DNR’s Role in Biomass Production and Markets

DNR Mission

As developments in the world of renewable energy progress, it is important to remember that the DNR’s mission is to work with citizens to conserve and manage the state’s natural resources, to provide outdoor recreation opportunities and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life. Providing a sustainable source of biomass and encouraging the use of conservation-based energy sources aligns well with all three components of the DNR’s mission.

Producing Biomass on DNR Lands

DNR plays a key role in developing a conservation-based energy market in Minnesota. DNR has committed to expanding the sustainable woody biomass supply through innovative management and increased assistance to private landowners and to other partners.

As a land manager, DNR generates a significant volume of biomass primarily through commercial timber harvesting on state forest lands; and to a lesser extent, on other DNR administered lands. DNR will serve as a transitional source for conservation-based energy while new processing technologies are implemented and markets develop. DNR also has a role in contributing biomass as a by-product of management on non-forest lands. In particular, brushlands, which are considered to be under managed, may provide a potentially sizable biomass resource. Managing open brush lands for grasses can also provide a certain flow of herbaceous and grass biomass resources.

Setting Standards for Biomass Harvesting

DNR plays a role in setting the standard for best management practices for growing and harvesting biomass. DNR contributed to the Minnesota Forest Resources Council’s development of the nation’s first Woody Biomass Harvesting Guidelines as a foundation for sustainable forest and brush biomass harvesting. On state lands, biomass harvesting is (and must be) consistent with natural resource management goals and must comply with the Biomass Harvesting Guidelines.

Biomass Demonstration Projects

Given that sustainable energy crops have high barriers to adoption and often require demonstration to solicit market acceptance, DNR is in a unique position to experiment, to support research, and to model biomass production options. Some of DNR’s the recent innovations to promote conservation-based energy sources while protecting natural lands include:

- Facilitating the restoration of overgrown prairie, oak savanna and woodlands by removing undesirable woody vegetation and making the vegetation available for conversion to renewable energy.
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- Offering forest residues leftover from timber harvesting on most DNR timber sales. Harvesting forest residue can provide a source of renewable energy and reduce the risk of wildfire.
- Managing prairie harvests on approximately 700 acres of Wildlife Management Areas since 2007 in an effort to explore the feasibility and habitat benefits of using perennial native grasses for fuel.
- Providing leadership by demonstrating a series of pilot biomass harvests in brushlands as a part of open-land management.

Additionally, DNR is harvesting and planting more local native prairie seed on DNR-administered lands to increase the availability of native prairie seed stocks for future prairie reestablishment and biomass fuel production.

Our Role in Influencing the Use of Biomass

DNR’s strategy is to promote conservation of natural lands and ensure a sustainable biomass supply by advancing the development of conservation-based energy sources across the state.

Given that the DNR will not be the dominant supplier of biomass, particularly in the agricultural region of the state, the DNR will work with a range of partners to influence how biomass is grown and procured on non-state lands. Establishing a wide range of partnerships will allow the DNR to work with a multitude of landowners in a manner that promotes conservation-based energy sources consistent with the DNR’s land management goals.

Establishing these essential partnerships will involve appropriate participation in interagency policy forums, providing sound science on resource sustainability, and working with landowners, business and industry, conservation groups and other stakeholders to promote and evaluate alternative approaches to biomass production systems.

DNR also exhibits leadership by providing comments on proposed state and federal legislation and policy in a manner consistent with the central mission of the DNR.

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