

Developing a Climate-Forward Workforce and Innovation Pipeline for Forest and Community Resilience



Lead Organization: Forest WRX Alliance

Key Collaborators: Blue Lake Rancheria, Cal Poly Humboldt, Mad River Mass Timber, Gelinas & James Inc., Lake County Resource Conservation District, Humboldt Redwood Company / Mendocino Redwood Company, Humboldt Bay Harbor District, and Anew Climate.

More Information: Forest WRX Website: bit.ly/forest-wrx

Sector: Working Lands and Blue Economy

Project Description

The Forest WRX Alliance's Climate Forward Workforce and Innovation Pipeline integrates four interconnected components: Workforce Training Assessment and Dashboard Development, a Climate Tech, Natural Resource Management, and Traditional Ecological Knowledge Degree Granting Program, Mass Timber Manufacturing for Rural Multi-family Housing, and Carbon Market Development, all with the goal of growing a robust forest bioeconomy that improves forest and community resilience through targeted investments in our regional workforce, critical infrastructure, and market innovation. The project integrates Traditional Ecological Knowledge as we catalyze the development of a circular forest bioeconomy that benefits Redwood Region communities and landscapes, and beyond, by activating pathways that unlock revenue to support thriving-wage careers in forest stewardship, applied research, and manufacturing that benefit underserved communities, while sequestering carbon, reducing wildfire risk, and reimagining what fire-resilient communities can look like through biomaterial innovation.

Intended Outcomes

- Develop a regional workforce development resource directory and report for beneficial fire and forestry professionals in the region.
- Develop new degree program proposals at Cal Poly Humboldt in biomass utilization & bioproduct innovation, conservation finance and natural resource decision support tools.
- Select permit a 500-acre pilot project area of land for wildfire risk reduction.
- Architectural designs for multi-family housing utilizing innovative wood products, specifically Dowel-Laminated Timber.



Progress Update: Challenges & Achievements to Date

Forest WRX Alliance is planning an in-person Forest Bioeconomy Symposium on September 29th and 30th in Loleta, convening representatives from across the full value chain to cement a shared vision and connect the people and organizations needed to shift California's forest restoration challenge into an opportunity for a circular bioeconomy. The event is also intended to seed partnership opportunities around newly proposed degree-granting programs designed to benefit businesses, the University, our community, students, and ultimately a climate-forward future. Partners in this work hosted an in-person Advisory Panel Summit on May 8th at Start-Up Humboldt in Arcata, where advisors from diverse industry sectors came together to review and provide feedback on draft program proposals. Lake County Resource Conservation District (LCRCD) is currently in the information gathering period of building a regional workforce development directory/asset map that aims to improve workforce development coordination within the forestry and beneficial fire fields in the Redwood Region. Open until September, the survey assesses available workforce development capacities (e.g., curricula, workshops, expertise) and organizations' abilities to share their resources. The directory will be complemented with a written report synthesizing available resources, identified regional workforce development needs, and other insights gleaned from follow-up interviews with survey respondents.

Three recently approved project areas (forest fire prevention exemptions), two on Humboldt Redwood Company land in Humboldt County and one on Mendocino Redwood Company land in Mendocino County, have been proposed in place of the project area initially identified, bringing total acreage to 500+. Project foresters at HRC and MRC are working on input values for project intake forms provided to the Spatial Informatics Group for feasibility modeling. A key challenge involves developing predictive fire risk reduction results when underlying models discount fire risk severity and probability baseline conditions. This diminishes the predicted risk reduction and associated forecasted mitigation units generated, which represent the revenue needed to help fund treatments.

Ways to Engage and Support the Project

- Attend the Forest Bioeconomy September symposium: bit.ly/WRXsymposium
- Contact Forest WRX or join their newsletter: bit.ly/WRXcontact
- Follow Forest WRX on LinkedIn: bit.ly/WRXLinkedIn

