

Windham Wood Heat Initiative (WWHI)

Summary of Conclusions about Wood Supply and Important Points Regarding Wood and Pellet Supply

- To verify that there is a sustainable wood fuel supply for projects supported through WWHI, we conducted a thorough analysis of wood growth, use, and net wood availability for Windham County and the six VT, NH and MA counties that immediately surround it. The study was based on the most recent information available through state and federal sources. Its key conclusions:
 - The seven-county (see map at right) wood supply area contains over 2.2 million acres of timberland, over 80% of which is privately owned.
 - It is anticipated that the 20 schools and municipal buildings that WWHI seeks to convert to advanced wood heating may use, at most, some **8,000 green tons** of wood fuel per year.
 - Should the WWHI be successful in reaching its goal, our analysis indicates that there is ample additional supply of low grade wood resource available.
 - Our conservative analysis shows that **252,000 to 578,000 green tons** are currently available in the Region each year. This is annual forest growth net of current demand from other uses.
 - A series of computer model runs suggest **589,000 to 982,000 green tons** will be available annually in the year 2035 – much larger volumes than today - because the forests of the seven-county region are growing much more wood than is being used each year.
 - Other studies have reached a similar conclusion, including the Biomass Energy Resource Center, which in 2010 documented that Windham County has the highest net available low-grade wood of any county in Vermont.
- Given the relatively small size of schools and other target facilities in Windham County, it is unlikely that advanced wood heating projects will utilize green wood chips, which tend to be used for larger facilities such as Brattleboro High School and Bellows Falls Middle School.
- Wood fuel could take the form of semi-dry, refined (screened) wood chips that can be used in specialized boilers and may have good application in WWHI projects. This fuel requires air-drying to below 30% moisture content and will take over a year to develop a local supply. This is the most probable way that new WWHI project will directly utilize locally grown and harvested wood.
- Other wood may become feedstock for pellet manufacturing facilities that are within economic trucking distance to Windham County. These include plants in West Windsor VT, N. Clarendon VT, and Jaffrey NH – all three of which currently draw wood in the form of sawmill chips, sawdust, and roundwood chips from forestry thinning operations from within the seven-county area. The West Windsor plant is currently idle but expected to be operating soon.
- All three pellet manufacturers source bulk pellet fuel for school/municipal facilities through a network of distributors with specialized pneumatic and/or mechanical auger trucks. As a matter of policy, these companies consider bulk accounts to be a priority over bagged pellet sales. Despite news accounts of seasonal shortages of bagged pellet fuel in recent years, there have been no shortages of bulk pellet fuel.

