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INFORMATIONAL HEARING

Tuesday, December 10, 2019
1 p.m. -- State Capitol, Room 447

SUBJECT: Mass Timber and Other Innovative Forest Products

Background

California forests provide important environmental, recreational, and rural economic development benefits and opportunities for California. Forests are also a critical asset for California to achieve its greenhouse gas emissions reduction goals. However, California's forests face threats from wildfire, insects, disease, and a changing climate.

One third of California is covered in forests. These forests are composed of 57% Federal Land, including US Forest Service, National Park Service, and Bureau of Land Management portions, and 15% industrial timberlands. The remainder is made up of lands owned by individuals, corporations, and Native American tribes totaling 25% and lands owned by California Department of Forestry and Fire Prevention (CAL FIRE), local open space, and land trusts totaling 3%. Despite a small percentage of state-owned lands, the state is responsible for fire protection, as well as forest practices, on more than just land it owns. The state is responsible for fire protection on 31 million acres of forests, watersheds, and rangeland.

In 2017 and 2018 approximately 3 million acres burned in high-severity wildfires and over 30,000 structures were destroyed. Over one hundred Californians died from wildfires in those years.

Fire has always been present in California landscapes either occurring by lightning strikes or used by Native American tribes to preserve certain useful plants and prevent larger fires. Low-intensity fires have clear ecological benefits, such as creating habitat and assisting in the regeneration of certain species of plants and trees. Low-intensity fire also reduces surface fuel,

which decreases future wildfire intensity. A century of suppressing low intensity fires, logging of older growth and more fire-resistant trees, and a significant five-year drought has increased the size and severity of California's fires. Climate change has also contributed to wildfire risk by reducing humidity and precipitation and increasing temperatures.

California's forests have become overstocked and unhealthy. In the Stanislaus National Forest, a team of UC Berkeley researchers found a density of 400 trees per acre in 2013, compared with 60-90 trees per acre found in historical reports from 1911. In addition, the researchers found more undergrowth species, and a smaller average tree size than in 1911. From 2014 to 2018 over 147 million trees have died due to a combination of drought and bark beetles. New research by UC Berkeley states "these dead trees have created unprecedented levels of fuel, which could create dangerous wildfires in the near future that are beyond the predictive capacity of current fire models."

The use of targeted mechanical vegetation management, prescribed fire, and managed wildfire reduces the accumulated high fuel loads, promoting healthier, more resilient forests, reducing the risk of high-severity wildfires.

Senate Bill 901 (Dodd), Chapter 626, Statutes of 2018, committed \$1 billion for CAL FIRE's Forest Health Grant Program, fire prevention grant program, and dedicated fuel reduction crews over the next five years. The funds will be used to do significant fuel reduction work near communities and in forested watersheds, and many projects will include a biomass utilization component. The biomass utilization usually entails processing fuels reduction or harvest residues into wood chips and paying to haul the chips to a bioenergy facility. Sometimes, projects have access to biochar or small diameter wood products markets, and the grant funds could be used to move material to facilities for that purpose as well.

SB 901 also created the Forest Fire Prevention Exemption and the Small Timberland Owner Exemption, which exempts specified timber harvest activities from many of the requirements of the Forest Practice Rules to encourage industrial and private forest landowners to actively manage their land through fuels treatments that also produce commercially viable timber.

When conducting fuels treatment, the material removed from the forest is usually small diameter material, including surface fuels and ladder fuels, as well as dead trees. This material often does not have much value or use and has negative air quality impacts when piles are burned in the forest. There have been various efforts to develop markets for biomass removed for fuel reduction purposes. A goal of this hearing is to explore additional options for biomass utilization including oversight over recent and future action by the state described below.

SB 859 (Committee on Budget and Fiscal Review), Chapter 368, Statutes of 2016, directed the Natural Resources Agency (NRA) to, "...establish a working group on expanding wood product markets that can utilize woody biomass, especially biomass that is removed from high hazard zones." The report's findings are focused on strategies to accomplish three main goals: 1) utilizing material removed from high hazard zones; 2) promoting forest health and carbon sequestration; and 3) promoting rural economic development. To promote these goals, the report suggests a number of approaches including increasing wood product demand and promoting localized manufacturing of mass timber and other innovative forest products. To aid in the development of the capacity to handle these products, the group recommends three core

strategies: 1) remove barriers to market and create pathways for success; 2) promote innovation; and 3) invest in human capital.

In addition, the report recommends four pilot projects aligned with the above strategies. The projects include facilitating mill site redevelopment and promoting wood products manufacturing; holding a mass timber building competition; initiating a California Conservation Corps (CCC) wood products workforce training program; and convening a wood products summit for state and federal entities, industry partners, entrepreneurs, community organizations, and private investors. The state is in the process of implementing these recommended pilot projects. AB 2126 (Eggman), Chapter 635, Statutes of 2018, required the CCC to create the Forestry Corps, which among other activities will conduct training for wood products industry jobs. WoodWorks, in collaboration with the state, held a Wood Products Summit in the fall of 2018. Finally, the mass timber building competition is currently underway.

AB 2518 (Aguilar-Curry), Chapter 637, Statutes of 2018, defined both innovative forest products and mass timber as follows:

- “Innovative forest products” means products made using small-diameter woody materials, brush, and dead trees removed from fire hazard areas identified by the department and that are milled and manufactured in California to the maximum extent possible.
- “Mass timber” means prefabricated wood products consisting of not less than three layers of solid-sawn lumber or structural composite lumber in which adjacent layers are cross-oriented and bonded with structural adhesives, dowels, or nails to form a solid wood element and that are milled and manufactured in California to the maximum extent possible.

AB 2518 (Aguilar-Curry) also directed on or before July 1, 2020, CAL FIRE and the Forestry Management Task Force to identify barriers to in-state production of mass timber and other innovative forest products and make recommendations for siting additional wood product manufacturing facilities in the state.