## Report: Future development threatens Mass. forests

By STEVE LeBLANC / Associated Press / December 11, 2013

BOSTON (AP) — The ongoing loss of forests to human development, if left unchecked, will undermine land conservation gains in the state, threaten its water quality and limit the ability of the natural landscape to offer protections from the harsher consequences of climate change, a new report says.

The two-year study, set to be released Wednesday by Harvard University and the Smithsonian Institution, projected how the state's forests could change over 50 years under four scenarios, ranging from one looking at what would happen if current patterns of development continued unabated to another in which forests are actively managed and protected from development.

The researchers used computers to look at the state acre by acre and model changes over the 50-year stretch for each of the four scenarios. The models took into account the effect on forests of contrasting patterns and intensities of development, wood harvesting, conservation and agriculture.

The study's lead author, Jonathan Thompson, a senior ecologist at Harvard Forest, the university's ecological research laboratory, said the study is the first of its kind for an entire state.

He said Massachusetts is a good place to study because it is densely populated, is heavily forested and is experiencing rapid change like most of the forested landscape of the eastern United States.

"The results of the study show that sprawl, coupled with a permanent loss of forest cover in Massachusetts, creates an urgent need to address land use choices," Thompson said.

The study looked at two other possible scenarios for the future of Massachusetts forests: One reflected rapid economic growth and new development with few regulatory controls, and the other reflected growing energy demand and soaring food prices driving up interest in biomass harvesting for energy and clearing of forests for agricultural production.

The study concluded that the scenario under which forests are actively managed and protected from development has the best projected outcomes for people and nature over the 50-year span, which projects out to 2060.

That scenario also results in improved timber harvesting methods and more clustered human development, which would leave more unfragmented swathes of forests, providing better habitat for wildlife. The study says that scenario also would result in the growth of more high-value trees such as large oak, sugar maple and white pine while increasing the storage of carbon.

Kathy Fallon Lambert, science and policy project director for Harvard Forest, said the study also has policy implications in Massachusetts.

Lambert said an investment of \$50 million per year for land conservation in the state's environmental bond bill would support land conservation at or above levels achieved over the past eight years and help provide protections for forests. She said the results of the study also support changes in zoning codes that encourage denser housing development located near transit hubs.

Lambert said forests are more than just collections of trees — they are also key to the state's natural and economic future and critical to grappling with the challenges of a changing climate.

"We're moving from the study phase of climate change to adapting to that change," she said.

From: <a href="http://www.boston.com/news/local/massachusetts/2013/12/11/report-future-development-threatens-mass-forests/h4egnSa4ZeuCkzsPsPvFhP/story.html">http://www.boston.com/news/local/massachusetts/2013/12/11/report-future-development-threatens-mass-forests/h4egnSa4ZeuCkzsPsPvFhP/story.html</a>

<sup>&</sup>quot;Forests are really important."