CalForest WRX^{3S} April 2021

California Forest Wildland Restoration for Social, Economic and Environmental Sustainability is an alliance that brings together partners with a shared interest in increasing active forest management on *all lands* for the purpose of delivering social, economic, and environmental sustainability outcomes by stimulating forest product manufacturing. The alliance, at this time, includes Six Rivers National Forest and Humboldt County and advisory panel.

What problems are we addressing?

- **Climate change** Sequester carbon & reduce comparative carbon emissions of substitute products.
- **Housing crisis** Increase speed of construction & availability of housing across economic spectrum.
- **Urban-rural disparity in jobs** Create living-wage manufacturing jobs in rural communities.
- **High-severity wildfire risk** Catalyze fuel removal in the WUI and beyond.
- Loss of ecosystem services Create market driven demand for small fuels reducing risks to ecosystem services.

Key Strategies

- Increase and diversify value-added forest products manufacturing in rural communities.
- Cultivate investment in emerging high-growth forest product markets utilizing biomass & small diameter wood.
- Attract investment through conservation finance (impact investments).
- Create financial instruments to subsidize forest restoration.

Forest Product Focal Industries

Mass Timber - Large wood building components for floors, walls, roofs or structural elements made from dimensional lumber for low to high-rise buildings.

- 10 manufacturers in North America now & zero in California. Industry experts project demand for mass timber in the U.S. to double every two years through 2034.
- Identified by Secretary of Agriculture Vilsack as one of the key strategies for how the Forest Service can contribute to flighting climate change.
- Google and Microsoft investing heavily in mass timber as key strategy to become carbon negative by 2030.

Torrefied Pellets – Fuel substitute for coal-fired plants created from biomass.

- Market demand for torrefied pellets in Asia is strong and expected to continue to grow given commitment to climate action plan to reduce carbon emission. Off-take agreements for torrefied pellets in place at \$200 a BDT.

Methods/Tactics

- Share information among partners and industry sectors on shared goals.
- Assemble existing data and identify region's market niche opportunities. Identify outstanding questions from investors, entrepreneurs, the community, land management and regulatory agencies.
- Secure resources to conduct feasibility studies, including industry or firm level development strategies, market analysis, business requirements, permitting requirements, site assessment, capitalization and financing, capital improvements, policies encouraging forest product manufacturing, workforce assessment.
- Recruit businesses, entrepreneurs, and investment in the sectors of interest.
- Subsidize initial investment Quantify & qualify outcomes to leverage conservation finance. Explore other funding, to include grants, philanthropy, private investment.
- Develop and implement workforce development strategy

Timeframe

Now - building alliance, seeking grants, conducting preliminary assessment. Summer – launch feasibility study.



Figure 1. Geographic Scope