

# Property Taxes and the Loss of Private Forests<sup>1</sup>

## Situation in Brief:

The US is losing its forest lands to development with potentially undesirable economic, social, and ecological consequences. Property taxes are believed to be relevant to this process both as a cause of, and possible solution to, the problem. What are the realities regarding the relationship of property taxes to private forests in the US, especially in terms of the continuing loss of such lands – and what, if anything, should the Forest Service do in response to the situation?<sup>2</sup>

## Objectives:

The objectives of this paper are:

- To briefly review the data on loss of forest lands to development, and to explain why these losses are of concern;
- To briefly review the potential impacts of the property tax on private forests, focusing on the role the tax can play in encouraging development of such lands;
- To briefly review the types of “special” property taxes that the states have adopted in an effort to make this tax more compatible with private forestry investments; and
- To briefly review the success of efforts to use some form of modified property tax as a means of discouraging the development of forest lands.

## Concern Over the Loss of Forest Lands:

As part of the RPA Assessment, an analysis is performed of the past and probable future trends in forestland acreage in the US. Table (1) summarizes the principal findings from the latest of these periodic reports (Alig et. al., 2003). Before looking at the specific results, it may be appropriate to note that the table shows only “net changes” – i.e., the changes that occur after balancing “movements in” against “movements out” of forest use – and that such changes typically reflect only a small fraction of the overall changes taking place.

Table (1): Historic and Projected Trends in the Area of Forestland/Timberland in the US.

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<sup>1</sup> Prepared by Cliff Hickman, Forester, Policy Analysis Staff.

<sup>2</sup> While the focus of this paper is on the property tax, this should not be interpreted to mean that other taxes – e.g., income and inheritance taxes – are perceived to have no impacts on land use. There is a great deal of research showing that these other taxes, as well as many other types of public policies, can and do influence land use, it’s just that these impacts have been defined to be outside the scope of this paper. The reader who desires to learn more about how the property tax fits into this broader context is referred to the following publication:

- Kilgore, Michael A. and Ellefson, Paul V. 2002. “*Investment, Taxation, and Regulatory Environment.*” Background paper on sustainability indicator #58. 39 p. A copy of this paper may be found at: <http://www.fs.fed.us/research/sustain/documents/indicator%2058/indicator%2058.pdf> .

Type of Land, Region and/or Ownership	1953	1997	2050 (Projected)	Historic Change	Projected Change	Historic Change	Projected Change
	(MM Ac.)	(MM Ac.)	(MM Ac.)	(MM Ac.)	(MM Ac.)	(Percent)	(Percent)
<b>Forestland:</b>							
North	160.8	170.3	163.8	9.5	-6.5	5.9	-3.8
South	226.0	214.1	210.5	-11.9	-3.6	-5.3	-1.7
Rocky Mountain	141.6	143.2	142.5	1.6	-0.7	1.1	-0.5
Pacific Coast	227.8	219.3	207.1	-8.5	-12.2	-3.7	-5.6
<b>Total</b>	<b>756.2</b>	<b>746.9</b>	<b>723.9</b>	<b>-9.3</b>	<b>-23.0</b>	<b>-1.2</b>	<b>-3.1</b>
<b>Timberland:</b>							
North	154.3	159.4	151.0	5.1	-8.4	3.3	-5.3
South	204.5	201.0	197.8	-3.5	-3.2	-1.7	-1.6
Rocky Mountain	66.6	71.0	70.9	4.4	-0.1	6.6	-0.1
Pacific Coast	83.4	72.2	69.3	-11.2	-2.9	-13.4	-4.0
<b>Total</b>	<b>508.8</b>	<b>503.6</b>	<b>489.0</b>	<b>-5.2</b>	<b>-14.6</b>	<b>-1.0</b>	<b>-2.9</b>
<b>Public</b>	<b>145.4</b>	<b>146.0</b>	<b>146.1</b>	<b>0.6</b>	<b>0.1</b>	<b>0.4</b>	<b>0.1</b>
<b>Forest Industry</b>	<b>59.0</b>	<b>66.9</b>	<b>64.9</b>	<b>7.9</b>	<b>-2.0</b>	<b>13.4</b>	<b>-3.0</b>
<b>NIPF</b>	<b>304.4</b>	<b>290.7</b>	<b>278.0</b>	<b>-13.6</b>	<b>-12.7</b>	<b>-4.5</b>	<b>-4.4</b>
<b>Total</b>	<b>508.8</b>	<b>503.6</b>	<b>489.0</b>	<b>-5.2</b>	<b>-14.6</b>	<b>-1.0</b>	<b>-2.9</b>

The RPA analysis shows that between 1953 and 1997 the forestland base of the US experienced the following net changes:

- The area of forestland declined by 9.3 million acres, or 1.2 percent. Gains in the North and Rocky Mountain regions were more than offset by losses in the South and Pacific Coast regions. Losses in the South, now considered to be the center of the US forest products industry, were especially pronounced; this region lost 11.9 million acres, or 5.3 percent of its forestland base.
- The area of timberland – i.e., land capable of growing 20 ft.<sup>3</sup> or more of wood per acre per year and not withdrawn from commercial timber harvesting – declined by 5.2 million acres, or 1.0 percent. Again, gains in the North and Rocky Mountain regions were more than offset by losses in the South and Pacific Northwest regions. In this instance, losses were most pronounced in the Pacific Northwest; this region lost 11.2 million acres, or 2.9 percent of its timberland base.
- Timberland losses were concentrated in the NIPF (Non-Industrial Private Forest) ownership class. This ownership class lost 13.6 million acres, or 4.5 percent of its total, while the amount of timberland held by the Forest Industry and Public ownership classes actually increased.<sup>3</sup>

The RPA analysis projects that between 1997 and 2050 the forestland base of the US will experience the following additional net changes:

<sup>3</sup> Given the fact that many large, vertically integrated forest products companies have elected to divest themselves of their timberland holdings during the last 15 years, the observation that the amount of timberland held by forest industry increased during the interval from 1953 to 1997 may be surprising. For the most part, the explanation can be traced to the fact that most divestitures didn't occur until after 1997. Also, it's important to recognize that while a TIMO would not be considered to be part of the "forest industry" ownership class – because it owns no manufacturing facility – this is not necessarily the case for a timber REIT, which may still own a mill as part of a separate corporate subsidiary.

- The area of forestland will decline by another 23 million acres, or 3.1 percent. Losses will be experienced in every region, but will be most pronounced in the North and Pacific Coast regions.
- The area of timberland will decline by another 14.6 million acres, or 2.9 percent. Again, losses will be experienced in every region – but will be most pronounced in the North and Pacific Coast regions.
- Timberland losses will be experienced in both private ownership classes – i.e., Forest Industry and NIPF – while the amount of timberland held in Public ownership will remain essentially unchanged.

Forest and timberland has been lost in the US as a result of competition between various rural land uses – e.g., cropland, and pasture or rangeland – and also because of urbanization. Between 1982 and 1997, the relative importance of the different causes was: 47 percent due to urbanization, 29 percent due to conversion to pasture or range, 9 percent due to conversion to cropland, and 15 percent due to conversion to some other rural land use – e.g., windbreaks, barren land, and marshland (Alig et. al., 2003). Looking to the future, while urbanization – i.e., high density development in urban fringe areas – and competition between alternative rural land uses will no doubt continue to influence the size of the forestland base in the US – of greatest concern is what has been termed “rural growth” – i.e., low density development away from urban areas (Harper and Crow, 2006). Between 1980 and 2000, 31 million acres of forestland were settled at urban and suburban densities of less than 1.7 acres per dwelling while 7 times that amount – 227 million acres – were settled at rural densities of 1.7 to 40 acres per dwelling. With such low-density development the affected lands may continue to be classified as forestlands for inventory purposes, but it’s unclear to what extent they may still be considered to be “working forests” that can be relied upon to provide traditional products.<sup>4</sup>

A variety of factors appear to be driving the land use changes that have been occurring. These include the following:

- *Population Growth* – The US population, estimated to be almost 302 million today, is projected to grow to 325 million by 2020, and 571 million by 2100 (Eav, 2003).
- *Economic Factors* – Average disposable personal income in the US has been increasing over time. Road systems have improved, making many rural areas more accessible. Housing is generally cheaper away from a city.

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<sup>4</sup> Some reviewers of an earlier draft of this paper questioned the value of the “working forests” concept. They felt that even if timber outputs declined from lands that had been subject to low-density development, in all likelihood these areas would continue to provide many public goods benefits – and that indeed outputs of some of these other benefits might actually be enhanced if less emphasis was placed on timber. Still other reviewers pointed out that low-density development can influence land use beyond the bounds of the properties that are actually developed – e.g., the new owners may cause restrictive ordinances to be enacted that limit traditional land management practices in surrounding areas. This phenomenon is called “shadow development.”

- *Social Factors* – More and more people want to have their own “little piece of nature” – i.e., to be able to enjoy the environmental amenities associated with living in a rural setting (Crim et. al., 2002).
- *Technological Factors* – Improvements in the area of telecommunications have made it possible for many businesses to operate successfully outside the bounds of urban areas, and for more people to allow “quality of life” considerations to determine where they choose to live.
- *Public Policies* – Public policies, including tax policies, can and do influence private land use decisions in many ways – some intentional, and some not. To illustrate, a case can be made that allowing taxpayers to deduct mortgage interest on a second home encourages additional development. Similarly, local ordinances that restrict harvesting may create a disincentive to keep lands in forest.

The loss of forestland, especially to low-density development, is of concern for various reasons. These reasons may be grouped into three categories as follows:

- *Economic Reasons* – The loss of forestland jeopardizes our ability to meet future fiber needs without becoming more reliant on imports. The employment and income opportunities traditionally associated with activity in the forest products sector can decline. Finally, local units of government may find it increasingly difficult to provide desired public services.<sup>5</sup>
- *Social Reasons* – The loss of forestland jeopardizes traditional rural lifestyles. Many rural communities could lose their sense of identity. Outdoor recreation opportunities for urban and suburban residents could be lost. The amenity values that many people have come to value could also be lost.
- *Ecological Reasons* – Fish and wildlife habitats can become fragmented, water and air quality can deteriorate, pest and invasive species can spread, and the risks of wildfire may be increased (Cleaves and Eav, 2003). Ecological impacts may not only be experienced domestically, but internationally as a result of increased timber harvesting elsewhere due to US demands for forest products.

An additional layer of complexity is added by the fact that when development occurs, in many instances the change in land use is for all intents and purposes irreversible.

### **The General Property Tax and Private Forests:**

The “general property tax” is the most important source of revenue for most local units of government.<sup>6</sup> As used in this paper, the term “general property tax” means a tax levied annually

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<sup>5</sup> Research shows that on average, residential development requires \$1.24 in expenditures for public services for every \$1.00 it generates in tax revenue. In contrast, farm and other open space lands only require an expenditure of \$0.38 for every \$1.00 of tax revenue they generate (Heimlich and Anderson, 2001).

<sup>6</sup> The general property tax is sometimes referred to as the “ad valorem” property tax. Ad valorem simply means “according to value.”

on the fair market value of taxable property in its highest and best use. The term “fair market value” is defined as follows:

“The value at which a property would change hands between a willing buyer and a willing seller, neither being under any obligation to buy or sell and both having knowledge of the relevant facts” ([www.timbertax.org](http://www.timbertax.org)).

The general property tax applies to two broad classes of property: real and personal. Real property includes land, improvements to land – e.g., a house – and any specific physical assets that have value – e.g., timber, a mine or quarry, or minerals in place ([www.timbertax.org](http://www.timbertax.org)). Personal property is of two types: tangible and intangible. Tangible personal property is something that can be seen, weighed, measured, felt, or otherwise perceived by the senses and that has more than a negligible intrinsic value of its own – e.g., a car. Intangible personal property is a claim, interest, right, or other thing that has value but which cannot be seen, felt, weighed, measured, or otherwise perceived by the senses although its existence may be evidenced by a document – e.g., stocks and bonds ([www.timbertax.org](http://www.timbertax.org)).

Tax theorists have long been critical of the general property tax as a way to raise public revenue, regardless of the context in which it is being applied – but over the years, the implications of applying this tax to forested properties have been especially controversial. This controversy arose long before there was any concern about the loss of forestlands to other uses, and had to do more with questions of tax equity and whether or not the property tax was conducive to proper forest conservation. These early concerns were discussed at length in a 1935 USDA report entitled “*Forest Taxation in the United States*” (Fairchild and Associates, 1935). This report identified many problems associated with the application of the general property tax to forested properties, but two concerns were of greatest importance. These were:

- *Parcel Bias* – The difficulty here was that the evidence showed that lower value properties such as forestlands were typically being over-assessed relative to those of higher value. This meant that the tax was not treating equals, in terms of their ability to pay, equally – indeed it was operating so as to be regressive in its effect – i.e., so as to place a greater tax burden on those least able to meet their tax obligations.
- *Time Bias* – The difficulty here was that because most forest properties produce incomes only periodically, a growing forest crop – unlike other agricultural crops that mature and are harvested in a single year – isn’t taxed just once, but many times. This was seen as inequitable, and the problem was compounded by the fact that in concept the amount of the tax would rise from year-to-year as the value of the trees increased because of physical growth. The implication was not only that the tax wasn’t neutral regarding the allocation of resources, but that it actually operated so as to encourage forest exploitation – i.e., so as to induce forest owners to reduce stocking levels, shorten rotation lengths, move marginal forest lands into other uses, and even forfeit their lands when taxes became higher than productive values.<sup>7, 8</sup>

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<sup>7</sup> It is perhaps worth noting that since publication of the Fairchild Report, the so-called “parcel bias” problem has largely become a non-issue because of subsequent improvements in assessment standards and practices. Some have even questioned the validity of the so-called “time bias” problem. The arguments on this point are rather technical,

Widespread concern about the loss of forest and other rural lands to development, and about the role of the general property tax in forcing such land use changes, didn't materialize until sometime during the 1960's – but these concerns grew quickly, and for quite logical reasons.<sup>9</sup> In well functioning markets, forestland prices capture a wealth of information about both current and possible future land uses; these prices reflect the perceptions of numerous buyers and sellers as to what the future highest and best use of a given piece of land will be (Wear and Newman, 2004). Experience has shown that it's not uncommon for forestland to take-on a value for some development-related use that vastly exceeds its value for continued timber production. The following statistics are illustrative (Alig and Plantinga, 2004):

- For 473 counties in the Southeast, the weighted average land value of forestland for continued forest use was determined to be \$415 per acre as compared to \$36,216 per acre in urban use – the latter being 87 times higher.
- For 38 counties in the Pacific Northwest (Westside), the weighted average land value of forestland for continued forest use was determined to be \$1,483 per acre as compared to \$165,947 per acre in urban use – the latter being 111 times higher.

Since the general property tax is levied upon the fair market value of property in its highest and best use, it's easy to see that when forestlands take on a value for some use other than continued timber production – i.e., a value dependent on urbanization, industrialization, recreational development, or second home construction – a tax based upon the land's value in this alternative use can quickly “squeeze out” any potential to earn a profit from further forest management. In essence the tax becomes “economically confiscatory.” Under these circumstances it can be argued that landowners have no economically rational choice but to sell or develop their properties – i.e., that a change in land use is being “forced.”<sup>10</sup>

### **Review of “Special” Forest Property Taxes:**

State legislatures can, within limits, exempt certain classes of property from taxation or provide other types of tax benefits such as abatements, credits, or reduced assessment ratios. The tax benefit must serve some public purpose, and the class of property to which it is applied cannot be arbitrary. In some instances, the availability of the benefit is contingent upon the property being used for a specified purpose ([www.timbertax.org](http://www.timbertax.org)).

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and revolve around the question of whether or not the annual increment in value that is realized as a stand grows should be treated as deferred income or current income that is automatically reinvested. The “parcel” and “time” bias problems have been highlighted here mainly to help the reader better understand the nature of the various special forest property taxes that have been adopted by many states.

<sup>8</sup> Between 1910 and 1940 large amounts of privately owned forestland in the US, especially in the Lake States, reverted to state and local governments for failure to pay property taxes – creating what came to be known as the “New Public Domain.” By the 1930s the problem had become so serious that Congress appointed a study commission to investigate “The Forest Tax Problem.” This eventually led to publication of the 1935 Fairchild Report (Gregory, 1972).

<sup>9</sup> It is perhaps worth noting that initially most concern was focused on the loss of farmlands, not forestlands.

<sup>10</sup> As will become apparent later in this paper, modifying the general property tax so that it is no longer economically confiscatory may or may not provide a sufficient incentive to keep forests and other rural lands in their existing uses. This depends on the specific situation – i.e., on the strength of the pressures for development.

In response to the perceived weaknesses of the general property tax as it applies to forest properties, over the years the states have seen fit to develop and implement a variety of “special” forest property taxes. As suggested earlier, the original impetus for such laws was to promote greater tax equity and to encourage sound forest conservation, but since the 1960s the dominant objective has been to ensure that the tax doesn’t force the conversion of forest and other rural lands into developed uses. The principal types of special forest property taxes that have been enacted are briefly described below (Hickman, 1982):

- *Exemption Laws* – Provide that forestland and/or timber are to be removed from the property tax rolls, either permanently or for some specified number of years. A timber exemption could apply to all standing timber, or it could be limited to planted stands, immature stands, trees of a particular species, or trees retained for specific purposes such as windbreaks.<sup>11</sup>
- *Rebate Laws* – Provide that landowners who engage in some approved activity, such as tree planting, may subsequently apply for abatement of a portion of the taxes levied on the value of their land, timber, or both. The rebate may be given in the form of a direct cash payment or as a reduction from the total amount of taxes owed.
- *Yield Tax Laws* – Provide for a conceptual separation of land and timber values. Land values normally remain subject to the annual property tax, although sometimes in modified form. Timber values go untaxed until the time of harvest. At this juncture a gross income tax, equal to some percentage of the stumpage value of the products cut, is imposed.
- *Modified Rate Laws* – Provide that forestland and timber are to be assessed like other forms of property, but that a different tax rate, lower than otherwise applicable, is to be used in computing the tax.
- *Modified Assessment Laws* – Provide that forest properties are to be valued differently from other forms of property. If fair market value in highest and best use is retained as the basic valuation standard, forest assessments may be frozen or calculated using a reduced assessment ratio. Alternatively, fair market value may be abandoned in favor of another valuation standard such as current use value.<sup>12</sup>

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<sup>11</sup> Some have argued that it’s inequitable to tax both forestland and timber; their reasoning is that the value of forestland is derived from the value of the timber products it produces, and that as a result taxing both constitutes double taxation.

<sup>12</sup> In instances where current use value has been adopted as the relevant assessment standard, the statutes are sometimes further broken-down into three subclasses based on two attributes: 1) the restrictions placed on the ability of participating owners to change land use, and 2) the penalties imposed on participating owners who withdraw their property from the current use tax program or convert it to a non-qualifying use. The three subclasses that are generally recognized are:

- *Pure Preferential Assessment Laws* – Programs of this type allow participants to withdraw and/or convert their properties to a more intensive use at any time. Either action precipitates a return to a market-based system of assessment and taxation, but no penalty charge is imposed.
- *Deferred Taxation Laws* – Programs of this type allow participants to withdraw and/or change land use whenever they please. However, either action, besides triggering a return to a market-based system of assessment and taxation, leads to the imposition of a penalty charge based on the taxes saved during the period of enrollment.

Another form of “special” forest tax is the *Timber Severance Tax*, but it differs from the preceding tax mechanisms in that it is not a substitute for the general property tax – but another tax, in the nature of an occupation or privilege tax, that is levied in addition to some form of property tax<sup>13</sup> (Hickman, 1982). Timber severance taxes are levied at the time timber is cut, and are normally computed as a fixed amount per unit of product removed – e.g., per cord of pulpwood, or per MBF of sawtimber. While not a property tax per se, severance taxes have been included in this paper for purposes of completeness.

With regard to levels of usage, exemptions and rebates were the earliest form of special forest property tax to be enacted, with the first statutes appearing in the mid to late 1800s. The popularity of such legislation peaked in the early 1940s when 16 states had laws of this type, mostly exemptions. Yield taxes began to appear around 1910, and peaked in popularity in the early 1930s when 16 states had laws of this type. Modified rate laws emerged in the mid 1920s, but never became very popular – with no more than 5 states ever having such statutes. Finally, although modified assessment laws first appeared as early as 1899 – it wasn’t until after 1960 that they really became widely used. In 1960 only 4 states had modified assessment laws that applied to forest lands, but in subsequent years – because of the growing concern over the mounting losses of forest and other rural lands to development – the number of such laws virtually exploded<sup>14</sup> (Hickman, 1982).

Table (2) provides some information on the extent to which the various types of special forest property taxes are presently being used, and these data confirm, as was just suggested, that modified assessment laws have become the dominant type of special forest tax.

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- *Restrictive Agreements* – Programs of this type constrain the ability of participants to withdraw and/or convert their properties to some ineligible use. This is accomplished by requiring participants to contract with a designated state, county, or local government body to retain their property in a qualifying use for a specified number of years. Only changes in land use deemed to be in the public interest are allowed, and even then a penalty may be imposed.

<sup>13</sup> Historically, severance taxes were levied on the cutting of trees for the same reasons that they were imposed on the utilization of other natural resources such as oil, gas, and coal – i.e., to: 1) discourage undue or wasteful consumption, and 2) provide a mechanism whereby society could be compensated by those who benefited from the exploitation of an essentially free gift of nature. Since trees are a renewable resource, it’s questionable that these arguments were ever completely valid – but they probably had at least some legitimacy when most cutting was occurring in virgin forests. In the US today, however, this is far from the reality; most of the stands that are now being harvested are at least 2<sup>nd</sup> or 3<sup>rd</sup> growth, and many have required significant investments for management and protection purposes. Accordingly, most modern timber severance taxes are justified on the grounds that they help to encourage better management of timber and related resources. This end is accomplished by devoting most, or all, of the revenues raised by these taxes to some forestry related activity like tree planting, forestry education, or forestry research (Hickman, 1989).

<sup>14</sup> The popularity of current use assessment laws as a policy tool for combating excessive conversion of forest and other rural lands to various developed uses is easy to understand. Public officials avoid the need to make direct public expenditures to either acquire lands in fee or to purchase development rights. Qualifying property owners are granted tax concessions that can prove to be quite substantial. Finally, both parties avoid the onus associated with zoning regulations, and the controversy that can arise over the question of when a “taking” requiring payment of “just compensation” has occurred.

Table (2): Types of Special Forest Property Taxes Used in the United States, 2007.<sup>15</sup>

State	Exemption	Rebate	Yield Tax	Modified Rate	Modified Assessment	Severance Tax
Alabama	X		X		X	X
Alaska	X				X	X
Arizona	X				X	X
Arkansas					X	X
California			X		X	
Colorado	X				X	
Connecticut			X		X	
Delaware	X				X	
Florida					X	
Georgia					X	X
Hawaii					X	
Idaho			X		X	
Illinois					X	X
Indiana					X	
Iowa	X				X	
Kansas					X	
Kentucky					X	
Louisiana			X		X	X
Maine					X	
Maryland					X	
Massachusetts			X		X	
Michigan			X			
Minnesota		X			X	
Mississippi					X	X
Missouri			X		X	
Montana	X					X
Nebraska	X					
Nevada					X	
New Hampshire			X		X	
New Jersey					X	
New Mexico					X	X
New York			X		X	
North Carolina	X				X	X
North Dakota				X	X	
Ohio				X	X	
Oklahoma					X	
Oregon		X	X		X	X
Pennsylvania					X	
Rhode Island	X				X	
South Carolina					X	X
South Dakota					X	
Tennessee	X				X	
Texas					X	
Utah					X	
Vermont					X	
Virginia					X	X
Washington			X		X	
West Virginia					X	X
Wisconsin			X	X		
Wyoming					X	
<b>Totals</b>	11	2	13	3	45	14

<sup>15</sup> This table was compiled using information available at the following website: [www.timbertax.org](http://www.timbertax.org). However, since tax laws can change periodically and it's unclear how frequently the information at this website is updated, and because terms are not always used consistently – e.g., some states have yield taxes that they call severance taxes and vice versa – the data in this table should only be considered to be indicative of array of “special” forest property taxes that presently exists, and should not be assumed to be completely accurate.

As regards the types of provisions that are typically included in special forest property taxes, for purposes of this paper attention will be focused on just modified assessment laws – because they have become so dominant, and also because most were enacted for the express purpose of ensuring that the property tax wouldn't cause the forced conversion of forest and other rural lands to developed uses.<sup>16</sup>

While the specific provisions included in modified assessment laws vary markedly between states, it's nonetheless possible to gain a good appreciation for the nature of these laws by considering four variables: 1) conditions of eligibility, 2) application requirements, 3) prescribed valuation procedures, and 4) withdrawal penalties.

- *Conditions of Eligibility* – A few modified assessment laws are mandatory – i.e., they require the county assessor or other appropriate official to identify qualifying lands and to ensure that they receive whatever type of preferential assessment is authorized. Where participation is optional, a variety of eligibility criteria may be imposed. The most common criteria include the following ([www.timbertax.org](http://www.timbertax.org)):
  - Minimum tract size;
  - Minimum number of years in continuous forest use;
  - Property is managed under an approved/sound program of management; and
  - Property has produced a specified average annual gross forest income.

A few states have adopted more unusual restrictions such as the following ([www.timbertax.org](http://www.timbertax.org)):

- The property must be individually, not corporately owned (GA, NC); and
  - The property cannot be owned by a foreign government or non-resident alien (TX).
- *Application Requirements* – Modified assessment laws that provide for voluntary participation require interested owners to apply for the preferential tax treatment being offered. The procedures that are employed vary all the way from requiring initial applications only to requiring annual applications. In between these two extremes, some states require periodic applications ([www.timbertax.org](http://www.timbertax.org)).
  - *Prescribed Valuation Procedures* – Today, virtually all modified assessment laws call for using “current use value” as opposed to “fair market value” as the basis for determining the taxable value of qualifying properties; indeed, the term “current use value law” is now more widely used than the term “modified assessment law” – even though the latter is the more inclusive term.

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<sup>16</sup> It's important to recognize that most modified assessment laws extend preferential tax treatment to more than just forestland; other types of rural land that typically qualify include cropland, pastureland, rangeland, and lands used for horticultural purposes. Indeed, in states where forests are not a major cover type, forestland often receives preferential assessment only because qualifying “agricultural land” has been broadly defined to encompass timber growing as well as the growing of traditional crops.

A few of the states that have adopted current use valuation as the assessment standard for forest and other rural lands don't provide any statutory direction as to how current use values are to be determined.<sup>17</sup> Other states provide a statutory definition – e.g., the current use value of a forest property is the value that would be arrived at by a willing buyer and a willing seller both knowledgeable of the market situation and under no compulsion to deal, when it is assumed that timber growing is the property's highest and best use for now and the foreseeable future. Still other states set-forth in their statutes the factors that are to be considered in arriving at current use value. Factors often listed include the following:

- Forest or farm income;
- Soil productivity or fertility;
- Market value as forest or farm land;
- Rental value;
- Location and accessibility; and
- Topography.

Finally, the most common approach is to require that current use value be determined by capitalizing expected timber or farm income ([www.timbertax.org](http://www.timbertax.org)).

- *Withdrawal Penalties* – Not all states impose penalties on landowners who have been enrolled in a modified assessment (current use value) program and then either withdraw their properties, convert their properties to an ineligible use, or sell their properties; however, in instances where a penalty is imposed – by far the most common approach is to impose a so-called “rollback tax.” This is a charge equally, for some specified number of years, the difference between the taxes actually paid and those that would have been paid without current use valuation. Sometimes interest charges are added to the rollback taxes ([www.timbertax.org](http://www.timbertax.org)). Another type of penalty entails levying a charge equal to some percentage – e.g., 10 % – of a property's fair market value at the time it is withdrawn from the current use program or sold. If imposed when a property is withdrawn, this charge is known as a “development tax.” If imposed when a property is sold, this charge is called a “conveyance tax” (Hickman, 1983).

### **Effectiveness of Current Use Assessment in Discouraging Development:**

As previously noted, one objective that was part of the rationale for enactment of virtually all current use assessment laws was that they would help to slow the rate at which forest, farm, and other open space lands were being lost to development – or that they would at least prevent forced sales and conversions. This being the case, the obvious question becomes: have they succeeded? The consensus opinion seems to be that to a large degree they haven't. The following quotations are illustrative:

“At best, preferential assessment may slow the transition from rural to developed uses, but it is not a permanent solution (Heimlich and Anderson, 2001).”

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<sup>17</sup> This doesn't mean that county assessors are left to their own devices; oftentimes the assessment responsibility is given to a state agency, or a state agency is instructed to develop detailed assessment guidelines.

“Once urban development becomes economically feasible as a result of improved access or other factors, land rents for development are often notably higher than the returns to other land uses. ... This raises the question of whether efforts to restrain urban sprawl are likely to have long-term effectiveness. Potential increases in forestry returns will likely not be sufficient. This finding is consistent with others who have suggested that use value assessment and other preferential tax policies are only minimally effective in restraining urban development (Alig et. al., 2003).

“Current use or preferential tax treatments can moderate the pressure to sell and convert by setting the basis for the tax to the value in current use as opposed to highest and best use, but the literature shows these programs to be ineffective in stopping sprawl and the development of high valued lands. They may be effective in transitional areas, and are still seen as an important tool for reducing the forced sale of lands” (Wear and Newman, 2004).

Given the dramatic increases in forest and other rural land values now being experienced in many parts of the country, one commentator, quoted below, suggests that use value laws are likely to be even less effective in the future.

“The tidal wave of exurban sprawl is reaching far into the wildlands in intensities never before seen. ... Policies such as use value taxation or other aids to private forestry were never designed to cope with today’s land prices and real estate demands. They are a 6-inch levee facing a 20-foot storm surge” (Irland, 2005).

Investigators have identified a number of reasons to explain why current use assessment laws have only been partially effective in arresting the loss of forest and other open space lands, but the most persuasive explanation is also the most obvious – namely that many rural property owners simply cannot resist the large financial gains that are now realizable through lands sales and development in many parts of the country. Figures were cited earlier from a study that looked at comparative land values in the South and Pacific Northwest regions, and which showed land values for development purposes that were 87 to 111 times higher than the values of the same land for continued timber production.<sup>18</sup> This is a perfect illustration of the 6-inch levee standing against the 20-foot storm surge. Another explanation that has appeared in the literature pertains to the fact that whenever lands that have been enrolled in a use value program change hands through a sale, one would expect the tax subsidy represented by use valuation to be capitalized into the sales price so that the tax incentive would become irrelevant to the new owner’s decision about what to do with the land in the future (Hickman, 1983). Finally, yet another explanation that has been offered is that use valuation only addresses one of many economic, demographic, and sociological factors that can enter into a landowner’s decision to sell or develop their property (Hickman, 1983). While this observation is certainly valid, this saw cuts both ways – i.e., just as it may explain why some forest owners will decide to sell their properties even though current use valuation has made continued timber production economically possible, it can also explain why other forest owners may elect to hold their properties beyond the point where economic logic suggests they should sell or develop them.

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<sup>18</sup> Given development pressures of this magnitude, even driving the property tax to zero would in all likelihood not be a sufficient incentive to keep forest and other rural lands in their existing uses.

In addition to be criticized for being largely ineffective in retaining forest and other rural lands in their existing uses, use value assessment laws have also been challenged on other grounds.<sup>19</sup> One of these challenges concerns their equity implications. Use valuation normally causes the taxes on non-participating property owners to increase. This occurs because local units of government typically respond to any reductions in the value of the tax base by increasing the tax rate. For participants, the impact of the higher rate is partially offset by a reduced assessment – but non-participants are not so lucky. Each non-participant’s tax bill will rise, and collectively they will bear a greater portion of the total tax burden. This phenomenon is called “tax-shifting”<sup>20</sup> (Hickman, 1983). One obvious equity question this situation raises is: does the use valuation of forest and other open space lands produce public benefits for non-participating property owners that are commensurate with the increased taxes they must pay? Perhaps a case can be made that this is a way of compensating rural landowners for the value of the environmental amenities that they have traditionally provided for free. Alternatively, one might argue that use valuation is a way to achieve greater tax equity by shifting more of the tax burden to those property owners who are consuming most of the public services.<sup>21</sup>

Still another issue that has been raised in connection with use value assessment laws concerns their possible revenue implications. As previously noted, historically the property tax has been the most important source of revenue for many local units of government; they are heavily dependent on it to provide vital public services such as education, and police and fire protection. As long as tax rates remain flexible, use valuation does nothing to compromise the ability of local governments to raise needed tax revenues because declines in the value of the tax base can be offset by increases in the tax rate. In reality, however, the ability to adjust tax rates is sometimes constrained by legislation or political pressures. In such cases, local tax revenues, and ultimately the public services that they support, can be adversely affected (Hickman, 1983). In the absence of adequate state oversight, local tax officials can get around this problem by keeping current use assessments higher than they really should be – even though this would compromise the incentive to keep forest and other rural lands in their existing uses. There is some evidence that suggests this has occasionally happened to property owners who voluntarily surrendered their development rights by entering into a conservation easement. These owners were promised that their properties would henceforth be taxed on the basis of current use value, but the promised tax benefits have not always been forthcoming (Fernholz et. al., 2006).

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<sup>19</sup> While not highlighted here, it should be noted that some authorities have criticized use value assessment laws because they have occasionally been used by developers to reduce the tax costs associated with holding undeveloped land in anticipation of future development. The potential for such abuse is greatest when few restrictions on eligibility are imposed; and when declassification penalties are nonexistent or weak. However, the decision about whether or not to embrace tougher provisions can confront state and local officials with something of a “catch-22,” because there is also evidence that indicates tougher provisions tend to discourage participation. In a somewhat different vein, current use assessment laws have been criticized for not being sufficiently discriminatory – i.e., for not more directly targeting tax relief to only those properties that from a public benefits standpoint are the most critical to maintain in their existing uses.

<sup>20</sup> The amount of tax shifting that occurs will be depend on essentially two things:

- The amount by which use valuation reduces the assessed value of participating properties. The greater the reduction, the larger the tax-shift.
- The proportion of the total tax base, as measured on a fair market value basis, that is in participating property. Up to a point, the greater this percentage – the larger the tax shift.

<sup>21</sup> See footnote (5) as well as the subsequent discussion about “Cost of Community Services” (COCS) studies.

In a somewhat different vein, during the last 15 years an increasing number of so-called “Cost of Community Services” (COCS) studies have been conducted showing that forest, farm, and other open space lands almost always generate more in property tax and other revenues than the costs they impose on local units of government to provide essential public services.<sup>22</sup> A review of a wide array of studies conducted at various locations around the country yielded the following results (American Farmland Trust, 2002):

- For residential land, revenue to expenditure ratios averaged 1.00:1.16.
- For commercial and industrial land, revenue to expenditure ratios averaged 1.00:0.27.
- For forest, farm, and other open space land, revenue to expenditure ratios averaged 1.00:0.36.

The implication is that forest and other open space lands, and commercial and industrial land, typically subsidize the costs associated with providing public services to the owners of residential land. In the case of forest and other open space lands, the principal reason is fairly straightforward – i.e., such lands use relatively few public services while residential land creates a need to provide some very costly services such as public education. To a degree this same logic applies to commercial and industrial land, but in this instance the fact that such landowners are often required to pay hefty income and other business-related taxes also appears to be part of the explanation.

This is not strictly a property tax issue because, as suggested above, other sources of revenue are considered in doing such analyses. However, equity questions can certainly be raised about whether or not the tax burdens being imposed on different classes of property owners should be more reflective of the benefits each is receiving. In the case of forestlands a case can be made that the implied inequity is especially egregious since, as previously noted, such lands typically provide many public benefits – e.g., clean air and water, scenic amenities, and recreational opportunities – for which landowners are not normally compensated (Northeast State Foresters Association, 2000). However, the opportunity to draw conclusions about this matter is complicated by the fact that, without further inquiry, it’s unclear to what extent the findings of the reported studies reflect situations where forest other open space lands were being taxed on the basis of their current use as opposed to their fair market values. It may be that where rural lands are being taxed on the basis of their current use values, COCS studies would yield revenue-to-cost ratios closer to 1.00:1.00.

### **Some Concluding Thoughts:**

In thinking about actions that the Forest Service might take with regard to property taxes and how they may be contributing to, or could be used to help solve, the problem of development displacing forest and other open space lands – it’s important to recognize up-front that the

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<sup>22</sup> The COCS methodology was developed by the American Farmland Trust in the mid-1980s to provide local community planners with a tool they could use to gain a better understanding of how growth might impact their community’s financial bottomline. The methodology is fairly simple and inexpensive to apply, but care must be exercised to obtain reliable figures.

federal government's role in this arena is limited. The Constitution gives the states control over land use issues, and property tax policies are also controlled at the state and local level. Furthermore, it's appropriate to note that many would question whether there is really a problem here that requires some form of government intervention to solve. As one observer put it:

“Some view these issues as the collective result of countless rational individual decisions – the marketplace at work – and see very little, if any, need for government interference, especially at the federal level” (Zinn, 2001).

To its credit, the Agency's actions to date in response to former Chief Bosworth's efforts to highlight “fragmentation and conversion” as a major “threat” to the Nation's forests – e.g., its “Cooperating Across Boundaries” initiative (Harper and Crow, 2006), and the “Open Space Conservation Strategy” now under development (Harper, 2007) – indicate a high level of sensitivity to these legal and political realities. Additionally, both documents suggest that the Agency's focus should be on trying to help state and local governments manage low-density development of forestlands away from existing metropolitan areas – and not on trying to stem the conversion of forestlands in the urban fringe. This priority seems appropriate, and in terms of using the property tax as a tool to help conserve forestlands – the information presented in this paper strongly suggests that it is only in such outlying areas, where development pressures have not yet grown too strong, that there is any chance of success.

Through initiatives such as those mentioned above, the Forest Service is already doing a great deal to help conserve America's remaining private forests – and it has plans to do even more. All Deputy Area's are involved, but especially S&PF and R&D. A multi-faceted approach to the challenge is being taken – i.e., an approach that entails cooperation and collaboration, information sharing, and sometimes financial assistance – and this is exactly what's needed because property tax policies are only a small part of the solution to this problem. While no attempt will be made here to enumerate the many activities the Agency is presently engaged in since this has already been done in the aforementioned documents – it is appropriate to highlight some existing activities that relate specifically to property taxes.

- The Southern Research Station has for many years had a research unit that has studied the impacts of tax policies on private forestry investments. All types of tax policies have been investigated, including income and estate taxes as well as property taxes. Over the years, the results of these inquiries have been transferred to private forest owners through the joint efforts of the R&D and S&PF Deputy Areas.
- The Forest Service has helped to develop and maintain the website [www.timbertax.org](http://www.timbertax.org). This website, which is hosted by Purdue University, contains a wealth of information about income and estate taxes, as well as property taxes. Users specifically interested in property taxes may follow links that will take them to state supported websites where even more detailed information is available.

In closing, it is perhaps appropriate to re-emphasize a point that was made earlier – namely that property tax policies are only part of the solution to the problem of protecting forest and other open space lands. State and local governments have at their disposal an array of other tools they

can also use to address this concern; these tools include fee simple acquisition, development rights acquisition (i.e., conservation easements), transferable development rights, agricultural and forestal zoning, and agricultural and forestal districting.<sup>23</sup> In a somewhat different vein, the creation of markets for various ecosystem services – e.g., carbon sequestration and water quality protection – could also prove helpful. In some settings these other mechanisms might provide a better vehicle for state and local governments to achieve their forest and open space land conservation objectives.

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<sup>23</sup>While it is now somewhat dated, the pros and cons of these various policy options are briefly discussed in the following publication:

- Hickman, Clifford A. 1987. “Preserving Rural Lands: Legislative Strategies to Curb Excessive Conversion.” *Journal of Forestry* 85(3): 31-35.

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