

Background

During the past few years, the Sierra Nevada Conservancy (SNC) has been actively addressing the need for forest restoration efforts through its grant program and the Sierra Nevada Forest and Community Initiative (SNFCI). Large damaging fires have been increasing in size and severity and most scientists predict that this will continue under current forest conditions and increasing temperatures. For a variety of reasons, there is currently excess biomass ‘fuel’ (mostly brush and small diameter trees) built up in the forest. One means to reduce large, catastrophic fire is through forest restoration treatments involving removal of biomass.

Developing markets for the utilization of biomass is important to provide financial support for forest treatment and more specifically fuel reduction at the scale necessary to reduce fire size and severity. In many instances the costs of collection, processing, and transport of biomass is prohibitive, resulting in other means of disposal – such as piling and burning – or restoration projects not being accomplished. Recent state planning efforts and policies support the use of biomass to create renewable energy while at the same time protecting the state’s valuable forests, and the region’s communities, from catastrophic wildfire. Development of additional biomass power generation facilities in the Sierra Nevada Region that utilize forest byproduct will provide a ready market for biomass.

Recently, State policy and planning has focused on supporting small scale facilities distributed in fire threat areas. The 2012 State Bioenergy Action Plan was released in August of last year. This plan, prepared by the Bioenergy Interagency Working Group, acknowledges the benefits of forest biomass, stating:

“Increased utilization of forest biomass residues improves community safety and forest health by offsetting costs of forest restoration, fuel reduction, and forest thinning treatments. These activities reduce wildfire hazards and mitigate wildfire damage to public health and safety, natural resources, infrastructure, and public and private property. Restoration activities can also make forest ecosystems more resilient to the effects of climate change. Community-scale distributed generation facilities using forest biomass residues are important for forest restoration and protection as well as community development. Scaling bioenergy facilities to the community’s resource potential ensures that biomass use is environmentally and economically sustainable. Sustainable development will promote long-term economic and social stability in rural, economically-disadvantaged communities by providing construction, plant operation, and in-forest biomass collection and transportation jobs.”

The 2012 Bioenergy Action Plan includes a broad array of action items related to the promotion of forest bioenergy. The SNC is identified as one of the key responsible agencies for these action items, particularly in assisting forested communities to develop small scale forest bioenergy facilities.

Shortly following the adoption of the Bioenergy Action Plan, legislation requiring large utilities to purchase bioenergy was signed into law. Senate Bill 1122 (Rubio, Chapter 612 Stats. 2012), adds new benchmarks for the development of small scale forest biomass projects. It requires the state's three large investor owned utilities to collectively purchase 50 megawatt (MW) of energy from new small scale (3 MW or less) bioenergy projects using byproduct of sustainable forest management.

Senate Bill 1122 added new urgency to the SNC's responsibilities under the Bioenergy Action Plan by adding an additional 50 MW of forest biomass from a minimum of 16 new facilities in the next 10 years. This will take a concerted and coordinated effort and SNC is prepared to continue playing a lead role in the development of forest bioenergy facilities in the Sierra Nevada Region.

Current Status

SNC Staff is focused on specific tasks to support both the Action Plan and SB 1122 implementation. The California Public Utilities Commission (CPUC) is responsible for implementing SB 1122 and is conducting a formal public process to receive input from various stakeholders on specific implementation issues. SNC staff has submitted written comments as well as attended workshops and meetings to provide verbal comments on these issues. Senate Bill 1122 requires that California Department of Forestry and Fire Protection (CALFIRE) assist CPUC to determine the megawatt allocations based on the amount of forest byproduct derived from sustainable forest management practices. CALFIRE has requested SNC assist with outreach to key stakeholders and to help develop a transparent process that can support consensus with standards to support this determination. SNC and CALFIRE are planning the second workshop to convene stakeholders to develop some common understanding and agreement with this. SNC has provided professional facilitation services for this process through the Sacramento State Center for Collaborative Process.

SNC Staff is also coordinating with up to 12 communities interested in a forest bioenergy facility in their area. Staff has been providing support by identifying funding sources and assisting with funding applications, helping to coordinate outreach efforts to build support for projects, providing technical assistance and funding. There are three communities that are well into the project planning process. These include a 1 MW project in Calaveras County (Wilseyville), which has completed a feasibility study and was recently awarded federal funding for the design and engineering of a facility. A 1 MW facility in Madera County (North Fork), which has completed a feasibility study and is currently engaged in pre-development design/engineering and California Environmental Quality Act (CEQA) documentation. The SNC has been providing assistance to the Wilseyville and North Fork projects, which are both in communities suffering from severe economic conditions. It is intended that these two projects will act as demonstrations for other communities in the Region where forest bioenergy would be both feasible and beneficial.

Additionally, Placer County is pursuing a 2 MW facility and recently adopted the Environmental Impact Report (EIR) and issued the conditional use permit. The County's EIR was appealed by the Center for Biological Diversity (CBD) and SNC Staff assisted the County and other partners to negotiate conditions leading to CBD withdrawing the appeal. More recently, CBD has appealed the environmental report supporting the North Fork project implementation. SNC Staff is now leading a similar negotiation process between Madera County, the project proponents and CBD.

The Action Plan directs SNC to develop community scaled facility criteria to support appropriate sizing and location of facilities. SNC is coordinating with UC Berkeley, CALFIRE and US Forest Service to develop location criteria and a tool to pre-assess the validity of specific locations to support a successful project. This tool will also be used to proactively identify suitable sites for bioenergy facilities.

TSS Consulting was recently retained to provide technical assistance and some policy support to SNC and project partners. SNC remains involved in the Biomass Working Group, which includes representatives from federal and state agencies, forest and energy industries, conservation and community development groups as well as technical experts. The SNC is an active member of the working group and has provided coordination assistance and additional resources for the activities it undertakes. In addition, SNC participates in the State Bioenergy Working Group, led by the Natural Resources Agency and Cal EPA. The purpose of this group is to coordinate several key State agencies to implement the Bioenergy Action Plan. This group meets quarterly in the Governor's office.

Next Steps

Focus areas for the SNC's Forest Bioenergy Team's activities, working with CALFIRE, Forest Service and other partners, over the next year will include:

- Continuing to provide project support for the North Fork and Wilseyville Projects and evaluate and prioritize other projects to lend support to;
- Identifying new funding opportunities and providing grant writing assistance for appropriate funding opportunities;
- Evaluating projects that have completed pre-assessment work as potential candidates for SNC's Healthy Forest grant program;
- Developing the optimal location criteria and tool to identify the most appropriate sites for forest bioenergy;
- Working with CALFIRE to convene stakeholders to develop a common understanding of feedstock from sustainable forest management to support SB 1122 implementation;
- Facilitating efforts to resolve CEQA concerns and other potential project barriers to reach resolution;
- Providing targeted education and assisting in tours for representatives of key agencies, such as the CPUC, the Energy Commission, and the Air Resources Board; and,

- Assisting to develop educational materials and participating in workshops regarding SB 1122 implementation.

Recommendation

This is an informational item only; no formal action is needed by the Board at this time, although Boardmembers are encouraged to share their thoughts and comments.