Ms. Meserve, DOER

I would like to add some comments on biomass energy. First of all, I would like to add some weight to the comments by Mike Leonard, who is one of my competitors. He sent in several pages, and I concur with his comments entirely. Rather than duplicate his efforts, I will add a few other thoughts.

Forestry is a lot like gardening. To grow the good trees to full maturity, we have to weed out the garden. In forestry, these trees of less potential (I'll call them weeds, but some are offended by that) need to be removed so the better trees have the room they need to grow and be healthy. Furthermore, when the forest matures, it is imperative to remove weed trees, along with mature crop trees, to properly regenerate the next forest. With poor markets for low grade wood in Massachusetts, it is common practice to harvest large, mature trees like oak and pine, and "leave the smaller trees to grow". These smaller trees are less vigorous (especially if they are the same age) and are often inferior species like red maple and hemlock. Yes, many will survive and grow. But the forest has been degraded. This is highlighted in the Harvard Forest study Mr Leonard references.

Th other important concept I would like to mention, which is not well referenced in most other discussions on the topic, is the rate of tree mortality in Massachusetts. I have researched this carefully in Vermont, and the rate of mortality has increased 300% in about 30-40 years. In Vermont, forest harvesting is done at about 40-50% of the growth rate.
So the growth has finally exceeded the carrying capacity of the forest.
Since harvesting in Mass is only about 15-25% of the growth rate, and "high-grading" is more common, I would conclude that the mortality has probably increased as much or more in Massachusetts. With a half-ton or more mortality per acre per year (with some more time I could have USFS data on this) all this wood is decaying and releasing its carbon into the atmosphere. I do not believe any of the recent studies, including Manomet, have taken this trend into account. This is part of the "silvicultural debt" referenced by Mr Leonard. The forests are not really in good shape. They look nice and full from the highway, but they are "too full". So a significant portion of your annual growth merely rots.

Reducing harvesting overall will not fix this.
Harvesting more or fewer sawlogs will not fix this.
Small scale processing for pellets, firewood, or chips for thermal use will have little or no impact.
Large scale pulp mills (several) would have an impact, but are as likely as pigs flight.
Large scale biomass for electricity really is the best solution for this forestry problem

I can further enumerate the economic and ecological benefits of larger scale biomass. From a carbon accounting perspective, this increased mortality is a critical portion. Manomet has been a poor study to base forest and energy policy and I urge you to look at other sources. I just looked up th USFS data for 2014 (most recent) which shows annual mortality of growing stock (this does not count cull trees) of over 49 million cubic feet. Divided by 85 ft3 per cord is 588,000

cords per year. Dying and rotting. In 2006, it was 29 million cubic feet. So it has nearly doubled for you in 8 years. Look into this.
Yours,
Robbo Holleran
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