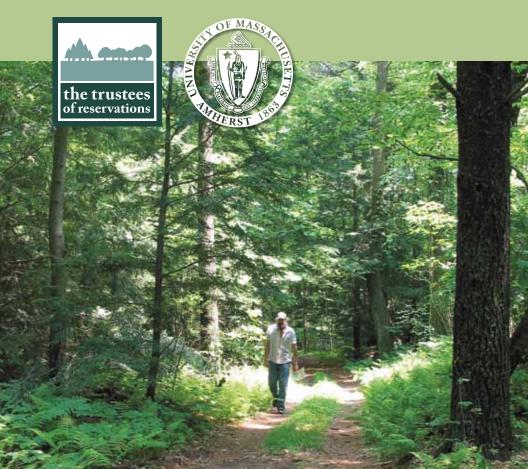
Running the Numbers

on Forest Conservation Tools





As a landowner, you may be interested in keeping your land in its natural state but face financial pressure from local property taxes. There are several ways landowners can offset this carrying cost of owning woodlands: by increasing revenue, by reducing property taxes, or both – all while keeping your land undeveloped.

Three common forest conservation "tools" for helping landowners continue to own and keep their land undeveloped include managing forest for long-term income from the sale of timber; enrolling in one of the state's Ch. 61, Ch. 61A, or Ch. 61B current use programs to reduce property taxes; and selling or donating a conservation restriction on some or all of your land. These tools can be used separately or in combination to help relieve some of the financial pressures of land ownership.

Using one or more of these options may help you save money and conserve your woodland. Understanding how these options might affect your finances can help you make an informed decision that meets your financial needs and personal goals for your land. This publication explores the financial outcomes of choosing one or more of these forest conservation tools and details where you can find more information. You've got to "run the numbers"!

RUNNING THE NUMBERS

A recent study compared the financial impacts of paying full property taxes to the use of different forest conservation tools. The options studied include the following:

- 1. Default option: Do nothing, pay full property taxes.
- 2. Harvest timber to produce income, pay full property taxes.
- 3. Enroll in Ch. 61 to reduce property taxes, harvest timber to produce income.
- 4. Enroll in Ch. 61B to reduce property taxes, no timber harvests.
- 5. Sell a conservation restriction, pay reduced property taxes.
- 6. Enroll in Ch. 61 to reduce property taxes, harvest timber to produce income, and sell a conservation restriction.

Decisions that you make as a landowner today have financial impacts well into the future. A Net Present Value (NPV) analysis compares the various alternatives and tells you what the future financial impacts of your decisions are worth in today's dollars (2008), allowing you to accurately compare the financial impacts of the various alternatives. It is important to note that the results from NPV analysis include income (e.g., money from a timber harvest) and reduced expenses (e.g., property tax reduction from enrolling in Ch. 61). This publication shows the financial impacts of the alternatives over a 30-year period in today's dollars.

The analysis of each scenario was run for four hypothetical properties of different sizes. This enables you to find financial values that most closely match your own property size. Because the value of large properties can vary considerably, two large (150-acre) properties, with high- and low-assessed property values, were included. The analysis only looked at "raw," undeveloped land. Houses and out buildings were not included in the analysis.

The analysis was done in the Deerfield River Watershed in western Massachusetts. The numbers will be most accurate for those areas that share a similar forest cover, growing sites, property values, tax rates, and current use per-acre valuations.



DEFAULT OPTION I:

DO NOTHING, PAY FULL PROPERTY TAXES.

Your land's property taxes under standard assessment are based on its "highest and best use." Typically, this means your land is being assessed for its development potential (e.g., how much road frontage it has for building lots). The numbers below are an estimate of what a landowner may expect to pay in property taxes over 30 years, and are the basis for the 'Net Financial Impact' comparison in all of the following tables.

TABLE 1: Estimated full property taxes paid over 30-year period in 2008 dollars						
PROPERTY SIZE	I5 ACRE	30 ACRE	60 ACRE	I50 ACRE low assessed value	150 ACRE high assessed value	
PROPERTY TAXES	-\$25,109	-\$38,449	-\$53,360	-\$55,667	-\$100,301	

OPTION 2:

HARVEST TIMBER TO PRODUCE INCOME, PAY FULL PROPERTY TAXES.

Timber harvests allow landowners the opportunity to produce income from their woods. The analysis estimated the amount of income a landowner may expect from long-term, sustainable timber management. The timber management analysis included three timber harvests over the 30-year period. The first two harvests concentrated on removing low-quality, low-value species from the woods in order to improve the quantity of high-quality timber over time. Since not every acre of land can be managed because of wetlands or steep slopes, we have reduced the amount of manageable land in each property by 7 percent.

The analysis did adjust timber income to reflect the use of a licensed forester in setting up and running the harvest. Taxes on the income from timber have not been included. Even though the table below shows timber revenue on the 15- and 30-acre properties, the feasibility of timber management on these properties may be marginal because the volume of timber available on small properties may not be cost-effective for loggers to purchase and operate efficiently.

TABLE 2: Estimated income from timber harvests over 30 years, shown in 2008 dollars, compared to full property taxes

PROPERTY SIZE	I5 ACRE	30 ACRE	60 ACRE	I50 ACRE low assessed value	150 ACRE high assessed value
TIMBER INCOME	\$5,888	\$11,776	\$23,553	\$58,882	\$58,882
TAX SAVINGS	\$0	\$0	\$0	\$0	\$0
TOTAL NET PRESENT VALUE	\$5,888	\$11,776	\$23,553	\$58,882	\$58,882
NET FINANCIAL IMPACT*	-\$19,221	-\$26,673	-\$29,807	\$3,215	-\$41,419

^{*}Net Present Value minus Full Property Taxes



OPTION 3:

ENROLL IN CH.61 TO REDUCE PROPERTY TAXES, HARVEST TIMBER TO PRODUCE INCOME.

As noted in the default option – "do nothing, pay full property taxes" – your land's valuation is based on its development potential. For landowners interested in keeping their land in its current undeveloped use, the state offers the Ch. 61 program. Ch. 61 reduces your land's valuation to reflect its value for growing timber instead of houses. This reduction in the assessed valuation results in a savings in property taxes.

One of the requirements of the Ch. 61 current use program is long-term, sustainable timber management based on a state-approved management plan that must be renewed every 10 years. To be eligible for the Ch. 61 program, your land must be a minimum of 10 contiguous wooded acres. For more information about the Ch. 61 program, including a calculator to determine your taxes under the program, visit www.masswoods.net.

The numbers in the following table estimate your property tax savings under the Ch. 61 program and also include the estimated income from the

long-term, sustainable timber management required under the program. The costs for the development of the management plans required to enroll in the Ch. 61 program and renew the certification every 10 years have been deducted from the timber income.

TABLE 3:
Estimated property tax savings from enrollment in the Ch. 61 program and estimated income from timber management over 30 years, shown in 2008 dollars, compared to estimated full property taxes

PROPERTY SIZE	15 ACRE	30 ACRE	60 ACRE	I50 ACRE low	I50 ACRE high
TIMBER INCOME	\$4,618	\$10,506	\$21,805	\$55,338	\$55,338
CH. 61 TAX SAVINGS	\$24,093	\$36,417	\$49,295	\$45,505	\$90,139
TOTAL NET PRESENT VALUE	\$28,711	\$46,923	\$71,100	\$100,843	\$145,477
NET FINANCIAL IMPACT*	\$3,602	\$8,474	\$17,740	\$45,176	\$45,176

^{*}Net Present Value minus Full Property Taxes



OPTION 4:

ENROLL IN CH. 61B TO REDUCE PROPERTY TAXES, NO TIMBER HARVESTS.

Landowners who are not comfortable with the Ch. 61 requirements to develop a forest management plan and actively manage timber, or who prefer a more passive approach to their land, have the option of enrolling in the Ch. 61B current use program. The Ch. 61B program, run by your local assessor, provides landowners with a 75 percent reduction in assessed valuation, resulting in lower property taxes in exchange for agreeing to keep their land undeveloped. Because timber management is allowed but not a requirement, the revenues of a timber sale have not been included. For more information about the Ch. 61B program, including a calculator to determine your taxes under the program, visit www.masswoods.net.

The numbers below are an estimate of property taxes based on enrollment in the Ch. 61B current use program.

TABLE 4: Enroll in Ch. 61B, no timber harvests						
PROPERTY SIZE	I5 ACRE	30 ACRE	60 ACRE	I50 ACRE low	I50 ACRE high	
CH. 61B TAX SAVINGS	\$18,832	\$28,837	\$40,020	\$41,750	\$75,226	
TIMBER INCOME	\$0	\$0	\$0	\$0	\$0	
TOTAL NET PRESENT VALUE	\$18,832	\$28,837	\$40,020	\$41,750	\$75,226	
NET FINANCIAL IMPACT*	-\$6,277	-\$9,612	-\$13,340	-\$13,917	-\$25,075	

^{*}Net Present Value minus Full Property Taxes



OPTION 5:

SELL A CONSERVATION RESTRICTION, PAY REDUCED PROPERTY TAXES.

A conservation restriction (CR) is a legal agreement between the landowner and a conservation organization that extinguishes the development rights of the land forever, but does not alter the ownership of the land. A CR can be placed on all or part of your land. It can be written to allow forest management and agriculture. Public access is optional.

The financial value of a CR is the difference between the value of your land with and without its development rights. A CR can be donated, which provides income tax benefits; sold as a source of income; or sold for a bargain price, providing some tax benefits and some income. Your financial situation and the ecological value of the land will help determine the best option. For more information about a CR, visit www.masswoods.net.

The analysis assumes that the CR has been sold. Taxes on this income have not been included. Since a CR does not allow development, property taxes have been reduced to reflect the reduced development potential. The degree to which property taxes are reduced is decided by town assessors and, thus, varies town by town. Check with your local assessor for specifics regarding your town.

TABLE 5:
Estimated value for the sale of a CR and the property tax savings over a 30-year period, shown in 2008 dollars, compared to full property taxes

PROPERTY SIZE	15 ACRE	30 ACRE	60 ACRE	150 ACRE low	150 ACRE high
INCOME FROM SALE OF A CR	\$42,873	\$65,652	\$91,113	\$95,052	\$171,264
TAX SAVINGS DUE TO CR	\$19,712	\$28,792	\$36,322	\$20,585	\$60,906
TOTAL NET PRESENT VALUE	\$62,585	\$94,444	\$127,435	\$115,637	\$232,170
NET FINANCIAL IMPACT*	\$37,476	\$55,995	\$74,075	\$59,970	\$131,869

^{*}Net Present Value minus Full Property Taxes

OPTION 6:

ENROLL IN CH. 61 TO REDUCE PROPERTY TAXES, HARVEST TIMBER TO PRODUCE INCOME, AND SELL A CONSERVATION RESTRICTION.

These forest conservation tools can be used separately or in combination. The table below shows the financial impact when several of the tools that have already been described are used in combination.

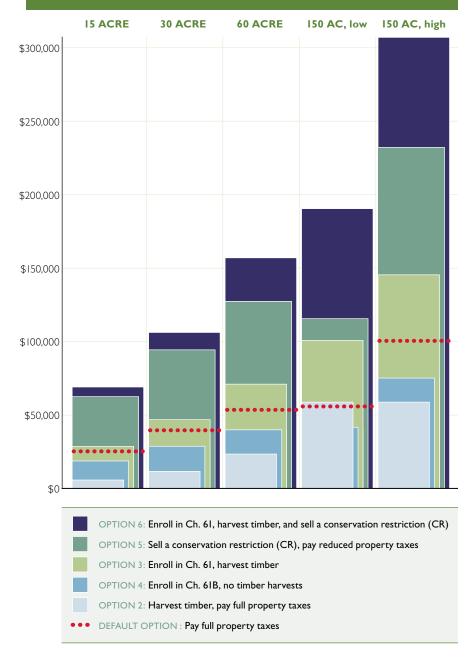
TABLE 6:
Estimated income from timber management and sale of a CR and tax savings from Ch. 61 enrollment over a 30-year period shown in 2008 dollars, compared to full property taxes

PROPERTY SIZE	I5 ACRE	30 ACRE	60 ACRE	I50 ACRE low	I50 ACRE high
TIMBER INCOME	\$4,618	\$10,506	\$21,805	\$55,338	\$58,882
CH. 61 TAX SAVINGS	\$21,667	\$30,106	\$44,137	\$40,125	\$80,445
INCOME FROM SALE OF A CR	\$42,873	\$65,652	\$91,113	\$95,052	\$171,264
TOTAL NET PRESENT VALUE	\$69,158	\$106,264	\$157,055	\$190,515	\$310,591
NET FINANCIAL IMPACT*	\$44,049	\$67,815	\$103,695	\$134,848	\$210,290

^{*}Net Present Value minus Full Property Taxes



TABLE 7:
Summary comparison of total Net Present Value (NPV) of the 6 options



THE RIGHT TOOL FOR THE RIGHT JOB

Each landowner's financial circumstances and personal goals are different. Making an informed decision about the future of your land means understanding each option described above. Choose the forest conservation tool(s) that best fit your goals for your property and your financial needs. Doing so will ensure continued enjoyment from your land for you and your family.

There are people working in your town and region to help you evaluate your options and make an informed decision. They can give you more details and contact information for local organizations and professionals. To find them, consult these resources:

- "Your Land, Your Choices: A Landowner's Guide to Critical Decisions in Land Management and Protection." To download a PDF document, visit the library page of www.highlandcommunities.org. To request a hard copy, contact the Highland Communities Initiative at 413.268.8219 or highlands@ttor.org.
- MassWoods (www.masswoods.net), the UMass Extension Forest Conservation Program web site, for information on selling timber, the results of the quarterly Southern New England Stumpage Price Survey, Ch. 61, Ch. 61B, conservation restrictions, and to find a forester or land trust in your town that can help you evaluate your options.
- "Economic Viability of Ownerships in the Deerfield River Watershed," the study that produced the numbers used in this publication. Visit www.masswoods.net/images/stories/pdf/economic_viability_ drw_ownerships.pdf

ACKNOWI FDGMENTS

New England Forestry Foundation;

Anthony D'Amato, University of Minnesota;

David Damery, University of Massachusetts;

Kristina Ferrare, University of New Hampshire Cooperative Extension;

David Kittredge, University of Massachusetts





THE HIGHLAND COMMUNITIES INITIATIVE

A program of The Trustees of Reservations, the Highland Communities Initiative is a group of neighbors and volunteers working to enhance the quality of life and rural character of our communities. HCI connects people and provides them with the information and support they need to preserve the special natural and cultural landscapes of the Highlands region.

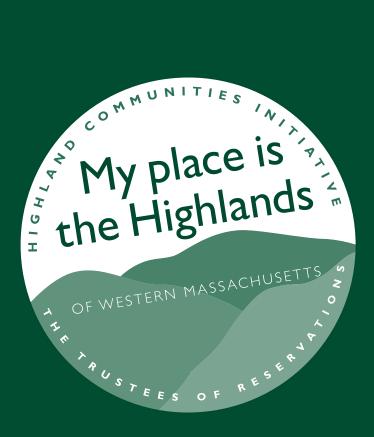
www.highlandcommunities.org

THE TRUSTEES OF RESERVATIONS

We are more than 100,000 people like you who want to protect the places we love, secure our landscapes and landmarks for future generations, or simply like getting outdoors.

Together with our neighbors, we protect the distinct character of our communities and inspire a commitment to special places across the Commonwealth. Our passion is to share with everyone the irreplaceable natural and cultural treasures that we care for, because of their value to our lives every day.

www.thetrustees.org



PO Box 253, 132 Main Street
Haydenville, MA 01039
www.highlandcommunities.org