

Land Use Change Drives Forest Legacy Program

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Population and extensive land use are driving changes in forestry. Federal programs are changing to address the loss of environmentally important forest land. This presentation focuses on the use of Working Forest Conservation Easements and land acquisition through the Forest Legacy Program to continue traditional forest management practices on lands threatened to conversion to non forest use. Land Use, Forest Loss, Forest Legacy Program

After European settlement, forests were cleared for agriculture and those land use alterations influenced today's forests in terms of forest structure, function and loss of soil from erosion. Reforestation and fire control were the urgent issues at the turn of the 20th Century, resulting in massive reforestation programs (CCC, Soil Bank) and the creation of state forestry agencies. In the South starting around the 1950's, pine plantation management and intensive production forestry dominated our forestry landscape. Discussions of wood supplies, sustained yield models, and genetically improved stock dominated forestry meetings. These days we often find ourselves discussing the impacts of timber harvesting and development of forest land for urban uses.

What is driving this change? In a word, it is driven by population. Obviously the number of people born in this country exceeds the numbers who die, and in addition we are experiencing immigration from other countries. We are increasing the number of people in the country by about 2.6 million per year (about 800,000 are immigrants) and according to Census projections, we will increase our population by 50% in the next 50 years to a whopping 394 million people. That's nearly 100 million more people than we have today.

We have gone from 4.5 people per square mile in 1790 to 80 people per square mile in 2004. And we have reduced the number of people per household; in 1970 we averaged 3.14 people per household, in 2003 that trend continued down with 2.57 people per household. Simply put, there are more of us and we use more land.

So where do we live? And what are the impacts of expanding populations on forestry?

When we look at population density we see that more people live in the east, and most want to live on the coast or in the mountains. And as more people buy more of the land, it ends up in smaller ownerships. Now we have a category of forest landowner called "the residential Forest owner", who owns less than 10 acres and effectively do not practice forestry. These owners comprise 7% of the forest acres, and that number is growing.

There have been a number of studies and projections regarding where our ever increasing population is changing land use, and another session will cover a recent study (Forests on the Edge).

We may know how to manage forest land, but if manageable forest land is not available, that skill is of little value. The pattern of forest land loss is more significant than the total number of acres being "paved over". Breaking up ownerships and selling off pieces has consequences. Wildlife habitats become disconnected making movements of plants and animals difficult. Forestry operations become less economical, making forestry economically marginal as a land use option.

And then there are the new neighbors, who have different values and who may not see the beauty of a good clean clearcut, or understand the role of fire in a longleaf pine

ecosystem. And these new neighbors and forest users who want to hike, bird watch, canoe, camp, and even drive off road vehicles.

So many changes are happening at a rapid pace. What can be done to keep our private forest lands working?

One program that was created because of land use change is the Forest Legacy Program. And it certainly is not the complete answer; it's just an indication of the way the practice of forestry is being driven by land use change.

The Forest Legacy Program can provide federal funding for up to 75 percent of the cost of conservation easements or fee acquisition of forestlands threatened with conversion to non-forest uses. Prompted primarily by threats to northeastern forests, the program, established in 1990, was initially restricted to Maine, Vermont, New Hampshire, New York, and Washington State, but is now potentially open to any state with threatened forestland. The Forest Legacy Program is entirely voluntary; states choose whether or not to participate and landowners choose whether or not to participate. Participating landowners are required to have a Forest Stewardship Management Plan or a multiple resource management plan.

Over 1 million acres have been protected from conversion to non forest use through the Forest Legacy Program to date. The average tract size is about 3,900 acres, with a range from 4 acres to 218,547 acres (median 300 acres). The average Forest Legacy conservation easement is 4,700 acres, and the average full fee purchase is 1,750 acres.

Table 1: Forest Legacy Accomplishments by State

State	Tracts	Acres	Total Cost	FLP Contribution
Connecticut	14	6,789	\$7,723,554	\$4,479,378
Delaware	2	1,356	\$7,830,000	\$3,969,000
Illinois	7	392	\$1,668,898	\$1,196,174
Indiana	10	3,737	\$4,902,500	\$3,764,300
Iowa	4	452	\$872,075	\$587,376
Maine	16	403,795	\$57,683,205	\$32,763,145
Maryland	7	1,247	\$3,033,000	\$1,358,000
Massachusetts	17	2,999	\$12,268,332	\$5,214,850
Minnesota	17	1,171	\$3,436,800	\$2,179,950
New Hampshire	25	204,110	\$34,347,497	\$22,865,072
New Jersey	5	2,597	\$14,003,000	\$2,262,000
New York	6	1,555	\$4,773,400	\$2,403,400
Rhode Island	10	1,458	\$3,732,000	\$2,344,000
Vermont	16	54,450	\$10,694,272	\$9,834,000
Wisconsin	13	36,009	\$14,202,790	\$5,713,561
Alabama	2	1,799	\$5,318,667	\$3,463,412

Florida	1	1,671	\$3,843,000	\$493,000
Georgia	3	2,896	\$5,798,000	\$4,573,000
North Carolina	7	6,490	\$16,894,575	\$8,495,269
Puerto Rico	9	1,429	\$1,576,875	\$791,700
South Carolina	8	30,683	\$39,225,949	\$23,789,467
Tennessee	12	18,283	\$23,812,800	\$14,149,335
Virginia	4	3,866	\$5,875,000	\$4,115,000
Alaska	2	362	\$507,000	\$373,500
California	5	4,982	\$9,953,000	\$1,495,731
Colorado	2	541	\$3,966,000	\$2,390,000
Hawaii	2	4,000	\$3,310,000	\$2,745,000
Idaho	2	25,860	\$5,266,576	\$3,954,000
Montana	9	154,579	\$42,191,970	\$20,109,533
New Mexico	1	132	\$654,000	\$352,318
Utah	20	47,967	\$42,102,586	\$14,716,911
Washington	22	13,260	\$44,332,044	\$14,935,429
TOTAL	280	1,040,917	\$435,799,365	\$221,876,811

A State joins the Forest Legacy Program if and when its governor designates a lead agency. Forty-three States and territories are currently in the Forest Legacy Program. Typically the governor designates the State Forestry agency, but the law allows for any natural resource agency to be the State lead agency, and that is the case in Montana, South Carolina, Maine and Alaska.

The State lead agency then becomes the contact point for the USDA Forest Service. Federal grant funds help support the development of an Assessment of Need (AON), a statewide plan that identifies the threats of conversion to non-forest uses facing private forests, and also identify the location of its environmentally important private forests. This AON plan is based on existing data, public participation, and analysis. Typically the planning process takes about a year. Once the AON is approved, the State is eligible for additional funds to purchase land or interests in land consistent with their AON goals and objectives. The AON identifies specific Forest Legacy Areas where the program will operate and all Forest Legacy projects are located in these Forest Legacy Areas.

The State lead agency is responsible for administering the program, identifying potential projects, completing baseline documentation and monitoring conservation easements. Most states use the state grant option whereby they receive Federal funds from the Forest Service in a grant and then undertake the real estate transaction and accept title in the name of the State. The other option is for the Forest Service to undertake the transaction in the name of the United States, as is the case in Hawaii. In either case there is a requirement for a Forest Legacy match of at least 25% non-Federal value. These grants aren't block grants; rather they are specific to Forest Legacy projects as approved by Congress, and are matched with nonfederal dollars on a project-by-project basis.

The other important entity with a statutory role in the Forest Legacy Program is the State Forest Stewardship Coordinating Committee, chaired by the State Forester. The committee is involved in developing the AON and in setting project priorities. This is the case even if the State lead agency is not the State Forester.

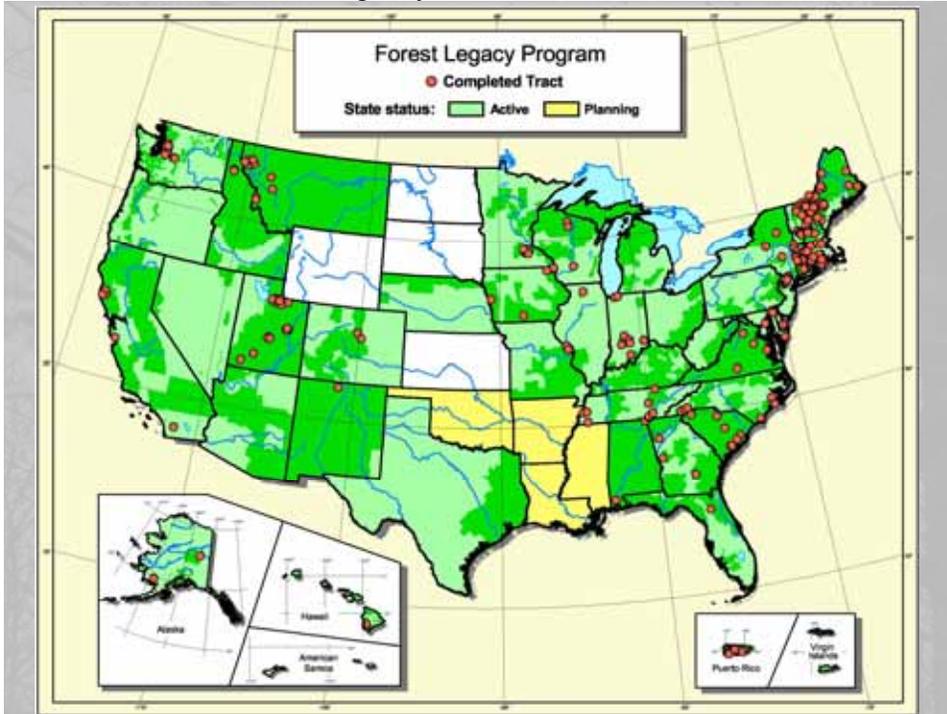


Figure 1: States participating in Forest Legacy Program

Of the 43 states or territories that have chosen to participate in the Forest Legacy Program, 38 states have received Forest Legacy funds to purchase lands or interests in lands (conservation easements).

Table 2: States completing Forest Legacy acquisitions by geographic region

Region	# of states	Tracts	Acres	Total Cost	FLP Contribution
North	15	169	722,117	\$181,171,323	\$100,934,206
South	8	46	67,117	\$102,344,866	\$59,870,183
West	9	65	251,683	\$152,283,176	\$61,072,422
	32	280	1,040,917	\$435,799,365	\$221,876,811

The Forest Legacy program allows for 3 types of real estate transactions. Forest lands can be purchased in fee simple, through the use of a conservation easement, or through the use of a Reserve Interest Deed. The Reserve Interest Deed method has not been utilized to date.

Of the closed projects nationwide 87% of the acres were conservation easements and of the funded projects, 80% are proposed as conservation easements. Breaking this down

by geographic region (North, South, and West), there was little change in the North; closed projects were 88% conservation easement and funded projects are to be 86%. There was some change in the West, going from 97% of the acres purchased with conservation easements on closed projects to 72% with one very large 25,000 acre fee simple purchase proposed in Hawaii. The story was different in the South. For closed projects only 39% used conservation easements and this trend continues downward to 10% for funded projects. That is to say, the trend is for more fee simple acquisition in the South than in any other part of the country.

Of the 280 completed tracts, only 3 were less than 10 acres and all of those tracts were purchased fee simple. 76 tracts were between 10 and 100 acres and 75% (57 tracts) were conservation easements. 114 tracts were medium forest owners (100 to 1000 acres) with 73 of them held by conservation easement or about 2/3. 87 tracts were more than 1000 acres with 75% (65 tracts) protected with conservation easements.

For those landowners who sold or are going to sell lands or interests in lands in the South, the majority of these cases are forest industries who are primarily interested in selling most of their forest land in fee simple to the States. All transactions with land trusts in the South have been fee simple, and in most of these cases the land trust purchased forest land from forest industry and then sold it to the state (3rd party transaction).

Forest industry did place conservation easements on 11,897 acres in the South while selling 42,740 acres in fee (either directly or through a 3rd party transaction) over the last 5 years. These conservation easements all involved some public use primarily for educational purposes. All of these Forest Industry conservation easements were along major rivers and allowed controlled, limited public recreation activities. Industrial landowners retained all forest management rights, hunting leases, cabin leases, and the rights to conduct forest research. Development rights were extinguished except for any reservations for educational structures. Best Management Practices (BMPs) and forest management plans are required.

Table 3: Percent of Forest Legacy fee simple and conservation acquisitions by ownership type in the South

Type of Ownership	Percent of fee simple acres	Percent of conservation easement acres
Industrial/Developer	35	10
Foundation	1	2
Land Trust	16	0
Family Trust	13	0
Non Industrial Private Forest Landowner	10	13

The same basic program requirements apply to other landowners selling a conservation easement using Forest Legacy funds. All must have a Forest Stewardship or multiple resource management plans. The plan is to be updated every 10 years at a minimum. All Forest Legacy conservation easements have a reversion clause that requires the State to “make the federal government whole” should the property be condemned. This can be done either by the State purchasing another property with similar conservation values or by the State returning the money invested.

The following rights are typically restricted; the right to subdivide, the right to build structures, the right to mine, and the right to deposit waste or fill. Typically the landowner reserves forest management rights and access rights. Other items such as future family burial plots are negotiated individually and are unique to those easements.

Specific restrictions on forest management practices differ by state. For example, a Forest Legacy conservation easement in Tennessee restricts clearcut size and requires reforestation. In Virginia Forest Legacy conservation easement holders are required to notify the Department of Forestry 30 days prior to the start of any material forest activity. Georgia requires compliance to the Forest Stewardship Plan. Each State Attorney’s office is involved in the drafting of these easements to assure they comply with state law. The State monitors and enforces these easements.

Given the rapid rate of change in land use, the use of conservation easements and acquisition of important forest lands will need to continue if we are to keep intact forest lands to supply timber products, wildlife habitat, soil and watershed protection, and recreational opportunities. While local governments can guide development using traditional land use tools such as zoning and performance standards, these measures are sometimes not sufficient to fully protect the forested component.

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