allowable for federal purposes.
4. Other.

Deductions:

1. Standard deduction: $3,600 for a single person or married filing separate; $7,200 for married filing jointly and head of households..
2. Taxpayers can elect to take the amount of the federal itemized deductions allowed for the tax year with certain limitations.

Credits and Exemptions:

1. Personal exemptions: individuals ($2,100); married, or head of household ($4,200); married filing jointly and claiming at least one dependent ($6,300); dependents ($2,300); all adjusted annually for inflation.
2. Taxes paid to another state.
3. Homestead property taxes paid.
4. Public school fees.
5. Estates or Trusts.

Tax Rates (married filing jointly):

| Taxable Income | Tax Rate |
|---|---|
| $0 - 20,000 | 2.9% of taxable income |

| | |
|---|---|
| $20,001 - 50,000 | $580 plus 3.3% of excess over $20,000 |
| $50,001 - 100,000 | $1,570 plus 3.9% of excess over $50,000 |
| $100,000 - $300,000 | $3,520 plus 4.8% of excess over $100,000 |
| $300,001 and over | $13,120 plus 5.17% of excess over $300,000 |

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## Arkansas

Adjusted gross income is income from all sources,

Less:

1. Accident or health insurance proceeds
2. Any gain from the sale or exchange of a principle residence if applied to purchase of a new principle residence.
3. Deductions for alimony and separate maintenance payments.
4. Deductions allowed for cash payments to individual retirement accounts.
5. Losses from the sale or exchange of property.
5. Other.

Deductions:

1. Standard deduction -- married filing jointly, $1,000 or 10% of AGI, whichever is less, if the gross income is $5,000 or more.
2. Other.

Credits and Exemptions:

1. Personal exemptions: single ($20 tax credit); married filing jointly ($40 tax credit); dependents earning less than $3,000 ($20 tax credit); fiduciaries ($20).
2. Taxes paid to another state
3. Household and dependent care services
4. Property tax credit for senior citizens.

5. Retirement and disability benefits.
6. Sale of home.
7. Other.

Tax Rates:

| Net Income | Rate |
| --- | --- |
| 1st $2,999 | 1% |
| Next $3,000 | 2.5% |
| Next $3,000 | 3.5% |
| Next $6,000 | 4.5% |
| Next $10,000 | 6% |
| $25,000 or over | 7% |

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## California

Adjusted gross income is federal AGI,

Less:

1. Interest on bonds issued by California or its local governments.
2. Cost-share payments received by forest landowners from the California Department of Forestry and Fire Protection under the California Forest Improvement Act of 1978, or from the U.S.D.A., under the Cooperative Forestry Assistance Act.
3. Gain from sale of primary residence of up to $250,000
4. Other.

Deductions:

1. Taxpayers may follow federal itemized deduction rules with specific state exceptions.
2. Standard deduction: head of household, married filing jointly and surviving spouse ($5,166); all others ($2,583).
3. Depletion and depreciation of improvements deduction for mines, oil and gas wells, other natural deposits, and timber.
4. Other.

Credits and Exemptions:

1. Personal exemption tax credits: single, head of household or married filing separately ($68); surviving spouse, or married filing jointly ($136); each dependent ($68); estate ($10); trust ($1).
2. Low income housing tax credit.
3. Taxes paid to another state
4. Other.

Tax Rates (married filing jointly):

| If the taxable income is: | The tax is: |
|---|---|
| $0 - 10,032 | $0.00 plus 1.0% of the excess over $0 |
| $10,032 - 23,776 | $100.32 plus 2.0% of the excess over $10,032 |
| $23,776 - 37,522 | $375.20 plus 4.0% of the excess over $23,776 |
| $37,522 - 52,090 | $925.04 plus 6.0% of the excess over $37,522 |
| $52,090 - 65,832 | $1,799.12 plus 8.0% of the excess over $52,090 |
| $65,832 and over | $2,898.48 plus 9.3% of the excess over $65,832 |

## Colorado

Taxable income is federal taxable income,

Less:

1. Interest income included in federal taxable income.
2. Net operating loss carryover.
3. Up to $20,000 per year received as pensions or annuities.
4. Other.

Plus:

1. Any federal net operating loss deduction carried over from year prior to 1987.
2. Other.

Deductions:

1. Net operating loss, as in the federal return.
2. Other.

Credits and Exemptions:

1. No personal exemption is allowed, however the federal personal exemption amounts are allowed.
2. School bond interest exemption.
2. Other state taxes.
3. Other.

Tax Rate:

A tax of 5% is imposed on the federal taxable income of every individual, estate, and trust.

---

## Connecticut

Adjusted gross income is federal AGI;

Less:

1. Exempt dividends paid by a regulated investment company.
2. Interest from obligations issued by or on behalf of Connecticut.
3. Other.

Plus:

1. Any income from obligations issued by any other state.
2. Other.

Credits and Exemptions:

1. Personal exemption: single or married filing separate ($12,000); head of household ($19,000); married filing jointly or surviving spouse ($24,000).
2. Taxes paid to other states.
3. Real property taxes.
4. Other.

Tax Rates (married filing jointly):

3% of the first $12,500 of Connecticut taxable income and $375 plus 4.5% of the excess over $12,500.

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## Delaware

Adjusted gross income is federal AGI,

Less:

1. Interest or dividends exempt from state taxes, but not exempt from federal tax.
2. Pensions from employers.
3. Other.

Plus:

1. Interest or dividends on obligations or securities of any political subdivision other than Delaware.
2. Deduction for oil and gas well depletion.
3. Other.

Deductions:

1. Standard Deduction: resident individual ($1,300); resident married ($1,600).
2. Taxpayers may also elect to itemize deductions
3. Other.

Credits and Exemptions:

1. Personal exemption: $100 per exemption.
2. Credit for income taxes paid to another state.
3. Other.

Tax Rates:

| Taxable Income | Rate |
|---|---|
| $0 - 2,000 | 0% |
| $2,000 - 5,000 | 3.1% |
| $5,000 - 10,000 | 4.85% |
| $10,000 - 20,000 | 5.8% |
| $20,000 - 25,000 | 6.15% |
| $25,000 - 30,000 | 6.45% |
| $30,000 and over | 6.9% |

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## Florida

Florida does not impose a personal income tax.

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## Georgia

Taxable income is federal AGI,

Less:

1. Standard deduction: single or head of household ($2,300); married filing jointly ($3,000); married filing separate ($1,500).
2. Income from public pension or retirement funds, if included in federal AGI.
3. Taxpayer's Georgia personal exemptions.
4. Other.

Plus:

1. Dividend or interest income excluded from federal AGI and from obligations of states other than Georgia.
2. Interest on federal obligations exempt from federal taxation, but not state taxation.
3. Income taxes imposed by other taxing jurisdictions, other than Georgia, to the extent deductible on the federal return.
4. Other.

Credits and Exemptions:

1. Personal exemptions: married filing jointly ($3,000); any other taxpayer ($1,500); and each dependent ($2,500).
2. Other.

Tax Rates (married filing jointly):

| Taxable Income | Tax |
| --- | --- |
| $0 - 1,000 | 1% |

| | |
|---|---|
| $1,000 - 3,000 | $10 plus 2% of amount over $1,000 |
| $3,000 - 5,000 | $50 plus 3% of amount over $3,000 |
| $5,000 - 7,000 | $110 plus 4% of amount over $5,000 |
| $7,000 - 10,000 | $190 plus 5% of amount over $7,000 |
| Over $10,000 | $340 plus 6% of amount over $10,000 |

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## Hawaii

Hawaii imposes a tax on the entire taxable income of resident individuals, estates, or trusts.

Deductions:

1. Standard deductions: married filing jointly or surviving spouse ($1,900); head of household ($1,650); single individual ($1,500); married filing separate ($900).
2. "First principle residence" housing account deduction.

Credits and Exemptions:

1. Personal exemption deduction: $1,040 per exemption; estates ($400); trusts distributing income currently ($200); all other trusts ($80).
2. Credit for taxes paid to another state, attributable to sources outside Hawaii.
3. A tax credit ($1 X number of qualified exemptions) for each resident individual who is not claimed or is not eligible to be claimed by another taxpayer, and for each dependent.
4. Food tax credit.
5. Dependent care credit
6. Nursing facility expense credit

7. Other.

Tax Rates (married filing jointly):

| Taxable Income | Tax |
| --- | --- |
| $0 - 3,000 | 2% |
| $3,000 - 5,000 | $60 plus 4% of excess over $3,000 |
| $5,000 - 7,000 | $140 plus 6% of excess over $5,000 |
| $7,000 - 11,000 | $260 plus 7.25% of excess over $7,000 |
| $11,000 - 21,000 | $550 plus 8% of excess over $11,000 |
| $21,000 - 31,000 | $1,350 plus 8.75% of excess over $21,000 |
| $31,000 - 41,000 | $2,225 plus 9.5% of excess over $31,000 |
| Over $41,000 | $3,175 plus 10% of amount over $41,000 |

---

## Idaho

Taxable income is federal taxable income,

Less:

The proportion that the adjusted gross income of the taxpayer from Idaho sources bears to total adjusted gross income from all sources.

Deductions:

1. Taxpayers can deduct the federal standard deduction amount or;
2. Can deduct federal itemized deductions except state income taxes.
3. 60% of net capital gains on qualified property.

Credit and Exemptions:

1. Contributions to educational institutions.
2. Grocery Credits.
3. Credit for taxes paid to another state.
4. Other.

Tax Rates:

| Taxable Income | Tax |
|---|---|
| $0 - 1,000 | 2% |
| $1,000 - 2,000 | $20 plus 4% of excess over $1,000 |
| $2,000 - 3,000 | $60 plus 4.5% of excess over $2,000 |
| $3,000 - 4,000 | $105 plus 5.5% of excess over $3,000 |
| $4,000 - 5,000 | $160 plus 6.5% of excess over $4,000 |
| $5,000 - 7,500 | $225 plus 7.5% of excess over $5,000 |
| $7,500 - 20,000 | $412.50 plus 7.8% of excess over $7,500 |
| Over $20,000 | $1,387.50 plus 8.2% of excess over $20,000 |

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## Illinois

Net income is federal AGI,

Less:

1. Armed forces compensation.
2. All payments under the Soil and Water Conservation Districts Act for soil and

water conservation, flood prevention, and erosion prevention or control.

3. Property taxes paid on taxpayer's principle residence.
4. Other.

Plus:

1. Interest or dividends included in federal AGI.
2. Any Illinois income that was deducted in computing federal AGI.
3. Amount received during the tax year as a refund of real property taxes on principle residence.
4. Other.

Deductions:

1. There are no standard or itemized deductions allowed.
2. Other.

Credits and Exemptions:

1. Personal exemption: $1,000 per exemption.
2. 5% of real property taxes paid on principle residence.
3. Other.

Tax Rate:

A 3% income tax is imposed on the net income of individuals, estates, and trusts.

---

## Indiana

Base income is federal AGI,

Less:

1. Income exempt from federal tax.
2. Part of federal AGI that is subject to an income tax imposed by another state.
3. Personal exemptions
4. Other.

Plus:

1. Any deduction allowed for state and local property taxes.
2. Deduction allowed for two-earner married couples.
3. Other.

Deductions:

1. Net operating loss deduction.
2. Other.

Credits and Exemptions:

1. Personal exemptions:  individuals ($1,000); dependents ($1,000).
2. Taxes paid to another state.
3. Contributions to Indiana colleges.
4. Other.

Tax Rate:

An income tax of 3.4% is imposed on the AGI of resident individuals, estates, and trusts.

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## Iowa

Net income is federal AGI before the net operating loss deduction,

Less:

1. Interest and dividends from federal securities.
2. Business asset and capital loss deductions for married taxpayers filing a joint federal return, but separate state returns.
3. 45% of net capital gain from the sale of timber under Sec. 631(a); cannot exceed $17,500.
4. Other.

Plus:

1. Interest and dividends from foreign securities and from securities of states and other political subdivisions exempt from federal taxation.
2. Oil, gas, or geothermal well depletion in excess of cost depletion amount.
3. Interest and dividends from federal securities.
4. Other.

Deductions:

1. Standard deductions: married filing jointly ($3,480); single or married filing

separate ($1,440).

2. Taxpayers may also elect to itemize deductions.
3. Other.

Credits and Exemptions:

1. Personal exemption tax credits: estate, trust, single or married filing separate ($20); head of household or married filing jointly ($40); dependents ($40).
2. Tax paid to other states.
3. Child care credit.
4. Political contributions.
5. Other.

Tax Rates:

| Taxable Income | Rate |
|---|---|
| $0 - $1,112 | .40% |
| $1,112 - 2,224 | $4.45 plus .8% of excess over $1,112 |
| $2,224 - 4,448 | $13.35 plus 2.7% of excess over $2,224 |
| $4,448 - $10,008 | $73.40 plus 5% of excess over $4,448 |
| $10,008 - 16,680 | $351.40 plus 6.8% of excess over $10,008 |
| $16,680 - 22,240 | $805.10 plus 7.2% of excess over $16,680 |
| $22,240 - 33,360 | $1,205.42 plus 7.55% of excess over $22,240 |
| $33,360 - 50,040 | $2,044.98 plus 8.80% of excess over $33,360 |
| Over $50,040 | $3,512.82 plus 9.98% of excess over $50,040 |

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## Kansas

Adjusted gross income is federal AGI,

Less:

1. Interest or dividends on U.S. obligations, to the extent included in federal AGI.
2. Amounts included in federal AGI specifically exempt from Kansas income tax.
3. Gain or loss from sale of property with a higher adjusted basis for Kansas than for federal purposes.
4. Other.

Plus:

1. Interest income on obligations of state or political subdivisions to the extent not included in federal AGI.
2. Federal net operating loss deduction.
3. Federal income tax refunds if the refunded taxes resulted in a tax benefit for Kansas income tax purposes.
4. Other.

Deductions:

1. Standard deduction: sum of the standard deduction and the additional federal standard deduction
2. Also allowed to itemize deductions.

Credits and Exemptions:

1. Personal exemption: $2,000 per exemption
2. Taxes paid to other states.

3. Other.

Tax Rates (married filing jointly):

| If the taxable income is: | The tax is: |
|---|---|
| Not over $30,000 | 3.5% of Kansas taxable income |
| Over $30,000 but not over $60,000 | $1,050 plus 6.25% of excess over $30,000 |
| Over $60,000 | $2,925 plus 6.45% of excess over $60,000 |

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## Kentucky

Adjusted gross income is federal AGI determined by the provisions of the IRC Sec. 62.

Less:

1. income exempt from state tax by the laws of Kentucky.
2. Other.

Plus:

1. Interest income from obligations of other states.
2. Other.

Deductions:

1. Standard deduction: $900 per person.
2. Other.

Credits and Exemptions:

1. Personal exemption tax credits: single individual ($20); married filing separate ($20); married filing jointly ($40); dependents ($20); estates ($20).
2. Credit for taxes paid to another state.
3. Other.

Tax Rates:

| Taxable income: | Rate |
|---|---|
| Up to $3,000 | 2% |
| $3,000 - 4,000 | 3% |
| $4,000 - 5,000 | 4% |
| $5,000 - 8,000 | 5% |
| $8,000 and over | 6% |

---

## Louisiana

Adjusted gross income is federal AGI,

Less:

1. Property acquired by gift, bequest, etc.
2. Compensation for injuries or sickness.
3. Income from social security benefits.
4. Interest on the obligations of the state of Louisiana or its political subdivisions, to the extent exempt by law.
5. Other.

Credits and exemptions:

1. Combined personal exemption and standard deduction: single ($4,500); married filing jointly ($9,000); married filing separate ($4,500); head of household ($9,000).
2. An additional personal exemption of $1,000 per exemption is allowed for each allowable exemption in excess of those allowed above.
3. Job credits.
4. Other.

Tax Rates:

| Taxable Income: | Rates |
|---|---|
| Up to $10,000 | 2% |
| Next $40,000 | 4% |
| Excess over $50,000 | 6% |

---

## Maine

Taxable income is federal AGI,

Less:

1. Interest or dividends included in federal gross income but exempt from state tax under federal law.
2. An amount equal to federal new jobs credit.
3. Other.

Plus:

1. Interest or dividends on obligations of any state or political subdivision other than Maine.
2. Interest and dividends exempt from federal tax but exempt from state tax.
3. The amount of any net operating loss in the tax year which has been carried back to previous years.
4. Other.

Deductions:

1. Standard deduction: conforms to the allowable federal standard deduction of the taxpayer.
2. Taxpayers may also itemize deductions.

Credits and Exemptions:

1. Personal exemption: $2,150 tax credit per exemption.
2. Taxes paid to other states.
3. Once every 10 years, an individual is allowed a credit for the lesser of $200 or the individuals cost for having a forest management and harvest plan developed for a parcel of forest land greater than 10 acres.
4. Other.

Tax Rates (married filing jointly):

| If the taxable income is: | The tax is: |
| --- | --- |
| Less than $8,250 | 2% |
| $8,250 but less than $16,500 | $165 plus 4.5% of the excess |
| $16,500 but less than $33,000 | $536 plus 7% of the excess |

| | |
|---|---|
| $33,000 or more | $1,691 plus 8.5% of the excess |

---

## Maryland

Taxable income is federal AGI,

Less:

1. Interest or dividends on U.S. obligations to the extent included in federal gross income but excluded from state income taxes.
2. Expenses incurred in purchasing and installing conservation tillage equipment.
3. Double the amount incurred in reforestation or timber stand improvement activity on 10 to 100 acres of commercial forestland, except for federal funds.
4. Income from a Keogh account.
5. Other.

Plus:

1. Interest or dividends on obligations of state or local governments other than Maryland.
2. In the year after decertification of land used for commercial forest land, the amount allowed in prior years as a Maryland subtract for reforestation or timber stand improvement.
3. Other.

Deductions:

1. Standard deductions: 15% of AGI with limitations.

2. Residents may also elect to itemize deductions.

Credits and Exemptions:

1. Personal exemptions: taxpayer ($1,200); dependents ($1,200).
2. Credit for taxes paid to other states.
3. Other.

Tax Rates:

| Taxable income: | Rate |
| --- | --- |
| $1 - 1,000 | 2% |
| $1,001 - 2,000 | 3% |
| $2,001 - 3,000 | 4% |
| Over $3,000 | 5% |

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## Massachusetts

Gross income is federal gross income,

Less:

1. Interest on federal obligations exempt from state income tax, but included in federal gross income.
2. Social security benefits included in gross income.
3. Dividends received from a taxable corporate trust, to the extent exempt from tax.
4. Income from annuity, stock bonus, pension, etc.
5. Other.

Plus:

1. Interest on government obligations other than Massachusetts state or political subdivisions.
2. Earned income from foreign sources.
3. Other.

Gross income is divided into two classes:

1. Interest, dividend and capital gain net income (Part A).
2. Massachusetts gross income not included in Part A or Part C (Part B).
3. Capital Gain income divided into classes based upon holding period of asset (Part C)

Part A deductions:

1. Any excess of the deductions allowed in computing Part B adjusted gross income over Part B gross income.
2. Losses from the sale of capital assets held for one year or less.
3. 50% deduction of gain from the sale of collectible property.
4. Other.

Part B deductions not allowed:

1. Any deduction relating to income not includable in Massachusetts gross income.
2. The federal deduction for retirement savings.
3. Any net operating loss deduction allowed by Sec. 172 of the Code.
4. The deduction for losses from the sale or exchange of property.
5. The depreciation and depletion deduction allowed under estates and trusts.
6. Other.

Part B deductions:

1. Interest and dividends: single, head of household, and married filing separately ($100); married filing jointly ($200); from savings accounts.
2. Travel expenses and meals while away from home.
3. Other

Credits and Exemptions:

1. Personal exemptions allowed against Part B income: single, married filing separate ($2,630); married filing jointly ($5,260); head of household ($4,065); dependents ($1,000).
2. Medical, dental, and other expenses allowed under Sec. 213 of the Code.
3. Credit for other state income taxes.
4. Credit for repairing a septic system.

Tax Rates:

Part A taxable income: 12%
Part B taxable income: 5.95%
Part C taxable income (capital gain income):

Class G (the gains from the sale or exchange of capital assets held for more than 6 years): net gain or net loss multiplied by the rate of 0%.

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## Michigan

Gross income is federal AGI,

Less:

1. Income from the sale or exchange of federal obligations to the extent included in federal AGI.
2. Retirement or pension benefits from federal, state, or local public retirement systems; social security benefits, etc.
3. Senior citizens may deduct interest, dividends, and capital gains received in a tax year not to exceed $3,500 (single) and $7,000 for a joint return.
4. Political contributions not over $50.
5. Net operating loss deduction.
6. Other.

Plus:

1. Interest and dividends from state obligations other than those of Michigan.
2. Income taxes.
3. Losses from the sale or exchange of federal obligations.
4. Net operating loss deduction under Sec. 172 of the Code.
5. Other.

Deductions:

1. Aside from above modifications, there are no other deductions.

Credits and Exemptions:

1. Personal exemption: $2,500 per exemption.

2. Other state taxes.
3. City income tax credit.
4. Homestead property tax credit.
5. Charitable contributions credit.
6. Other.

Tax Rate:

A tax is imposed on taxable income at the rate of 4.4%.

---

## Minnesota

Net income is federal taxable income,

Less:

1. Interest income on U.S. obligations to the extent taxable on the federal level, but not on the state level.
2. The amount of overpayment of Minnesota or other state tax from the previous year.
3. Distributions from a qualified pension plan, IRA, etc.
4. Other.

Plus:

1. Interest on any state or political subdivisions other than Minnesota exempt from federal taxation, but not from state taxation.
2. State taxes paid within the year to any other state, province or territory of Canada,

to the extent allowed as a deduction on the federal return.

3. The capital gain amount of a lump sum distribution under Sec. 1122.
4. Other.

Deductions:

Minnesota adopts federal deductions because it uses federal taxable income as its starting point.

Credits and Exemptions:

1. The federal personal exemptions are automatically adopted and are the only ones exemptions allowed.
2. Other state income taxes.
3. Child and dependent care credit.
4. Property tax refund.
5. Refund of contributions to political parties and candidates.
6. Other.

Tax Rates (married filing jointly):

| Taxable Income: | Rate |
|---|---|
| $0 - 24,140 | 6% |
| $24,140 - 95,920 | 8% |
| $95,920 and over | 8.5% |

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## Mississippi

AGI is income from all sources less certain modifications

Deductions:

1. Amount of federal individual non-business deductions except the deduction for state income taxes paid.
2. Standard deduction: married filing jointly and head of household ($3,400); married filing separate ($1,700); single individuals ($2,300).
3. Periodic alimony payments included in gross income.
4. Cannot deduct loss from sale or exchange of personal residence.
5. Casualty loss.
6. Other.

Credits and Exemptions:

1. Personal exemptions: single ($6,000); married ($9,500); head of household ($9,500); dependents ($1,500); estates ($600); trusts required to distribute all their income currently ($300); other trusts ($100).
2. Taxes paid to other states.
3. Other.

Tax Rates:

| Taxable income: | Rate |
|---|---|
| $0 - 5,000 | 3% |
| $5,000 - 10,000 | 4% |
| over $10,000 | 5% |

---

## Missouri

Adjusted gross income is federal AGI,

Less:

1. Interest or dividends on federal obligations to the extent deducted determining federal AGI or included in Missouri itemized deductions, but only if expenses are at least $500.
2. Retirement benefits subject to limitations.
3. Other.

Plus:

1. Any federal tax refund received for a prior year, resulting in a Missouri tax benefit.
2. Interest on government obligation excluded from federal AGI, less interest that would have been deductible, if at least $500.

Deductions:

1. Standard deduction is equal to the allowable federal standard deduction.
2. A taxpayer may elect to itemize deductions.
3. Other.

Credits and Exemptions:

1. Personal exemption: residents ($1,200); spouse ($1,200); dependents ($400); head of household, surviving spouse ($800).
2. Credits for taxes paid to other states.
3. Senior citizens property tax relief.

4. Other.

Tax Rates:

| Net Taxable Income: | Rates |
|---|---|
| $0 - 1,000 | 1.5% |
| $1,000 - 2,000 | $15 plus 2% of excess over $1,000 |
| $2,000 - 3,000 | $35 plus 2.5% of excess over $2,000 |
| $3,000 - 4,000 | $60 plus 3% of excess over $3,000 |
| $4,000 - 5,000 | $90 plus 3.5% of excess over $4,000 |
| $5,000 - 6,000 | $125 plus 4% of excess over $5,000 |
| $6,000 - 7,000 | $165 plus 4.5% of excess over $6,000 |
| $7,000 - 8,000 | $210 plus 5% of excess over $7,000 |
| $8,000 - 9,000 | $260 plus 5.5% of excess over $8,000 |
| over $9,000 | $315 plus 6% of excess over $9,000 |

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## Montana

Adjusted gross income is federal AGI,

Less:

1. Unemployment compensation.
2. Interest on U.S. obligations or other political subdivisions in Montana.
3. Annuity, pension, or endowment benefits with limitations.
4. Montana income tax refunds.
5. Interest income earned by a taxpayer age 65 or older, up to $800.
6. Other.

Plus:

1. Interest on obligations of another state, territory, county, or other political subdivision not in Montana.
2. Lottery proceeds.
3. Other.

Deductions:

1. Federal itemized deductions, less state income taxes.
2. Federal income taxes.
3. Standard deduction: 20% of Montana AGI, not to exceed $5,820 for married filing jointly and heads of households; or $2,910 for individuals.
4. Political contributions.

Credits and Exemptions:

1. Personal exemption: $1,550 per exemption.
2. Senior citizen property tax credit.
3. Other.

Tax Rates:

| Taxable income: | Rates |
|---|---|
| $0 - 1,900 | 2% less $0 |
| $1,900 - 3,900 | 3% less $19 |
| $3,900 - 7,800 | 4% less $58 |
| $7,800 - 11,600 | 5% less $136 |
| $11,600 - 15,500 | 6% less $252 |
| $15,500 - 19,400 | 7% less $407 |

| | |
|---|---|
| $19,400 - 27,200 | 8% less $601 |
| $27,200 - 38,800 | 9% less $873 |
| $38,800 - 67,900 | 10% less $1,261 |
| over $67,900 | 11% less $1,940 |

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## Nebraska

Adjusted gross income is federal AGI,

Less:

1. Interest or dividends on any U.S. obligation included in federal AGI, but exempt from state taxes.
2. Net operating losses derived from Nebraska sources.
3. State tax refund, if included in federal AGI.
4. Other.

Plus:

1. Interest or dividends on obligations of other states or their political subdivisions,
to the extent excluded from federal AGI.
2. Other.

Deductions:

1. Standard deduction: equal to federal standard deduction amount.
2. Taxpayers can elect to itemize deductions.

Credits and Exemptions:

1. Personal exemption: $86 per exemption.
2. Fuel tax credit for agricultural, quarrying or nonhighway purposes.
3. Tax credit for other state income taxes.
4. Other.

Tax Rates (married filing jointly):

| Taxable Income: | Rate |
| --- | --- |
| $0 - 4,000 | 2.51% |
| $4,000 - 30,000 | 3.49% |
| $30,000 - 46,750 | 5.01% |
| over $46,750 | 6.68% |

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## Nevada

Nevada does not impose a personal income tax.

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## New Hampshire

A tax is imposed on interest and dividends only at the rate of 5%.

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## New Jersey

Gross Income is:

1. Salaries, wages, tips, etc.
2. Net business profits.
3. Net gain from disposal of property.
4. Net gain from rents, royalties, patents, and copyrights.
5. Interest, except on obligations of New Jersey or its political subdivisions.
6. Net income from estates and trusts.
7. Gambling winnings, prizes and awards.
8. Other.

Deductions:

1. Medical expenses, to the extent they exceed 2% of gross income.
2. Homestead property tax deduction.
3. Other.

Credits and Exemptions:

1. Personal exemption: $1,000 per exemption; dependent $1,500.
2. Tax credit for other state taxes.
3. Other.

Tax Rates (married filing jointly):

| Taxable income: | Rate |
|---|---|
| $0 - 20,000 | 1.4% |
| $20,000 - 50,000 | $280 plus 1.75% of excess over $20,000 |
| $50,000 - 70,000 | $805 plus 2.45% of excess over $50,000 |

| | |
|---|---|
| $70,000 - 80,000 | $1,295.5 plus 3.5% of excess over $70,000 |
| $80,000 - 150,000 | $1,645 plus 5.525% of excess over $80,000 |
| Over $150,000 | $5,512.50 plus 6.37% of excess over $150,000 |

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## New Mexico

Base income is federal taxable income

Plus:

1. The federal net operating loss deduction
2. Interest received on a state or local bond.
3. Other.

"Net income" is New Mexico base income adjusted to exclude:

1. The federal standard deduction allowed.
2. The federal itemized deduction less the standard deduction.
3. Federal exemptions.
4. Gain on income from obligations of the U.S.
5. Other.

Deductions:

New Mexico residents are entitled to all deductions allowed under the federal Code.

Credits and Exemptions:

1. No personal exemption because the state is starting with federal taxable income.
2. Tax credit for other state income taxes.
3. Cultural property credit.
4. Prescription drug credit.
5. Other.

Tax Rates (married filing jointly):

| Taxable income: | Rate |
|---|---|
| $0 - 8,000 | 1.7% |
| $8,000 - 16,000 | $136 plus 3.2% of excess over $8,000 |
| $16,000 - 24,000 | $392 plus 4.7% of excess over $16,000 |
| $24,000 - 40,000 | $768 plus 6.0% of excess over $24,000 |
| $40,000 - 64,000 | $1,728 plus 7.1% of excess over $40,000 |
| $64,000 - 100,000 | $3,432 plus 7.9% of excess over $64,000 |
| Over $100,000 | $6,276 plus 8.5% of excess over $100,000 |

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## New York

Adjusted gross income is federal AGI,

Less:

1. Interest on U.S. obligations, to the extent includable in federal AGI.
2. Interest or dividends on obligations exempt from state income tax, but included in

federal AGI.

3. Real property taxes paid on qualified agricultural property, with limitations.
4. Other.

Plus:

1. Interest or dividends on obligations exempt from federal income tax, but not from state income tax.
2. Other.

Deductions:

1. Standard deduction: resident individual ($7,500); married filing jointly or surviving spouse ($13,000); head of household ($10,500); married filing separate ($6,500); dependent ($3,000).
2. Joint filing deduction.
3. Taxpayers can also elect to itemize deductions.
4. Other.

Credits and Exemptions:

1. Personal exemption: $1,000 per exemption.
2. Household and dependent care exemption.
3. Household credit.
4. Credit for other state, local, or Canadian province income taxes.
5. Investment credit.
6. School property taxes paid by farmers.
7. Other.

Tax Rates (married filing jointly):

| Taxable Income: | Rate |
| --- | --- |
| $0 - 16,000 | 4% |
| $16,000 - 22,000 | $640 plus 4.5% of excess over $16,000 |
| $22,000 - 26,000 | $910 plus 5.25% of excess over $22,000 |
| $26,000 - 40,000 | $1,120 plus 5.9% of excess over $26,000 |
| Over $40,000 | $1,946 plus 6.85% of excess over $40,000 |

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## North Carolina

Taxable income is federal taxable income,

Plus:

1. Interest on obligations of states other than North Carolina, and its subdivisions.
2. The fair market value of a donated property interest for which the taxpayer claims a credit.
3. Other.

Deductions:

1. Interest on obligations of states other than North Carolina, and its subdivisions.
2. Other.

Credits and Exemptions:

1. Since federal taxable income is the starting point, North Carolina does not provide

any personal exemptions.

2. Credit for other state tax.
3. Purchase of conservation tillage equipment.
4. Charitable contributions.
5. Farmer Credit (does not include timber).
6. Other.

Tax Rates (married filing jointly):

| Taxable income: | Rate |
|---|---|
| $0 - 21,250 | 6% |
| $21,251 - 100,000 | 7% |
| Over $100,000 | 7.75% |

---

## North Dakota

Taxable income is federal taxable income,

Less:

1. Interest received from federal obligations.
2. Income exempt from state taxation.
3. Federal income taxes.
4. Standard deductions:  joint returns and head of household ($300).
5. Medical expenses disallowed on federal return due to limitations.
6. Other.

Plus:

1. Income taxes deducted on the federal return, with limitations.
2. Income from foreign, state, and local obligations except North Dakota and its political subdivisions.
3. Other.

Deductions:

Since North Dakota taxable income is based on federal taxable income, the standard deduction is the same.

Credits and Exemptions:

1. No personal exemptions because the state tax starting point uses federal taxable income.
2. Credit on taxes paid to other states.
3. Charitable contribution credit.
4. Venture capital corporation investment tax credit.
5. Other.

Tax Rates:

A flat rate of 14% on federal income tax liability can be chosen or the following rates:

| Taxable Income: | Rate |
|---|---|
| $0 - 3,000 | 2.67% |
| $3,000 - 5,000 | 4.0% |
| $5,000 - 8,000 | 5.33% |
| $8,000 - 15,000 | 6.67% |
| $15,000 - 25,000 | 8% |
| $25,000 - 35,000 | 9.33% |

| | |
|---|---|
| $35,000 - 50,000 | 10.67% |
| Over $50,000 | 12% |

---

## Ohio

Adjusted gross income is federal AGI,

Less:

1. Income from federal obligations to the extent includable in federal AGI, but exempt from state taxation.
2. Disability and survivor benefits.
3. Social security benefits to the extent included in federal AGI
4. Other.

Plus:

1. Income from federal obligations of states, or political subdivisions thereof, other than Ohio.
2. Income from federal obligations which is exempt from federal taxation, but not exempt from state taxation.
3. Other.

Credits and Exemptions:

1. Personal exemption: taxpayer and spouse ($850); dependent ($1,050) .
2. Retirement income credit.
3. Senior citizen credit.

4. $20 personal exemption credit.
5. Taxes paid to another state.
6. Credit for contribution to political campaigns.
7. Other.

Tax Rates:

| Taxable Income: | Rate |
|---|---|
| $0 - 5,000 | 0.713% |
| $5,000 - 10,000 | 1.426% |
| $10,000 - 15,000 | 2.853% |
| $15,000 - 20,000 | 3.566% |
| $20,000 - 40,000 | 4.279% |
| $40,000 - 80,000 | 4.993% |
| $80,000 - 100,000 | 5.706% |
| $100,000 - 200,000 | 6.624% |
| Over $200,000 | 7.201% |

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## Oklahoma

Taxable income is federal taxable income,

Less:

1. Any income that is prohibited from being taxed in Oklahoma.
2. Dividend exclusion.
3. Other.

Plus:

1. Interest on obligations of any state or political subdivision not otherwise exempt.
2. Other.

Deductions:

1. Standard deduction: the larger of 15% of Oklahoma AGI or$1,000, not to exceed $2,000 for all except married filing separate, which is the larger of 15% of Oklahoma AGI or $500, not to exceed $1,000.
2. Federal income taxes, but only to the extent they relate to Oklahoma income.
3. Armed services pay, up to $1,500.
4. Political contributions, up to $100.
5. Other.

Credits and Exemptions:

1. Personal exemptions: $1,000 per exemption if single if AGI does not exceed $15,000; married filing jointly AGI does not exceed $25,000; married filing separate AGI does not exceed $12,500; head of household AGI does not exceed $19,000.
2. Property Taxes
3. Retirement benefits.
4. Other.

Tax Rates (married filing jointly):

| Taxable Income: | Rate |
| --- | --- |
| 1st $2,000 | 0.5% |
| Next $3,000 | 1% |
| Next $2,500 | 2% |

| | |
|---|---|
| Next $2,300 | 3% |
| Next $2,400 | 4% |
| Next $2,800 | 5% |
| Next $6,000 | 6% |
| Remainder | 7% |

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## Oregon

Taxable income is federal taxable income,

Less:

1. Interest and dividends on federal obligations to the extent included in federal gross income, but exempt from state taxes.
2. Inheritance tax administrative expenses and fees.
3. Job-related travels expenses of a logger.
4. Other.

Plus:

1. Interest and dividends exempt from federal tax on obligations or securities of any foreign state or political subdivision, or on U.S. obligations, exempt from federal, but not state taxation.
2. Depletion allowance allowed on federal return in excess of taxpayer's adjusted basis in the depleted property.
3. Other.

Deductions:

1. Standard deduction: married filing jointly or surviving spouse ($3,000); unmarried ($1,800); married filing separate ($1,500); head of household ($2,640); dependents ($500).
2. Federal income taxes, up to $3,000.
3. Other.

Credits and Exemptions:

1. Personal exemption tax credits: $128 per exemption.
2. Reforestation credit for under-productive forest lands.
3. Fish habitat improvement project credit.
4. Political contributions.
5. Elderly or disabled dependents.
6. Pension credit.
7. Taxes paid to other states.
8. Other.

Tax Rates (married filing jointly):

| Taxable income: | Rate |
| --- | --- |
| $0 - 4,500 | 5% |
| $4,500 - 11,400 | 7% |
| Over $11,400 | 9% |

## Pennsylvania

Taxable income includes the following:

1. Compensation (e.g. salaries, wages, etc.).
2. Net profits from businesses, professions, etc.
3. Net gains from the disposition of property.
4. Net gains from royalties, rents, patents, copyrights.
5. Dividends.
6. Interest on obligations not exempt from state or local tax under Pennsylvania or federal law.
7. Gambling or lottery winnings, other than Pennsylvania state lottery winnings.
8. Net income from estates and trusts.
9. Other.

Deductions:

Taxable income is computed with no deductions.

Credits and Exemptions:

1. Amounts withheld from compensation.
2. State and local income taxes, from Pennsylvania or its political subdivisions.
3. Other.

Tax Rate:

The personal income tax is imposed at a rate of 2.8%.

## Rhode Island

Tax base is federal adjusted gross income with the following modifications:

Less:

1. Interest or dividends on federal obligations to the extent includable in federal gross income, but exempt from state taxation.
2. Other.

Plus:

1. Interest on obligations of any state or political subdivision other than Rhode Island.
2. Interest or dividends on federal obligations exempt from federal taxation, but not state taxation.
3. Other.

Deductions:

No deductions allowed.

Credits and Exemptions:

1. No personal exemptions.
2. Taxes paid to another state.
3. Property tax credit.
4. Other.

Tax Rate:

The personal income tax rate is equal to 27.5% of the taxpayer's federal income tax liability.

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## South Carolina

Taxable income is federal taxable income.

Deductions:

1. Retirement income, not to exceed $3,000.
2. Retirement benefits.
3. Other.

Credits and Exemptions:

1. No personal exemption because the starting point is federal taxable income.
2. Credit for married filing joint: 0.7 % of the lesser of $30,000 or qualified earned income of the spouse with the lower qualified earned income for the taxable year.
3. Credit for taxes paid to another state on income from personal services.
4. Other.

Tax Rates:

| Taxable Income: | Rate |
|---|---|
| $0 - 2,280 | 2.5% |
| $2,280 - 4,560 | 3% |

| | |
|---|---|
| $4,560 - 6,840 | 4% |
| $6,840 - 9,120 | 5% |
| $9,120 - 11,400 | 6% |
| Over $11,401 | 7% |

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## South Dakota

South Dakota does not impose a personal income tax.

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## Tennessee

Tennessee imposes a tax of 6% on interest and dividend income only.

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## Texas

Texas does not impose a personal income tax.

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## Utah

Taxable income is federal AGI,

Less:

1. Interest or dividends on U.S. obligations to the extent includable in federal gross income, but exempt from state taxation.
2. Federal standard deduction amounts.
3. 50% of the net amount of any income tax paid to the U.S. after allowable credits.
4. Other.

Plus:

1. Any income tax imposed by Utah, or any other state to the extent deducted from federal AGI.
2. Any lump-sum distribution allowable as a deduction.
3. 25% of the personal exemptions as calculated in the federal Code.
4. Other.

Deductions:

No other allowable deductions.

Credits and Exemptions:

1. Personal exemption: add back 25% of the personal dependency exemptions calculated on federal return.
2. Taxes paid to another state.
3. Other.

Tax Rates (married filing jointly):

| Taxable Income: | Rate |
| --- | --- |
| $0 - 1,500 | 2.3% |
| $1,500 - 3,000 | 3.3% |
| $3,000 - 4,500 | 4.2% |
| $4,500 - 6,000 | 5.2% |
| $6,000 - 7,500 | 6% |
| Over $7,500 | 7% |

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## Vermont

Tax base is federal income tax liability with the following modifications to federal AGI:

Less:

1. Income exempt from state taxation under federal law.
2. Military pay.
3. Other.

Plus:

1. Interest income from state and local obligations other than obligations of Vermont and its political subdivisions.
2. Other.

Deductions:

No allowable deductions because starting point is federal taxable income.

Credits and Exemptions:

1. No personal exemption.
2. Credits for taxes paid to another state.
3. Homeowner rebate.
4. Other.

Tax Rate

A tax is imposed equal to 25% of the taxpayer's federal income tax liability.

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## Virginia

Adjusted gross income is federal AGI,

Less:

1. Interest or dividends on federal obligations to the extent exempt from state taxation.
2. Interest on obligations of Virginia or its political subdivisions.
3. Any amount included in federal AGI representing less than $600 in prize money from the Virginia state lottery.
4. The amount of any qualified agricultural contribution.
5. Other.

Plus:

1. Interest on obligations of other states or their political subdivisions.
2. Interest or dividends on U.S. obligations exempt from federal tax.
3. Other.

Deductions:

1. Mileage associated with charitable contributions, equal to $0.18 per mile.
2. Standard deduction: $5,000
3. Other.

Credits and Exemptions:

1. Personal exemption deduction: $800 per exemption.
2. Credit for income taxes paid to another state.
3. Purchase of conservation tillage equipment credit.
4. Agricultural best management practices credit.
5. Other.

Tax Rates:

| Taxable Income: | Rate |
|---|---|
| $0 - 3,000 | 2% |
| $3,000 - 5,000 | 3% |
| $5,000 - 17,000 | 5% |
| Over $17,000 | 5.75% |

## Washington

Washington does not impose a personal income tax.

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## West Virginia

Adjusted gross income is federal AGI,

Less:

1. Interest on U.S. obligations to the extent includable in federal gross income.
2. Interest or dividend income on U.S. obligations includable in federal taxation.
3. Any other income exempt from state taxation.
4. Other.

Plus:

1. Interest income from any state or political subdivision other than West Virginia.
2. Interest or dividend income on U.S. obligations exempt from federal taxation, but not state taxation.
3. Other.

Deductions:

No allowable deductions.

Credits and Exemptions:

1. Personal exemption: $2,000 per exemption.
2. Credit for income taxes paid to another state.
3. Gross bingo proceeds are exempt.
4. Investments in qualified agricultural equipment credit.
5. Other.

Tax Rates:

| Taxable Income: | Rate |
| --- | --- |
| $0 - 10,000 | 3% |
| $10,000 - 25,000 | 4% |
| $25,000 - 40,000 | 4.5% |
| $40,000 - 60,000 | 6% |
| Over $60,000 | 6.5% |

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## Wisconsin

Adjusted gross income is federal AGI,

Less:

1. Interest or dividend income exempted by federal law from taxation on the state level.
2. Net income not allocable.
3. 60% of capital gains held more than one year.
4. Other.

Plus:

1. Interest not included in federal AGI.
2. The amount of lump-sum distribution.
3. Losses not allocable.
4. Deductions for capital loss carry-overs.
5. Other.

Deductions:

1. Standard deduction: rules vary depending on status and income level.
2. Net capital losses, up to $500.
3. Other.

Credits and exemptions:

1. Personal exemption: $50 per exemption.
2. Property tax credit.
3. Joint filing credit.
4. Credit on taxes paid to other states.
5. Other.

Tax Rates (married filing jointly):

| Taxable income: | Rate |
|---|---|
| $0 - 10,000 | 4.9% |
| $10,001 - 20,000 | 6.55% |
| Over $20,000 | 6.93% |

## Wyoming

Wyoming does not impose a personal income tax.

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# Vita

Philip D. Bailey

Philip Donald Bailey was born on October 23, 1975 in Washington, D.C. He was raised in Kensington, MD and graduated from Walter Johnson High School in Bethesda, MD. He earned his Bachelor of Science in Forest Resource Management and Environmental Resource Management from Virginia Tech in 1997. He will receive his Master of Science in Forestry with a concentration in Resource Management and Economics from Virginia Tech in 1999.