

# LAKE COUNTY RISK REDUCTION AUTHORITY

## Entity Action Plan

Prepared for:

Lake County Resource Conservation District  
Lake County Risk Reduction Authority  
County of Lake

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# Lake County Risk Reduction Authority Entity Action Plan

## Introduction

The Lake County Community Risk Reduction Authority (RRA) was created with the purpose of addressing wildfire mitigation and community resilience, created in direct response to the severe wildfire crisis that has plagued Lake County, California. Since 2015, Lake County has suffered some of the most destructive wildfires in the state, with approximately 60% of its land mass having burned. Recognizing the urgent need for a coordinated, strategic response to this escalating threat, local leaders established the RRA through a Joint Powers Agreement (JPA) in 2018, later amended in 2019. This made Lake County one of only two counties in California to form a specialized wildfire prevention JPA, positioning it as a model for other fire-prone regions.

The RRA's structure has evolved significantly since its inception. Initially, it was a partnership between the County of Lake and several local fire protection districts. Over time, the authority has expanded to include a wide array of interested parties, reflecting the understanding that wildfire risk reduction requires broad, cross-jurisdictional collaboration. Today, the RRA encompasses the County of Lake, the Lake County Watershed Protection District, multiple fire protection districts (including Lakeport, Northshore, South Lake, Kelseyville, and Lake County), and several public water districts including Callayomi, Clearlake Oaks, Cobb Area, and Lower Lake. The cities of Lakeport and Clearlake are also members, along with four tribal governments: the Habematolel Pomo of Upper Lake, Middletown Rancheria Band of Pomo Indians, Robinson Rancheria Band of Pomo Indians of California, and Scotts Valley Band of Pomo Indians. This inclusive governance structure ensures that the diverse needs and perspectives of the entire Lake County community are represented in wildfire risk reduction planning and execution.

Leadership of the RRA has included prominent local officials, such as Moke Simon, former District 1 Supervisor (and Chairman of the Middletown Rancheria Band of Pomo Indians), who served as Chair, and Jessica Pyska, District 5 Supervisor, who served as Vice-Chair. The County Board of Supervisors saw a leadership transition in early 2025, with Eddie Crandell and Brad Rasmussen taking on the roles of Chair and Vice Chair, respectively. However, the RRA's leadership structure may not always mirror the Board of Supervisors exactly, as the Authority's governance is designed to include representatives from its many member agencies with annual elections.

The primary mission of the RRA is to reduce risks to life, property, and the environment from wildfires and other hazards by developing and implementing effective programs, securing sustainable funding, and providing public education. The RRA works to create low or no-cost resources for reducing risks from hazardous vegetation, earthquakes, and other environmental threats. It also focuses on improving community infrastructure

to enhance resilience, establishing property inspection programs and risk assessment tools, and developing funding sources to sustain risk reduction initiatives. Education and training are central to the RRA's approach, with efforts to provide tools for risk discovery, assessment, and mitigation to both residents and local agencies.

In 2021, the RRA set out a series of specific priorities to guide its work. These included expanding its membership to ensure all relevant stakeholders were involved, hiring a dedicated coordinator to manage its activities, securing sustainable funding, and developing a robust organizational structure. The RRA also prioritized updating the County's Community Wildfire Protection Plan (CWPP), supporting "shovel-ready" projects that could be quickly implemented, and advancing community wildfire risk reduction programs. Notable



initiatives under this umbrella have included the Fire Wise Communities program, maintenance of strategic fire breaks, the "Broom Buster" invasive species removal project, grazing programs to reduce fuel loads, and the support of local prescribed burn associations.

More recently, RRA, in partnership with the Lake County Resource Conservation District(LCRCD), was awarded a \$175,000 grant from the California Governor's Office of Land Use and Climate Innovation's Forest Sector Market Development Grant Program. This funding is being used to modify the RRA's structure to better manage forest biomass at a regional's level, supporting both wildfire resilience activities and local

biomass-utilizing businesses. The project brings together experts in biomass utilization, finance, and law to help the RRA develop new operational models and partnerships related to advancing local biomass utilization processes in support of wildfire risk reduction and economic development efforts.

As a part of this work, two studies have preceded this report: a RRA Financial Analysis Report (developed by Eastern Research Group, or ERG), and the Lake County Biomass Assessment (developed by Mule Ears Consulting). These reports provide recommendations for how the RRA can address wildfire risk, forest health, and biomass utilization challenges in Lake County. This Entity Action Plan further expands upon this work by identifying four specific actions that the RRA could pursue to support wildfire risk reduction and woody biomass utilization activities:

1. Explore waste management opportunities for forest biomass;
2. Facilitate a Biomass Business Competition to incentivize biomass utilization and economic development;
3. Review local regulatory challenges and improve regulatory processes for advancing biomass removal and utilization, including land use and CEQA compliance;
4. Launch at RRA-led Forest Biomass Information Center to streamline coordination between landowners, businesses, tribal governments, and agencies support effective project development and implementation related to wildfire prevention and biomass utilization.



# Part 1: Introduction to Lake County's Waste Management Context

Lake County faces significant geographic and environmental challenges that distinguish it from other California counties, requiring careful consideration of waste management responsibilities. Since 2015, wildfire has significantly impacted the county's waste streams, with more than 60% of the county's landmass having been burned by major wildfires, including the Valley Fire (2015), Mendocino Complex Fire (2018), and the LNU Lightning Complex (2020). These catastrophic events, combined with ongoing drought conditions and multi-species bark beetle and invasive Mediterranean oak borer (MOB) outbreaks, have created considerable volumes of woody biomass residues throughout the region.

The county declared a Local State of Emergency due to "Pervasive Tree Mortality" on May 3, 2022, following the identification of an estimated 590,000 dead and dying trees across 31,000 acres by 2022, a dramatic increase from approximately 3,000 trees on 1,000 acres in 2019. As of 2024, more than 69,000 acres of dead and dying trees have been identified by the USFS tree surveys. This tree mortality crisis, driven by drought-weakened conifers succumbing to bark beetle infestations, has created substantial volumes of woody material requiring removal for public safety and evacuation route access. Not included in the emergency declaration is the newer infestation by non-native MOB, which was detected here in late 2022<sup>1</sup>. MOB is killing valley and blue oaks, which are both important tribal cultural resources.

Additionally, utility vegetation management campaigns, primarily conducted by Pacific Gas & Electric (PG&E), have generated significant debris streams as part of wildfire risk mitigation efforts. The utility inspects approximately 100,000 miles of overhead powerlines annually and removes more than one million trees each year that pose safety risks. In Lake County, PG&E's vegetation management contractors routinely clear and trim thousands of trees to maintain power-line safety and reduce wildfire risk, yet they frequently leave the resulting biomass in the forest, leaving private landowners responsible for managing the debris<sup>2</sup>.

It is critical to understand that these forest biomass residues from wildfire cleanup, tree mortality, and utility vegetation management operations fall outside the scope of California's Senate Bill (SB) 1383 organic waste reduction requirements. SB 1383 specifically targets municipal organic waste streams, primarily food waste and residential yard waste, as part of the state's climate goals to reduce methane emissions

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<sup>1</sup> [Distribution in California | UC Agriculture and Natural Resources](#)

<sup>2</sup> [CPUC Lake County Comments on Draft Resolution M-4864](#)

from landfills. The massive volumes of forest biomass residues generated from these natural disasters and utility operations are managed through separate regulatory frameworks and processing systems, typically involving biomass power facilities, forest management agencies, and specialized waste handling operations rather than municipal waste collection services.

Lake County landfills do not accept woody biomass waste. While there is no county ordinance dictating that restriction, the County rejects this waste at the landfill because of California's regulatory framework (AB32, AB341, AB1826, and SB1383) that creates strong disincentives for landfilling organic materials to reduce greenhouse gas emissions and promote diversion to recycling and composting. Beyond regulatory pressures, the landfill also does not take this waste because of operational challenges that make woody biomass problematic, including increased onsite fire risks, inefficient airspace consumption due to bulky low-density materials, difficulties distinguishing treated from untreated wood (requiring different handling protocols), infrastructure needs for specialized processing equipment, and increased landfill gas production that would likely require expensive modifications to existing methane collection systems.

The County's role in woody biomass waste management is therefore limited to providing residential green waste collection services as a part of voluntary, subscription-based solid waste collection services provided through Lake County Waste Solutions. Forest biomass management challenges, to include collection and disposal, are overseen by other entities, including utility companies, forest management agencies, and specialized contractors.

## Current Green Waste Collection Services in Lake County

Residential green waste collection is available in unincorporated Lake County on a subscription-based weekly service through Lake County Waste Solutions. The service generally uses standardized 96-gallon carts with green lids delivered at no additional charge alongside garbage and recycling services, with customers billed quarterly based on their garbage cart size. Customers can order additional green waste bins for an additional charge.

LCWS accepts grass clippings, leaves, branches under four inches in diameter, and untreated wood scraps in green waste carts. Small amounts of fruit and vegetable scraps are permitted since all materials are composted, but meat, dairy, and prepared foods are excluded. Clean wood with nails is acceptable, while painted or treated wood must be disposed of as refuse due to health and environmental concerns. Carts must be placed curbside by 4:00 AM on collection day, positioned at least three feet apart

with arrows pointing toward the street and clear of overhead obstacles for automated collection.

Within Clearlake city limits, Clearlake Waste Solutions (CWS) operates under mandatory participation requirements established by City Ordinance No. 198-2017. This universal service ordinance requires all residential property owners to subscribe to garbage, recycling, and green waste services, eliminating self-hauling alternatives to ensure consistent participation in organic waste diversion. As of 2023, CWS serves 5,362 residential customers and 241 commercial customers, representing a 60-customer increase from the previous year.

Clearlake's program implements a more robust organics collection approach by accepting mixed organic waste in green carts, including traditional yard materials alongside food scraps and soiled paper products such as pizza boxes. This integrated collection system combines lawn clippings, leaves, plant material, branches under four inches in diameter, small unpainted wood pieces, food waste, and food-soiled paper to maximize organic waste diversion from landfills. The universal service requirement ensures comprehensive participation while limited annual exemptions are available for specific circumstances including vacant properties, homes without utilities, or verified vacation properties.

Both service providers follow identical operational standards for cart placement, collection procedures, and contamination prevention while processing materials at appropriate facilities to produce compost and recycled products.

## Forest Biomass Waste Management in Lake County

Forest biomass waste from fuel-reduction and wildfire-mitigation projects in Lake County, most often are disposed of through open-pile burning under permits issued by the Lake County Air Quality Management District. Logs, branches, tops and other woody residues that cannot be chipped, hauled, or otherwise processed are consolidated into slash piles and combusted on site—a practice that remains the default pathway for the majority of forest-sourced biomass. Recognizing the environmental and air-quality impacts of open burning, Lake County has invested in alternative processing infrastructure, led by the Quackenbush Resource Recovery and Composting Facility.

Quackenbush Resource Recovery and Composting Facility has served as Lake County's primary biomass waste processor since beginning operations in the early 2000s. Located in Clearlake on Quackenbush Mountain, this 22-acre facility operates on a 231-acre parcel owned by Pestoni Brothers LLC and is operated by South Lake Refuse & Recycling under the oversight of C&S Waste Solutions. The facility's strategic location adjacent to the county-owned Eastlake Landfill positions it as the central center for organic waste diversion throughout Lake County.

The Quackenbush facility has undergone significant expansion since its initial Phase 1 construction in 2005, growing from 5 acres of composting operations to a full build-out capacity of 15.35 acres for compostable materials handling. The facility operates under California Solid Waste Facility Permit 17-AA-0014 and possesses the capability to process up to 60,000 cubic yards of compost and compostable materials at full capacity. Since 2008, the facility has been permitted to accept food waste in addition to green waste, utilizing multiple composting methods including windrow composting, Covered Aerated Static Pile Method (CASP), and Enclosed Vessel Aerated Static Pile Method (EVASP). The facility's composting operations transform approximately 90% green waste and 10% food waste collected from residential and commercial sources throughout Mendocino and Lake Counties into certified organic compost products.

Quackenbush's compost products hold certification as Organic Input Material with the California State Department of Food and Agriculture and registration with the Organic Materials Research Institute, demonstrating its commitment to quality standards. The facility produces several specialized compost products, including Quackenbush Blended Compost enhanced with grape pomace for increased nutrient content, topsoil mixed with 60% compost and 40% soil, and various grades of wood chips for landscaping applications. These products are sold directly at the facility and through other C&S Waste Solutions locations, including the Lake County Transfer Station & Recycling Center in Lakeport.

The facility received significant state support through CalRecycle grant funding to expand its operations and better serve Lake County's organic waste diversion goals under California's AB 1826 and AB 1383 mandates. The grant project achieved greenhouse gas reductions of approximately 11,252 metric tons of CO<sub>2</sub> equivalent while diverting 49,223 tons of organic material from landfill disposal. The facility also demonstrated its emergency response capabilities during the 2015 Valley Fire, receiving a special 120-day waiver to accept fire debris for the disaster cleanup program, which was later extended through November 2016.

Beyond Quackenbush, several other entities handle forest biomass waste in Lake County, though at smaller scales. C&S Waste Solutions operates the Lake County Transfer Station & Recycling Center, which accepts green and wood waste for processing fees and serves as a distribution point for Quackenbush compost products. Local wood waste management solutions include firewood processing and sales by local contractors implementing fuels reduction projects, with heat treatment requirements due to Mediterranean oak borer concerns that have spread rapidly through untreated firewood transport. Additional options encompass air curtain incineration efforts like the 2022 CAL FIRE Firebox Burner pilot in Cobb that successfully removed stockpiled debris despite higher costs and reduced efficiency with

larger logs, and small-scale mobile sawmilling operations that convert larger hazard trees into rough lumber for private landowners during dead tree removal services

The emergence of biochar production facilities represents a significant evolution in Lake County's biomass processing landscape. The Clear Lake Environmental Research Center (CLERC) operates a pilot project at the Middletown Wastewater Treatment Plant using a Tigercat Carbonizer to convert large diameter logs from wildfire mitigation and power line clearing into biochar. This innovative approach diverts materials that might otherwise be burned in open piles or transported out of the county.

## Planned Increase in Forest Biomass Waste and Methods for Disposal and Utilization

Planned fuel-reduction activities across Lake County are set to generate woody biomass in need of disposal beyond existing processing capacity, especially with increased grant funding availability for wildfire prevention and forest health programming. This includes sources such as roadside hazard-tree removal, defensible space programming involving removal of vegetation around structures, tree removal along PG&E's utility lines, and community chipping initiatives. Other planned work that may lead to increased biomass availability includes larger-scale forest health programming typically funded by CAL FIRE grants.

Open pile burning is widely used in Lake County to dispose of unwanted vegetation, and air-district records show that Lake County consistently logged one of the highest acreages of open burning in the state from 2018 to 2021<sup>3</sup>.

However, open burning not only generates harmful smoke and carbon emissions but also limits opportunity to create innovative products and strengthen the local economy through wood processing pathways. More critically, pile burning alone cannot keep pace with the explosive growth in residues; while burn permits in Lake County have remained steady at several thousand acres per year, it is reasonable to conclude the increase in planned fuels reduction and wildfire prevention activities will generate additional quantities of biomass that require disposal within the next five years. CAL FIRE's seasonal burn ban and local smoke-management requirements will make it more difficult to burn all of the accumulating material, and costs to manage such burns in a safe way is also problematic, as well as obtaining enough staff to manage those fires. To avoid negative impacts of open pile burning, local officials may consider advancing wood utilization pathways to dispose of unwanted forest biomass, such as biochar, wood-derived specialty products, and renewable fuels, thereby closing the loop on forest health, carbon drawdown, and community resilience.

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<sup>3</sup> [California-forest-biomass-pile-data-collection-report. page 49, Table 7](#)

An important opportunity exists in thoughtfully examining Lake County's developing woody biomass processing capabilities. The Scotts Valley Band of Pomo Indians' AG Forest Wood Processing Bioenergy Project is currently under major-use-permit review for a five-acre facility in Upper Lake that would process pre-processed chips from Kelseyville and handle up to 20,000 tons per year for renewable fuel production and biochar creation for potential soil amendment and water filtration applications. Additionally, CLERC's Carbonizer Project in Middletown has been operating since February 2025, processing hazardous wood debris through pyrolysis at the wastewater treatment plant.

Given the county's substantial forest residue volumes from ongoing wildfire recovery and tree mortality issues, it would be valuable for stakeholders and local leaders to carefully evaluate whether additional dedicated processing facilities might complement these existing pilot programs. Such evaluation could examine the full range of woody debris generated by wildfire damage and tree mortality events, considering various processing approaches and their respective benefits, limitations, and community impacts. Taking time to thoroughly assess different management strategies, including but not limited to biochar production, would help ensure that any future investments align with the county's long-term forest health, community safety, and environmental stewardship.

## Recommendations

Lake County can dramatically improve forest-residue management by focusing on supply-chain organization, support for biochar and other uses of woody residues, and supporting the development of a wood sort yard and processing center.

The Lake County RRA should support a public-private partnership that combines mobile and centralized biochar production capabilities and other uses of biomass residue at one or more locations. With investment or support from local governments to help ensure operations, the development of micro or small business projects at these sort yards that could house such businesses could be a clever way to make use of this waste stream.

Already being used in Lake County is a mobile biochar unit, which provides flexible, on-site conversion of logs, slash piles, and whole trees into a stable soil amendment. Each unit processes roughly one ton of biomass per hour and yields about 20 percent biochar by weight, eliminating the need for grinding or fixed-site facilities. Deploying 3–5 of these units at strategic locations across the county—especially near high-mortality zones—will immediately divert slash from open burning and create a distributed network of small-scale processors. Complementing mobile operations, the RRA should support the private sector in developing centralized biochar facilities with annual capacities of 10,000–20,000 tons. Research shows these larger centers achieve lower per-ton

production costs and can support 10–15 full-time jobs each. By combining pyrolysis units with systems that capture co-products (bio-oil, syngas, renewable natural gas), these centers can generate multiple revenue streams and reach internal rates of return above 15 percent under conservative feedstock pricing.

These mobile biochar systems could be placed at centralized sort yard facility where woody residues from utility vegetation management, defensible space clearing, Caltrans roadside removals, and wildfire mitigation projects, should be consolidated, and such locations should use tipping fee arrangements to cover costs. PG&E contractors, already experienced with fee-based disposal operations for this type of biomass material. Some companies, like PG&E could also benefit from centralized chipping and densification equipment to increase biomass density by up to 300 percent, thereby reducing transportation costs and ensuring consistent material quality. This equipment could be supplied by the RRA. Covered storage areas with basic inventory management would buffer seasonal supply fluctuations and maintain year-round feedstock availability for downstream processing facilities.

The Lake County Biomass Supply Assessment identifies that wood processing infrastructure and contractors in Lake County are more commonly scaled for smaller-scale vegetation management projects, as opposed to larger-scale timber harvesting practices. These factors all lead to the conclusion that the development of one to three sort yards that include some processing and business activity would be the best outcome for the use of woody biomass residues in Lake County, which could also accept any agricultural residues in the area, as well. The RRA is well poised to lead further research into potential locations and development of such facilities.



## Part 2: Biomass Business Competition & Workforce Development

### Key Lake County Organizations and Their Current Activities

Lake County has several established organizations that could effectively collaborate on a biomass business competition, each bringing complementary expertise and resources. The Lake County Economic Development Corporation serves as the primary economic development entity, currently operating several business support initiatives including the recently launched "Eat Drink Shop Local" campaign in October 2024. The corporation provides comprehensive business advisory services with free business advisors and real-time workshops for startups, established businesses, and those in transition. They are currently updating their Comprehensive Economic Development Strategy (CEDS), a five-year plan following the U.S. Economic Development Administration framework, emphasizing programs based on local data and trends specific to Lake County's characteristics.

1Team 1Dream has established itself as a significant force in Lake County's small business development through their "Hands Up Lake County" business competition program, demonstrating remarkable success over five years since 2020. The organization has awarded a total of \$450,000 across annual competitions, with prize amounts growing from \$28,000 in 2020 to \$150,000 in 2024, reflecting both program success and growing community support. With 307 total applicants and 36 winners across five competitions, 1Team 1Dream has proven expertise in business competition management while providing comprehensive support services including mentorship programs, educational workshops on sustainable business practices, and ongoing entrepreneurial support.

Lake County's Economic Development Program, operated through the Administrative Office, focuses on promoting business growth while preserving quality of life by providing comprehensive support including tourism promotion, business assistance, and developer facilitation services. The program's core goals include economic diversification, infrastructure development, job training expansion, regulatory efficiency, and maintaining high quality of life standards, all supported by a strong local entrepreneurial network featuring active chambers of commerce and efficient service provider networks ready to assist business development and expansion throughout the county.

### The Sonoma County Biomass Business Competition Model

The Sonoma County Biomass Business Competition, known as BioBiz, serves as an excellent template for Lake County's potential biomass business competition. Launched

in January 2021 by the Northern Sonoma County Air Pollution Control District in partnership with multiple state and local organizations, the competition awarded \$32,500 in startup funds plus technical support services to two local entrepreneurs implementing winning biomass business concepts. The initiative was specifically designed to turn wildfire risk in Sonoma County into an economic development opportunity by creating incentives for forest health management through innovative wood products businesses.

The BioBiz competition was structured as a comprehensive program that included free workshops sponsored by the Napa-Sonoma Small Business Development Center to help applicants develop business concept plans, followed by a formal request for proposals period from February through March 2021. The program emphasized practical implementation over theoretical planning, requiring well-thought-out business concepts rather than completed business plans. An interdisciplinary panel of judges evaluated submissions, with awards presented in July 2021. The competition brought together diverse partners including the Bay Area Air Quality Management District, Sonoma County Economic Development Board, CAL FIRE, Sonoma Clean Power, and various support organizations.

## Opportunities for Lake County Biomass Business Competition Development

Lake County appears well-positioned to develop a biomass business competition similar to the Sonoma County Air Pollution Control District (Sonoma APCD) BioBiz model, leveraging existing organizational strengths and established partnerships. The combination of 1Team 1Dream's proven business competition experience, Lake EDC's economic development expertise and advisory services creates a strong foundation for a successful program. The county's current involvement in Lake County LCI Biomass Pilot Project, along with active tribal partnerships in renewable energy projects, provides both practical infrastructure and community support that could significantly enhance a biomass business competition's effectiveness and impact.

## Bioeconomy & Workforce Synergy

A biomass business competition in Lake County could serve as a transformative mechanism for workforce development by aligning economic growth with ecological stewardship, leveraging the region's abundant forest resources to create a sustainable pipeline of skilled workers. By fostering innovation across the biomass value chain—from sustainable forest management to advanced bioenergy production—such a competition would address critical gaps in rural employment while building technical expertise and entrepreneurial capacity. Such a competition would involve gathering donations from private sources or well-developed public economic development programs that could

include services or cash prizes for the competition winner or winners. These funds would be made available through an application process that has two phases. The first phase would be a written application, which requires production of a business plan and demonstrates capability to execute that plan. Second, those that pass the first phase would participate in a “pitch contest.” A committee of RRA members or others chosen by the RRA would evaluate the applicants, and then RRA staff would assure contracts are entered into with the winners, and ongoing use of the resources are consistent with the intent of the competition.

A structured competition would stimulate job creation by incentivizing businesses to develop solutions that convert underutilized biomass into marketable products, thereby expanding demand for skilled labor. The biomass sector inherently requires a diverse workforce, spanning roles in forestry operations, logistics, bioenergy plant management, and research and development. By challenging participants to address real-world problems-such as optimizing feedstock collection or improving conversion efficiency-the competition would drive technological advancements that, in turn, create specialized employment niches. For example, innovations in biomass processing could lead to new roles in quality control, emissions monitoring, or supply chain optimization, all of which require technical training and certification.

The competition’s focus on entrepreneurship would further amplify workforce development by encouraging participants to establish new ventures. These startups would need employees proficient in both traditional forestry practices and emerging bioenergy technologies, creating hybrid roles that blend ecological knowledge with engineering expertise. This approach aligns with broader workforce strategies that emphasize cross-disciplinary skills, ensuring workers can adapt to evolving industry demands.

## Rural Resilience & Local Opportunity

The competition’s emphasis on localized biomass utilization would directly benefit Lake County’s rural communities by creating jobs that cannot be outsourced. Positions in feedstock collection, facility operations, and biomass transportation are inherently place-based, ensuring employment opportunities remain within the region. This localized focus would counteract rural depopulation trends while providing stable, family-wage jobs in sectors such as forest management, where workers play a direct role in reducing wildfire risks through sustainable thinning practices. The competition would stimulate ancillary industries, including equipment manufacturing, maintenance services, and environmental consulting. For instance, businesses specializing in biomass harvesting machinery or biochar production would require skilled machinists, engineers, and sustainability analysts, creating a multiplier effect across the local economy. By

fostering a network of interdependent enterprises, the competition would establish a resilient economic ecosystem capable of withstanding market fluctuations.

A biomass business competition in Lake County could strategically attract wood-themed businesses by addressing systemic barriers to market entry while amplifying the region's natural and economic assets. By fostering innovation, collaboration, and alignment with broader sustainability goals, such a competition would create a dynamic ecosystem where businesses can thrive. The competition would incentivize participants to develop solutions that convert underutilized forest biomass into viable products, thereby addressing critical challenges like wildfire risk reduction and rural economic diversification. This approach would position the region as a center for sustainable bioeconomy practices, drawing enterprises focused on bioenergy, circular materials, and climate-resilient forestry.

## Creating a Self-Sustaining Workforce Ecosystem

The competition's most enduring impact would lie in its ability to create a self-reinforcing cycle of skills development and economic growth. As participants transition into the workforce, they would bring cutting-edge knowledge back to local businesses, driving continuous innovation. Meanwhile, successful ventures spawned by the competition would demand additional workers, creating a feedback loop where job opportunities expand in tandem with technological advancements. This dynamic aligns with projections that the bioeconomy could generate "over a million new positions" nationwide, many of which would be anchored in rural regions like Lake County. Educational institutions would play a pivotal role in sustaining this ecosystem by updating curricula to reflect industry needs and offering lifelong learning opportunities. Partnerships between competition organizers and tribal communities could also ensure equitable access to training programs, particularly for Indigenous populations with traditional ecological knowledge relevant to sustainable forestry.

## Innovation Incentives & Market Integration

A structured competition would lower financial barriers for wood-themed businesses through grants, prizes, and access to supply chain networks. Funding initiatives could support early-stage ventures in prototyping, scaling technologies, or securing certifications, while partnerships with industry stakeholders would facilitate market entry. By prioritizing projects that align with regional biomass availability and infrastructure, the competition would ensure participants can leverage existing resources efficiently. This would create a pipeline for businesses specializing in high-value products like biochar, sustainable building materials, or renewable energy systems, all of which depend on consistent biomass feedstock.

The competition would drive advancements in biomass utilization by challenging participants to solve persistent technical hurdles. Innovations might focus on improving feedstock processing efficiency, reducing transportation costs, or enhancing the environmental performance of conversion technologies. By encouraging cross-disciplinary collaboration, the competition could yield breakthroughs in areas like low-emission combustion systems or modular bioenergy solutions tailored for rural communities. These advancements would make Lake County an attractive testing ground for businesses seeking to pilot scalable models in biomass valorization.

A key outcome of the competition would be the formation of partnerships between businesses, academic institutions, and local communities. Workforce development programs integrated into the competition framework could train participants in specialized skills, from sustainable forest management to bioenergy plant operations. By connecting entrepreneurs with mentors, researchers, and policymakers, the competition would foster a supportive ecosystem where knowledge and resources are shared. This collaborative environment would reduce isolation for rural businesses and amplify their capacity to compete in broader markets.

Aligning the competition with state and federal environmental policies would enhance its appeal to businesses committed to sustainability. Metrics tied to carbon reduction, wildfire mitigation, or circular economy principles could be embedded into evaluation criteria, ensuring participants contribute to regional climate goals. Regulatory support for biomass utilization, particularly in wildfire-prone areas, would further incentivize businesses to establish operations in Lake County. By demonstrating compliance with environmental standards and stewardship practices, participants could gain credibility and access to green financing opportunities.

### *Sonoma County BioBiz Competition Winners: Current Status and Progress*

The 2021 Sonoma County Biomass Business (BioBiz) Competition selected two innovative companies as winners, each receiving \$47,500 in startup capital and technical services to launch their biomass ventures. Both businesses have continued to evolve and make significant progress in their respective fields.

#### *Forestree Collective*

Founded by Jeremy Fisher and Marisha Farnsworth, Forestree Collective transforms small-diameter trees from wildfire prevention thinning into climate-beneficial furniture and architectural woodwork. The company operates a vertically integrated facility at Green Valley Farm + Mill in western Sonoma County, where they source, mill, and solar kiln-dry wood in-house.

The company has achieved significant milestones, including a \$100,000 US Forest Service Wood Innovations Grant in 2022 and partnerships with UC Berkeley's Wood

Lab for research on underutilized wood species. They maintain active community engagement through mill tours and educational programs, with leadership presenting at major conferences like the Forest Innovation Summit and UC Berkeley seminars. Their business model creates economic value from forest restoration materials that would otherwise be chipped or burned.

### *Soil Carbon Management Company*

Led by Darek Trowbridge, a fourth-generation farmer and Old World Winery owner, this company developed "Primordial Biome Mulch" - an inoculated wood chip mulch that uses mycorrhizal fungi to enhance soil carbon sequestration. The proprietary technology increases farmland resilience to heat and wind while reducing water requirements.

The company has expanded from vineyard success to serve six additional farms and ranches, with a growing waiting list of interested clients including landscapers and winegrowers. Their approach addresses Sonoma County's soil carbon potential, where agricultural soils could sequester an additional 15.25 million metric tons of CO<sub>2</sub> equivalent by increasing organic carbon from current 0.88% to potential 2.5% levels.

Both companies demonstrate how environmental challenges can be transformed into profitable business opportunities while providing measurable climate benefits through carbon sequestration and sustainable resource management.

## Conclusion

A biomass business competition in Lake County would attract wood-themed businesses by creating a synergistic environment where innovation, collaboration, and sustainability converge. By addressing financial, technical, and logistical challenges through competitive incentives, the region could unlock new economic opportunities while advancing ecological resilience. This approach would not only diversify the local economy but also establish Lake County as a model for integrating bioeconomy development with environmental stewardship and aligns and supports many of the pillars in the County's adopted Pillars of Landscape Resilience<sup>4</sup>.

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<sup>4</sup> [Pillars of Landscape Resilience | Lake County, CA](#)

## Part 3: Land use and CEQA Law; its application to Fuel Reduction & Biomass Use Projects

### What is CEQA?

The California Environmental Quality Act (CEQA) stands as a foundational pillar of environmental governance in California, mandating rigorous assessment and mitigation of environmental impacts for both public and private projects requiring governmental approval. Enacted in 1970, CEQA has evolved into a complex regulatory framework that still acts to support decision-makers and the public by ensuring that both are fully informed about the environmental consequences of proposed actions, while promoting sustainable outcomes through mitigation measures and alternatives. By requiring transparency and public participation, CEQA fosters accountability in land use planning and project development, making it one of the most influential environmental laws in the United States.

CEQA's regulatory structure is codified in the California Public Resources Code (PRC) and further elaborated in the CEQA Guidelines, administrative rules maintained by the Governor's Office of Planning and Research (OPR) and the Natural Resources Agency. The law defines a "project" as any activity undertaken, funded, or approved by a public agency that may cause direct or indirect physical changes to the environment. This broad definition encompasses everything from infrastructure development and zoning changes to regulatory approvals for private construction. However, not all projects require full environmental review, as certain activities may qualify for exemptions, including statutory exemptions created by the Legislature and categorical exemptions for classes of projects determined to have no significant environmental effect enacted through regulation. When environmental review is required, agencies may prepare either a Negative Declaration (ND or MND) for projects with potentially significant impacts that can be reduced to less than significant levels through mitigation measures, or a comprehensive Environmental Impact Report (EIR) for projects with unavoidable significant environmental effects that require detailed analysis of impacts, alternatives, and mitigation measures.

Central to CEQA's framework is the concept of the "lead agency," the public entity with primary authority to approve or carry out a project. The lead agency is responsible for determining the appropriate level of environmental review, preparing necessary documentation, and ensuring compliance with CEQA's procedural requirements. Other entities, termed "responsible agencies" and "trustee agencies," may also participate by providing expertise on specific resources such as water quality or endangered species.

## The CEQA Process: Initial Determinations, Exemptions, and Analysis

The California Environmental Quality Act (CEQA) establishes a structured environmental review process designed to systematically evaluate potential impacts, engage stakeholders, and ensure informed decision-making. This process unfolds through distinct phases, each with specific requirements and opportunities for public participation, while incorporating various exemptions to streamline review for projects with minimal environmental effects.

### *Threshold Determination and Exemption Analysis*

The initial phase of CEQA compliance involves determining whether a proposed activity that requires a permit from a public agency qualifies as a “project” under the law. A “project” is broadly defined as any activity undertaken, funded, or approved by a public agency that may cause direct or indirect physical changes to the environment. This includes both public infrastructure initiatives and private developments requiring discretionary government approvals. If the activity is not a “project” then the CEQA is not triggered and no further analysis or action need be taken.

If an activity that needs a permit is considered a project under CEQA, the next question to ask is whether the project qualifies for one of the multiple pathways for exemption, which fall into two primary categories: statutory exemptions and categorical exemptions. Statutory exemptions, established by the California Legislature, removes activities from the definition of “project” thereby completely exempting the activity from CEQA review. These activities include ministerial actions (e.g., issuing building permits), emergency projects (e.g., disaster response), and activities explicitly excluded by law. For instance, emergency repairs to roads following landslides or wildfires qualify for statutory exemptions under CEQA Guidelines Section 15269. Such exemptions are absolute and apply regardless of environmental impacts.

Categorical exemptions, outlined in CEQA Guidelines Sections 15301–15333, apply to classes of projects typically deemed to have minimal environmental impacts, such as minor land alterations, routine maintenance of existing facilities, or small-scale construction. Examples include replacing a commercial structure of less than 10,000 square feet or minor repairs to existing facilities. If the activity does not fall within a specific exemption, there is also a commonsense exemption which applies when a project’s environmental impacts are plainly nonexistent, such as administrative actions with no physical footprint.

Categorical exemptions are not absolute, however, as there are exceptions which apply if a project affects sensitive resources such as scenic highways, hazardous waste sites, or historical resources. For example, a minor land division that encroaches on a

designated historic district would lose its categorical exemption. Lead agencies must carefully evaluate whether exemptions are appropriate, considering both the project's characteristics and potential exceptions. If an exemption applies, the agency may proceed without further environmental documentation, though some jurisdictions require a notice of exemption (NOE) to be filed.

### *Initial Study and Scoping Determination*

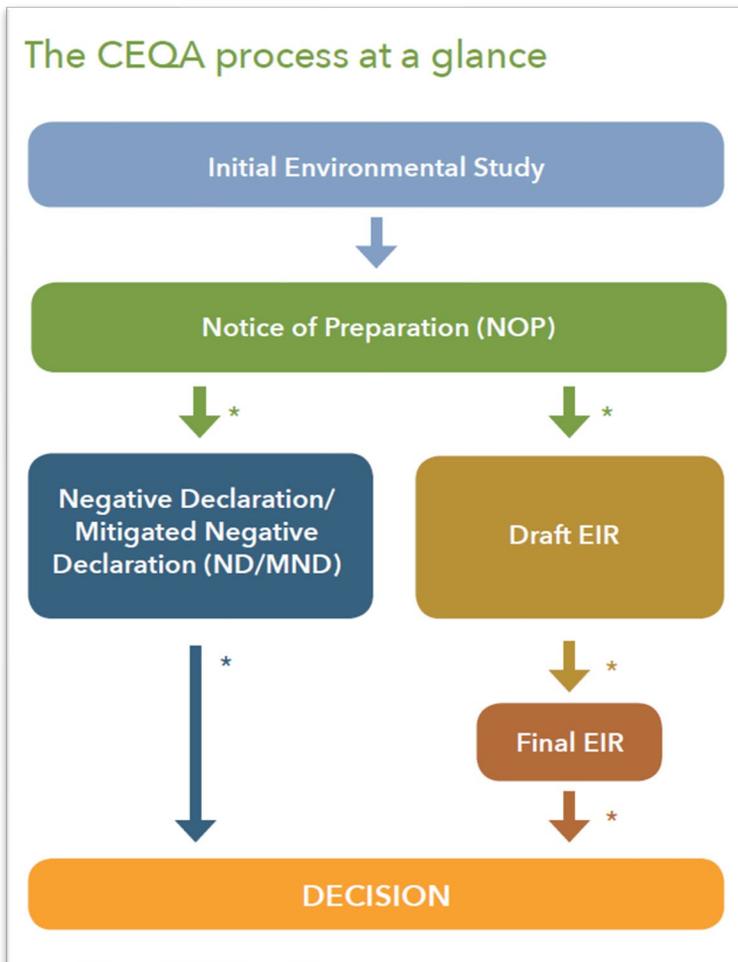
If a project is not exempt, the lead agency conducts an Initial Study (IS) to identify potential environmental effects. This preliminary assessment is described in a "CEQA Checklist," which evaluates impacts across 18 environmental factors, including air quality, biological resources, cultural heritage, noise, traffic, greenhouse gas emissions, and fire impacts. This process also examines cumulative impacts when combined with past, present, or reasonably foreseeable projects. For instance, a proposed housing development might be assessed for its contribution to regional traffic congestion or habitat fragmentation when considered alongside nearby industrial expansions.

Based on the Initial Study's findings, the lead agency prepares one of three environmental documents:

**A Negative Declaration (ND)** is issued if the study concludes the project will have no significant environmental impacts. **A Mitigated Negative Declaration (MND)** is used when identified impacts can be reduced to less-than-significant levels through enforceable measures, such as modifying construction schedules to protect nesting birds or installing noise barriers. These documents must be available for public review for 30 days before project approval, and the lead agency must respond to any comments received and file a Notice of Determination within five days of adopting the ND or MND.

For projects with unavoidable significant impacts, if significant impacts remain after mitigation, the agency must adopt a Statement of Overriding Considerations justifying the project's benefits despite environmental costs. This statement might emphasize economic benefits, housing needs, or public safety imperatives, as seen in approvals for critical infrastructure projects in fire-prone areas, and an **Environmental Impact Report (EIR)** is required. The EIR provides a comprehensive analysis of impacts, proposes mitigation strategies, and explores alternatives, including the "no project" option. Alternatives must achieve most of the project's basic objectives while minimizing harm; for example, a highway expansion might consider route modifications or public transit enhancements as alternatives to reduce air pollution.

For projects requiring an Environmental Impact Report (EIR), a Notice of Preparation (NOP) is issued, initiating a 30-day comment period to identify key issues and alternatives. Scoping meetings may be held for complex projects, particularly those of regional significance, to ensure all concerns are addressed early in the process. This phase is critical for avoiding oversights and reducing litigation risks by incorporating diverse perspectives. The EIR preparation process includes a draft phase released for public review (typically 30–45 days) and a final phase incorporating responses to comments. For state-level projects, the draft EIR undergoes a 45-day review through the State Clearinghouse to coordinate agency feedback.



This phase is critical for avoiding oversights and reducing litigation risks by incorporating diverse perspectives. The EIR preparation process includes a draft phase released for public review (typically 30–45 days) and a final phase incorporating responses to comments. For state-level projects, the draft EIR undergoes a 45-day review through the State Clearinghouse to coordinate agency feedback.

*Public Review and Agency Decision*

CEQA mandates transparency through public review periods, allowing community members, organizations, and agencies to submit comments on environmental documents. For EIRs, the review period is typically 30–45 days, while

Negative Declarations require at least 20 days. During this phase, the lead agency must address substantive comments in writing, explaining how concerns were resolved or why they were dismissed. For example, if residents raise concerns about a project’s impact on local water quality, the agency might revise mitigation measures or provide additional data on groundwater monitoring. Note that during any of the pathways, the lead agency solicits input from other agencies, tribal governments, and the public to refine the analysis.

Final approval requires the agency to certify by making findings that the EIR or a Mitigated Negative Declaration accurately reflects the project’s environmental consequences and that mitigation measures are feasible.

## *Mitigation Measures and Alternatives*

CEQA requires lead agencies to adopt all feasible measures to mitigate significant environmental impacts. Mitigation strategies include avoidance (e.g., rerouting a road to protect wetlands), minimization (e.g., using low-noise pavement), rectification (e.g., restoring degraded habitats), and compensation (e.g., funding off-site conservation easements). For example, a coastal development project might mitigate habitat loss by purchasing and preserving equivalent acreage elsewhere.

The law also mandates analysis of project alternatives that could achieve similar objectives with fewer impacts. Alternatives must be “feasible” and “capable of avoiding or substantially lessening environmental harm.” In urban infill projects, alternatives might include reducing building height, increasing green space, or incorporating renewable energy systems. The “no project” alternative serves as a baseline for comparison, illustrating the environmental consequences of inaction.

By integrating rigorous analysis, public engagement, and adaptive mitigation, the CEQA process ensures that environmental considerations remain central to California’s development trajectory while providing flexibility for projects with minimal impacts through well-defined exemptions.

## Legal and Policy Challenges: Litigation, Reform, and Climate Integration

### *Litigation Risk and Strategic Use of CEQA*

The judicial outcomes in CEQA (the “Act”) cases present notable patterns. Analysis of court decisions reveals that plaintiffs prevail in approximately 44% of CEQA cases. This regularity of success in challenging CEQA decisions has contributed to discussions about the predictability and consistency of CEQA enforcement. This is exacerbated by the fact that various parties utilize CEQA’s legal framework for different purposes. The Act’s broad standing requirements allow diverse stakeholders to file lawsuits and analysis suggests that environmental organizations represent a minority of CEQA plaintiffs<sup>5</sup>. The Little Hoover Commission’s (the “Commission”) 2024 report on CEQA acknowledged that the Act’s expansive standing provisions enable various parties to pursue litigation and the Commission noted concerns about the potential for CEQA to serve as a vehicle for pursuing objectives that may extend beyond environmental protection.

The Commission observed that CEQA proceedings can sometimes function as fora for broader policy debates, including those related to land use and local governance

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<sup>5</sup> [CEQA-By-the-Numbers May 2023 page 15-22](#)

issues. In response to these observations, the Commission recommended modifications to standing requirements, specifically suggesting strengthened requirements for filing CEQA lawsuits to help ensure the law's use aligns more closely with its environmental protection purposes. The Little Hoover Commission's recommendations represent one approach to address these concerns through targeted modifications to the Act's procedural requirements. To date, however, these recommendations remain unadopted.

The complexity of CEQA litigation remains and has created practical challenges for project development. The extended timeline of legal proceedings, typically lasting several years including appeals, can create financial uncertainty that affects project viability and investor confidence. Legal experts have noted that the unpredictability of litigation outcomes can influence project planning and implementation decisions. These dynamics have prompted ongoing discussions among policymakers, legal practitioners, and stakeholders about potential reforms to improve CEQA's effectiveness while maintaining its environmental protection functions.

#### *Climate Adaptation and Carbon Neutrality Mandates*

CEQA has grown beyond its original environmental review mandate to become deeply integrated with California's climate strategy. Updated guidelines, specifically Section 15064.4, mandate quantifying and mitigating greenhouse gas (GHG) emissions, aligning with the state's 2045 carbon neutrality goal established by Assembly Bill 1279. Projects must now assess operational and construction-related emissions, with thresholds established by regional air quality management districts. For instance, transit-oriented developments (Transit Priority Projects) near major transit stops can receive CEQA streamlining under SB 375 if they meet specific consistency requirements with regional Sustainable Communities Strategies and satisfy detailed environmental, land use, and community benefit criteria, though complete CEQA exemption requires meeting all requirements of Public Resources Code Section 21155.1 rather than achieving a specific VMT reduction percentage. Meanwhile, California's Climate Adaptation Strategy and related state planning documents promote green infrastructure, such as permeable pavements and urban forestry to enhance climate adaptability, though these are not specifically mandated within the CEQA Guidelines themselves. Conflicts can arise however, when renewable energy projects face CEQA challenges; according to empirical studies, energy projects (including solar farms and wind installations) have faced litigation rates consistent with other project types, with nearly one-third of solar projects and half of wind projects facing lawsuits during federal environmental review processes<sup>6</sup>.

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<sup>6</sup> [NEPA Litigation Over Large Energy and Transport Infrastructure Projects | FSI](#)

## Conclusion: Balancing Efficiency and Stewardship

CEQA's dual role as environmental safeguard and development gatekeeper remains contentious. While reforms like SB 35 and AB 1633 address procedural abuse, critics argue that exemptions risk undermining ecological protections, particularly in disadvantaged communities already burdened by pollution. Proponents counter that targeted streamlining prioritizes housing and climate infrastructure without sacrificing accountability.

As California navigates climate crises and equity imperatives, CEQA's adaptability is tested. Initiatives like GHG thresholds and wildfire mitigations exemplify its evolving relevance, yet persistent litigation risks demand structural fixes—such as disclosure requirements for litigants and limits on successive lawsuits. The Act's enduring strength lies in its capacity to harmonize growth and sustainability, ensuring that environmental justice remains central to California's development narrative

## CEQA Requirements for Biomass Fuel Reduction Projects

CEQA imposes varying requirements on biomass fuel reduction projects versus wood product businesses that utilize forest residues from those activities, highlighting differences in regulatory frameworks, environmental impacts, and policy objectives. Although both types of projects are important to meet state climate and safety goals, fuel reduction initiatives are granted streamlined pathways and multiple exemptions to facilitate wildfire prevention, while wood product businesses encounter more intricate commercial and industrial permitting processes, limited exemptions, and more extensive environmental review requirements<sup>78</sup>.

Fuel reduction in most cases, is treated as an emergency response activity deserving expedited regulatory treatment<sup>9</sup>, while the enterprises that can handle wood waste disposal are largely treated as unrelated to the fuel reduction effort. Wood product businesses contribute to climate goals and rural economic development but operate within a regulatory framework that emphasizes procedure over action. Recently proposed categorical exemptions for wood utilization facilities (that will be discussed more below) represent recognition that current CEQA requirements may impede beneficial biomass utilization projects<sup>10</sup>. Recognition that biomass residual waste

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<sup>7</sup> [California Streamlines CEQA for Housing and Public Projects](#)

<sup>8</sup> [With growing fire risk, Governor Newsom proclaims state of emergency to fast-track critical wildfire prevention projects statewide | Governor of California](#)

<sup>9</sup> [California Code of Regulations, Article 2, Section 1052 - Emergency Notice | California Code of Regulations | Justia](#)

<sup>10</sup> [WFR\\_May\\_2024\\_GovUpdate05\\_07.pdf](#)

management cannot solely be managed by prescribed fire or chip-and-scatter methods lead squarely to the need to develop other methods for disposal.

### **Categorical Exemptions**

Fuel reduction projects enjoy access to multiple categorical exemption pathways beyond the commonly used Class 4 exemption. Some projects may qualify for statutory exemptions, as demonstrated by the documentation provided by a project manager or agency. Emergency project exemptions under Section 15269(c) are available for fuel management activities that constitute "specific actions necessary to prevent or mitigate an emergency," where "emergency" is statutorily defined as "a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services". This exemption is particularly applicable for fire or catastrophic risk mitigation around existing facilities, provided the threat is immediate and substantial rather than speculative or long-term. Each time such an exemption is used, the use must be documented and explained in order for the exemption to hold up under scrutiny.

### **California Vegetation Treatment Program (CalVTP)**

The California Vegetation Treatment Program (CalVTP) provides an additional streamlined pathway specifically designed for fuel reduction projects. This programmatic environmental impact report covers 20 million acres of fire-prone, non-federal land in California and "enables efficiencies in the CEQA process that can reduce review timelines from multiple years to just months<sup>11</sup>." CalVTP states that it reduces redundancies without sacrificing environmental quality by allowing project sponsors to build upon verified environmental analysis for site-specific reviews. The Board of Forestry and Fire Protection released the proposed Final Program EIR for CalVTP in 2019, certified the Final PEIR, and approved the program later that year. Shortly thereafter, environmental groups filed a verified petition for a writ of mandate challenging the CalVTP's CEQA compliance in 2020. To date, the California Court of Appeal (Fourth District, Division One) remanded the case back to superior court with directions to consider whether specific CalVTP projects should be suspended until the Board complies with the court's mandate to redo their environmental analysis, representing the most significant legal setback for the CalVTP since its inception.

These projects frequently qualify for categorical exemptions under CEQA Guidelines Section 15304, Class 4 (Minor Alterations to Land), which covers "minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes".

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<sup>11</sup> [California Vegetation Treatment Program \(CalVTP\) Environmental Impact Report - California Wildfire & Forest Resilience](#)

This exemption is particularly applicable to fuel management activities within 30 feet of structures to reduce flammable vegetation volume, provided the activities do not result in taking of endangered species or significant erosion.

Recent project implementations demonstrate County fuel reduction CEQA success. The Olympic Valley Public Service District's OV-4 Fuel Reduction Project, covering 127.7 acres, successfully utilized the Class 4 categorical exemption for establishing shaded fuel breaks around residential properties. Similarly, the Truckee North Tahoe Forest Management Grant Project applied the same exemption for thinning, pruning, chipping, and mastication activities across 41 acres, emphasizing the elimination of surface and ladder fuel continuity. The Nestdown Ranch Vegetation Treatment Project in Santa Clara County also leveraged this exemption for mechanical and manual treatments across 53.3 acres.



### **Governor's Emergency Proclamation: Unprecedented Support for Fuel Reduction**

The most significant recent development supporting fuel reduction projects is Governor Newsom's March 1, 2025, Emergency Proclamation, which suspends CEQA and the California Coastal Act "to the extent necessary for expediting critical fuels reduction projects"<sup>12</sup>. This proclamation allows both state and non-state entities to conduct approved fuel reduction work through streamlined state managed approval processes<sup>13</sup>.

Eligible projects under the emergency proclamation must include as a primary objective at least one of the following activities: removal of hazardous, dead, or dying trees; vegetation removal for strategic fuel breaks identified in approved fire prevention plans; vegetation removal for community defensible space; vegetation removal along

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<sup>12</sup> [Proclamation of State Emergency](#)

<sup>13</sup> [California Continues Swift Progress to Fast-Track Critical Wildfire Projects: Apply Here for Streamlined Permitting - California Wildfire & Forest Resilience](#)

roadways for safer evacuation routes; cultural traditional ecological knowledge and prescribed burns; or maintenance of existing fuel breaks.

The proclamation requires compliance with a Statewide Fuels Reduction Environmental Protection Plan that implements best management practices to protect environmental resources while conducting fuels reduction work. This approach enables expedited permitting while maintaining environmental safeguards for water quality, air quality, tribal cultural resources, and special-status species habitats.

### **Legislative Efforts**

An attempt in 2025 with Assembly Bill 1456, authored by Assemblymember Isaac Bryan, represented a significant departure from typical CEQA exemption approaches. Rather than creating broad exemptions for vegetation fuel management projects, this proposed 2025 legislation would require the State Board of Forestry and Fire Protection to update the California Vegetation Treatment Program Final Program Environmental Impact Report (FPEIR) by January 1, 2027 to include portions of the state suitable for vegetation treatment regardless of fire suppression responsibility designation, incorporation of biomass disposal and recognition of cultural burning as a covered treatment activity that integrates indigenous and tribal ecological knowledge. While this bill did not make it out of the session, it still serves as an interesting concept for future efforts.

### **Senate Bill 131**

SB 131, enacted as part of California's 2025-2026 budget package and signed into law on June 30, 2025, represents a significant expansion of CEQA exemptions designed to accelerate critical infrastructure, housing, and community service projects across the state. While the legislation creates nine new statutory exemptions covering areas such as health centers, childcare facilities, food banks, farmworker housing, clean-water infrastructure, broadband deployment, and public parks, two provisions have garnered particular attention: the advanced manufacturing exemption and the wildfire risk reduction exemption. These statutory exemptions differ from categorical exemptions in that they do not trigger the numerous exceptions that can complicate CEQA compliance, such as the "unusual circumstances" exception, making them more robust pathways for project approval.

The advanced manufacturing exemption could be an important provision for biomass processing, exempting projects that consist exclusively of advanced manufacturing facilities located on sites zoned only for industrial uses and not designated as natural and protected lands. Under the bill's definition, advanced manufacturing encompasses microelectronics and nanotechnologies, semiconductors, advanced materials, integrated computational materials engineering, nanotechnology, additive

manufacturing, and industrial biotechnology. The definition extends to systems that achieve substantive advancement beyond current industry standards in materials or product production, as well as sustainable manufacturing systems that minimize resource use while maintaining cost and performance. This broad framework encompasses semiconductor fabrication plants, battery manufacturing facilities, defense, and aerospace manufacturing operations, and potentially biomass processing facilities that utilize industrial biotechnology for converting organic materials into biofuels, biochemicals, or bio-based materials. Industrial biotechnology processes can include the use of engineered microorganisms and enzymes to break down lignocellulosic biomass, such as agricultural residues, forest biomass, and woody feedstocks into sugars that are then fermented into advanced biofuels, bioplastics, and other bio-based products. These biorefinery operations represent sustainable manufacturing systems that convert renewable biomass feedstocks into high-value products while minimizing reliance on fossil fuels. The exemption removes a procedural hurdle for developing advanced manufacturing capacity in California, though projects must still comply with state air quality regulations, climate rules, and other applicable permitting requirements.

The wildfire risk reduction exemption addresses California's ongoing struggle with catastrophic wildfires by eliminating CEQA review for specific categories of fuel management and fire prevention projects. The exemption covers four distinct types of projects designed to reduce wildfire hazards across the state. First, it exempts prescribed fire and fuel reduction projects intended to reestablish natural fire return intervals and reduce wildfire risk, provided the projects do not exceed 50 acres, are located within one-half mile of a subdivision containing 30 or more dwelling units, and avoid coastal sage scrub habitat or other sensitive habitats. Second, the exemption applies to defensible space fire clearance projects that help create buffers around existing structures. Third, it covers the establishment or enhancement of residential home hardening and defensible space for wildfire risk reduction within 200 feet of a legal structure located in high or very high wildfire hazard zones. This provision aligns with existing state defensible space requirements, which in some high fire hazard areas already extend maintenance obligations up to 200 feet from structures. Fourth, the exemption includes fuel breaks designed to create strategic gaps in vegetation that slow or stop fire spread. All wildfire risk reduction projects must include environmental safeguards and comply with local, state, and federal laws while avoiding impacts on sensitive habitats, with consultation required from the Department of Fish and Wildlife and other appropriate agencies to protect riparian and tribal cultural resources. These wildfire exemptions reflect the state's recognition that CEQA review timelines can delay critical fuel reduction work during narrow seasonal windows when prescribed burns and vegetation management can be safely conducted.

The remaining exemptions created under SB 131 address a diverse range of infrastructure and community service needs. The bill exempts rezoning actions that implement schedules contained in approved housing elements, federally qualified health centers and rural health clinics under 50,000 square feet, childcare facilities not located in residential areas, nonprofit food banks and pantries on industrial-zoned sites, and certain electrically-powered high-speed rail maintenance facilities. Water infrastructure provisions extend existing exemptions for small disadvantaged community water projects until 2032 and expand eligibility to include sewer service for communities with inadequate sewage treatment systems. The legislation also exempts linear broadband deployment projects in local street rights-of-way and public park or nonmotorized recreational trail facilities funded by the Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024. However, most of these exemptions exclude projects proposed on natural and protected lands, a broadly defined category encompassing state and national parks, wetlands, and areas within 300 feet of wetlands, conservation easement lands, prime farmland, very high fire hazard zones, and other environmentally sensitive areas. Beyond the new exemptions, SB 131 introduces an innovative "near-miss" streamlining provision specifically for housing development projects that fail to meet a single criterion for an otherwise applicable exemption, limiting CEQA review exclusively to the environmental impacts associated with that single disqualifying condition rather than requiring full environmental impact reports. Together, these reforms reflect the Legislature's intent to streamline development that advances state policy goals while attempting to preserve environmental protections where they matter most, though ongoing legislative efforts may further refine the advanced manufacturing provisions in response to community and environmental health concerns.

## Specific CEQA Issues with both Bioenergy and Wood Products Development Projects

There are several aspects of CEQA review that are particularly important when developing a project that uses wood chips as its base material. One area that needs special attention when developing projects that use biomass waste is the greenhouse gas analysis. General technical guidance on the subject from the Governor's Office of Land Use and Climate Innovation emphasizes that lead agencies "should make a good-faith effort, based on available information, to calculate, model, or estimate the amount of CO<sub>2</sub> and other GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities." This requirement, established in their 2008 Technical Advisory on CEQA and Climate Change, provides the foundational framework for greenhouse gas emissions analysis under CEQA review, with updated CEQA Guidelines Section 15064.4 now mandating

that agencies "shall" make this good faith effort as part of their environmental impact assessment process.

Other impact areas such as air quality, traffic, noise, water quality, biological and cultural resources, soils and geology, aesthetics, and hazards must also be thoroughly evaluated under CEQA. Air quality analyses assess criteria pollutants from chip processing and transport, while traffic studies model the additional vehicle trips generated by material deliveries and operations. Noise assessments examine construction, and equipment impacts on nearby receptors, and water quality reviews address potential runoff and sedimentation from storage and handling areas. Biological and cultural resource evaluations identify and protect sensitive habitats and archaeological sites, and soils and geology studies ensure safe grading and erosion control. Aesthetic and visual impact reviews consider changes to landscape character, and hazards analyses evaluate fire risk, chemical storage, and emergency access activities.

## Suggestion to Improve CEQA for Business Development

The Joint Institute for Wood Products proposed amendments to CEQA guidelines in its recent CEQA Handbook<sup>14</sup> including plans to "create a categorical exemption for projects that utilize forest biomass waste located on properties zoned as industrial and outside zones of extreme air quality nonattainment," this exemption remains only as a proposal in 2025. Currently, most bioenergy and wood product facilities must undergo full environmental review processes, as CEQA's anti-piecemealing doctrine prohibits relying on categorical exemptions that would apply only to specific facility components rather than analyzing the environmental impacts of entire operations as integrated projects.

Other parts of the Handbook recommendations focus on reducing procedural burdens for projects on previously developed sites and incorporating lifecycle emission benefits into CEQA's energy-efficiency guidelines. A new brownfield reuse exemption could allow redevelopment of former industrial properties, as long as the new exemption provided that existing environmental baselines are maintained and no new significant impacts occur, such a new idea could improve project success. Also, enhancements to the energy-efficiency checklist would recognize the full life-cycle advantages of bioenergy facilities—extending beyond onsite efficiency to include avoided emissions from alternative waste-disposal methods. Together, these reforms seek to balance environmental protection with the urgent need to scale up renewable energy and sustainable forest management.

As an aside, the Yolo-Solano Air Quality Management District's revision of Rule 2.43 for biomass boilers demonstrates one available exemption pathway within air district

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<sup>14</sup> [CEQA Handbook for Bioenergy and Wood Products Businesses page 113](#)

permitting, which relies on the Class 8 categorical exemption under Section 15308 as an "Action by Regulatory Agency for Protection of the Environment". This exemption applies specifically to regulatory agency actions for environmental protection and cannot be used by private or commercial parties for their own project approvals. Additionally, many available exemptions apply to existing facilities rather than new facility construction."

## Legal Challenges to Processing Woody Residuals

Wood product businesses utilizing biomass require intricate CEQA compliance requirements compared to fuel reduction initiatives, owing to their industrial-scale operations and commercial objectives. Biomass facilities frequently face legal challenges, but the success stories rarely make it into the media.

For example, the Alpenglow Timber Sawmill's lengthy CEQA review process ended in success when it was approved by Nevada County in October 2024 with a Mitigated Negative Declaration. While it encountered neighbor opposition and significant regulatory hurdles that resulted in delays and the need for extensive mitigation planning, the project is clear now for development.

Nevada County prepared a comprehensive Initial Study and Mitigated Negative Declaration for the 124-acre project at 10375 Silverado Way, identifying potential environmental impacts requiring mitigation across eleven categories including air quality, biological resources, noise, hazardous materials, and cultural resources. The environmental review process, which began with the project application in 2023, required extensive analysis of the proposed sawmill facility and associated employee housing. Initially, the project faced community resistance, with over 400 public comments opposing the facility. The opposition group Friends of Prosser Truckee formed specifically to challenge the project, citing concerns about traffic safety, noise pollution, and property value impacts. In the end however, the Nevada County Board of supervisors found that the project had merit, and the final decision to approve the project was not challenged in court.

In Wilseyville, California, the Blue Mountain Electric Project that has been in development since 2018 is planning to develop a 3-MW facility that converts local biomass into syngas and biochar. In 2021 the Project changed hands; the initial nonprofit that led the development of the project, Calaveras Healthy Products Impact Solutions, sold the project to Phoenix Energy. The project needed small changes made to the project description and the County did not find the changes to be substantial. A vocal group from outside the local area attempted to thwart the project approval process at the Calaveras Board of Supervisors, but Blue Mountain Electric prevailed at its January 2022 [hearing](#). Since that time, it has partnered with the local water district to make the project even more locally beneficial.

In 2012, Mount Shasta Bioregional Ecology Center and Weed Concerned Citizens challenged Siskiyou County's approval of Roseburg Forest Products Co.'s 15-MW biomass-fired cogeneration plant expansion near the City of Weed, arguing the Environmental Impact Report (EIR) inadequately addressed alternatives, air quality, noise, and water impacts. After an extensive review process, including appeals, public EIR drafts, and final certification, the courts upheld the project, finding that while the EIR had minor deficiencies, they did not prejudice the environmental review or violate CEQA requirements. This appellate decision underscored that CEQA requires informed decision-making rather than perfection, and demonstrated that thorough, evidence-backed documentation can help bioenergy projects withstand legal scrutiny.<sup>15</sup>

These enterprises must address multidimensional environmental factors extending beyond immediate wildfire mitigation, including industrial facility siting considerations, long-term emissions profiles, and supply chain logistics. This contrasts with fuel reduction projects, which benefit from the processes and exemptions for vegetation management activities mentioned above.

## Regional Case Studies of CEQA Bottlenecks

### *Rescaling and Regulatory Realities: The Golden State Natural Resources Forest Resiliency Project in Tuolumne County*

The Golden State Natural Resources Forest Resiliency Project in Tuolumne County began as a bold collaboration among rural counties and the U.S. Forest Service to convert up to one million tons of excess forest biomass annually into wood pellets for international energy markets, backed by a 20-year Master Stewardship Agreement and anticipated to create stable, skilled jobs in under-resourced communities. However, during its October 2024 DEIR review, over 5,500 public comments, amplified by environmental groups' concerns over greenhouse gas emissions, air quality, and forest treatment methods, led GSNR's board to drop pellet production in June 2025 in favor of scaled-down domestic wood chip distribution. The CEQA process required an extended 90-day DEIR review and now necessitates a Revised DEIR in early 2026, highlighting how multi-agency air quality permitting, complex public review cycles, and the technical capacity limitations of rural jurisdictions can stretch wildfire mitigation projects into multi-year endeavors, even amid shifting international biomass subsidies and urgent wildfire risks. Nevertheless, in the end it appears that the process landed the community and the project proponents on an agreed upon path forward.

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<sup>15</sup> [Mount Shasta Bioregional etc. v. County of Siskiyou: 2012 :: California Courts of Appeal Decisions :: California Case Law :: California Law :: U.S. Law :: Justia](#)

## *Rural Capacity Crisis: The Brooktrails Microcosm Example*

The Brooktrails evacuation route clearance project highlights how limited resources in rural areas can make meeting CEQA requirements even more difficult. Despite securing \$447,000 in CAL FIRE grants in 2020, Sherwood Firewise Communities completed only 20% of planned work by 2025 due to Mendocino County's 18-month vacancy rate for environmental planners. Retiree Luis Celaya's frustration, "We're sitting ducks waiting for paperwork," mirrors sentiments documented in studies of rural California capacity constraints. The Little Hoover Commission's research on rural well-being shows that rural California faces significant challenges in governmental capacity and resource allocation. Compounding this, the county's lone CEQA consultant retired in 2023 without replacement, forcing project managers to contract Bay Area firms at 300% local rate premiums.<sup>16</sup>

Rural counties face unique challenges in environmental planning due to limited staff resources and specialized expertise requirements, with greater distances, lower population densities, and geographic diversity creating obstacles not faced by more urban or suburban counterparts. This disconnect between regulatory tools and localized expertise perpetuates the very environmental risks CEQA aims to mitigate, as rural communities often lack the technical capacity to effectively navigate complex environmental review processes despite having access to streamlined procedures and exemptions.

### *Conclusion*

The differential application of CEQA to biomass fuel reduction projects and wood product businesses reflects distinct regulatory philosophies and public policy priorities. Fuel reduction projects benefit from numerous exemptions, streamlined processes like CalVTP, and recognition as emergency wildfire prevention activities deserving expedited treatment. These projects typically qualify for categorical exemptions and face focused environmental review emphasizing immediate safety benefits over comprehensive impact analysis.

Wood product businesses encounter substantially more complex CEQA requirements reflecting their commercial nature and broader environmental implications. These enterprises must conduct comprehensive analyses of industrial impacts, greenhouse gas emissions, and cumulative environmental effects while having access to fewer exemption pathways. However, ongoing regulatory evolution, including proposed categorical exemptions for appropriate biomass utilization facilities, suggests

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<sup>16</sup> [California's program to fast-track wildfire prevention work hasn't finished a single project | KPBS Public Media](#)

recognition that current frameworks may unnecessarily impede beneficial biomass enterprises.

## CEQA Implementation in Lake County

### Insights from Local Interviews

The Lake County landscape shows mixed results of the application of CEQA for project approval. Some projects are processed quickly while others remain stalled. Proposed solutions from stakeholders include centralized CEQA support through county-wide coordination teams, empowering special districts as lead agencies through collaborative education and capacity building, integrating biomass support components into General Plans to institutionalize infrastructure priorities, and developing Programmatic Environmental Impact Reports to cover repetitive fuel-reduction activities like mastication and chipping. These interviews show how CEQA, while important for environmental protection, creates implementation challenges for the very agencies working to improve environmental conditions and reduce wildfire risks.

### Introduction projects reviewed and approved in Lake County (examples)

Lake County has processed numerous projects through its environmental review process in recent years, including the Red Hills BioEnergy Project. Following a lawsuit brought by neighboring winegrape growers, the project received approval through a Mitigated Negative Declaration. Operated by Scotts Valley Energy Corporation under Major Use Permit (UP 19-05), the approved facility will produce syngas and biochar from woody biomass on approximately 35 acres at 7130 Red Hills Road in Kelseyville. In 2023 there were necessary project modifications which relocated the operational building 40 feet east and reduced the project footprint from 43,350 square feet to 15,000 square feet, and eliminating outdoor biomass processing areas.

Another project that was approved by the county was the Woody Biomass Carbonizer Pilot Project which received approval under Class 4 (Minor Alterations to Land) and Class 7 (Actions by Regulatory Agencies for Protection of Natural Resources) exemptions<sup>17</sup>. This project, which established a portable biochar production facility on a 7.5-acre site, showcases the county's ability to utilize multiple exemption categories simultaneously for biomass operations.

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<sup>17</sup> [County of Lake Notice of Exemption 2/25](#)

Third is the Scotts Valley biomass conversion project proposed in Upper Lake, which plans to use pyrolysis gasification technology to convert forest woodchips and other woody biomass into biochar and syngas, the latter of which is used to generate electricity. The Lake County Planning Commission approved the major use permit for the Scotts Valley Energy Corporation's (SVEC) "woody biomass-to-biochar facility" on December 12, 2024, following several months of public hearings. Community members consistently raised concerns about lack of transparency in the County's process and insufficient information about potential impacts on residents near the project, water quality at Clear Lake, and agricultural land impacts. The project continues in the appeal process at the Board of Supervisors due to ongoing public opposition regarding the facility's location. Concerns articulated include the location within a floodplain and near wetlands, the proximity to a preschool and residential areas. It appears from the residential testimony that these communities might have benefited from more active early public engagement about the project (even though all processes were legally followed for public notification). The current discussions relate to the Lake County Watershed Protection District lease of the property to SVEC for this project.

These three examples demonstrate that there is local interest within the business community to develop biomass businesses in Lake County. Lake County has processed these projects as required, but as with any local agency, there is always room for improvement, with many suggestions coming from the interviews held and described above. When considering how a county might improve its environmental review process, referencing how other counties in California proceed with their work might offer some interesting insights for consideration. We take several in turn below.

## CEQA Review Process: Ideas for Streamlining and Improvement

Lake County has the tools needed to process projects as described above. For ideas on how things might be further improved in relation to the review of wildfire reduction, forest health, and biomass business development, we looked at the Lake County Code, and several other county codes, notably Sonoma, Marin, Napa, Placer, Calaveras, Tuolumne, and Ventura. There are some potentially interesting approaches that the County of Lake could take towards support for these projects.

### *Strategic Use of CEQA Exemptions or Suspensions*

Lake County's current framework supports forest health and wildfire projects, such as the fact that the removal of dead and dying trees typically does not require permits, providing a streamlined approach for immediate fire risk reduction activities. Other potential additions to the County's policies or CEQA process could help further success.

An interesting example is the focused use of exemptions for these projects that is clearly described in public facing documents. Tuolumne County has strategically applied existing state CEQA exemptions specifically for wood use activities throughout its municipal code. The county's Chapter 12.20 (Grading Ordinance) provides exemptions for vegetation removal, timber operations, site preparation and regeneration operations performed under various state-approved plans including Timber Harvest Plans, Modified Timber Harvest Plans, Emergency Notices, Nonindustrial Timber Management Plans, Program Timber Harvesting Plans, or Exemptions under 14 CCR § 1038 issued by CAL FIRE. Additionally, the ordinance exempts Notice of Conversion Exemption Timber Operations under 14 CCR § 1104.1 for single family home construction. The county's Chapter 8.05 (Storage Ordinance) provides particularly generous relief by exempting storage of wood products, raw materials and equipment related to sawmills or wood processing facilities countywide from area and visibility limitations. This exemption applies broadly across all zoning districts where such uses are permitted or conditionally permitted.

Another County Code approach is taken in Calaveras County where supportive zoning provisions help the overall permitting environment. The county's Title 17 (Zoning Code), updated in July 2024, allows wood yards as conditional uses in Rural Residential zones and provides for agricultural processing facilities to receive streamlined review under certain size thresholds. This recent update modernized the county's approach while maintaining environmental protection. Also, the county's Chapter 17.101 (Oak Woodland Mitigation Ordinance) provides specific exemptions from oak woodland requirements for certain activities while integrating with CEQA mitigation requirements for significant impacts. This ordinance balances conservation goals with practical development needs. Under Chapter 15.05 (Grading Ordinance), grading permits under 50 cubic yards generally do not require CEQA review, and standard categorical exemptions apply to compatible timber operations.

A third example is the Marin County Code that provides a slightly less direct but still relevant example of the deployment of categorical exemptions for socially critical policies. The county successfully applied CEQA Guidelines §15061(b)(3) to tenant protection ordinances restricting no-cause evictions, categorizing the action as a regulatory measure protecting public welfare and avoiding full environmental review while maintaining CEQA compliance. Additionally, Marin County's 2011 ordinance banning single-use plastic bags and requiring fees on paper bags invoked CEQA Guidelines §§ 15307 and 15308, categorical exemptions for actions that protect natural resources and the environment. This strategic approach allowed the county to implement waste-reduction policies without lengthy, costly reviews, setting a practical precedent for other jurisdictions. Notably, Marin County's exemption strategies were legally validated when courts rejected challenges from the Save the Plastic Bag

Coalition. This demonstrates that well-crafted exemption applications can withstand legal scrutiny while advancing sustainability priorities. Such strategic approaches to CEQA compliance can provide a model for rural jurisdictions seeking to expedite beneficial environmental and social policies while maintaining full regulatory compliance.

### *General Plan and Zoning Code Updates*

Lake County's General Plan broadly supports renewable energy, encouraging sustainable resource use such as geothermal and other renewables, and promoting energy-efficiency partnerships with local districts. It ties clean-energy adoption to objectives like reducing residents' utility costs but does not include expedited-permit language or specific reference to forest biomass. An example of more specific biomass supportive use language can be found within Tuolumne County's Conservation Element, adopted May 13, 2014, uniquely includes Policy 4.F.a, which directs county staff to "expedite all permits under the County's jurisdiction for the development of energy-generating facilities using renewable resources and enterprises engaged in biomass co-generation facilities." This explicit requirement for priority processing sets Tuolumne apart. Elsewhere, Yolo County's Energy and Conservation Element (Policy ER-1.1) promotes the development of biomass, biogas, wind, and solar resources in new and existing projects, while Butte County's Resource Conservation Element (Policy RC-P2) supports biomass utilization projects that both reduce wildfire fuels and generate clean energy. Mariposa, Siskiyou, and Sacramento counties likewise encourage renewable and biomass energy urging facilitation of solar, wind, geothermal, and biomass facilities in their natural-resource and economic-development elements.

In terms of zoning, the Lake county's existing zoning framework provides for biomass utilization through multiple districts that accommodate different scales of operations. The Agricultural Preserve District (APZ) permits agricultural processing facilities up to 5,000 square feet without requiring conditional use permits, which can accommodate smaller biomass processing operations. The Heavy Industrial District (M2) specifically allows for power generation facilities, including biomass plants, while the Industrial Park District (MP) provides for controlled industrial development. Lake County's 2008 General Plan includes specific policies supporting biomass utilization, including Policy AR-2.5 which encourages "the development of alternative energies production (e.g., ethanol) as new agricultural-related industries and for the utilization of agricultural waste," and Policy AR-4.3 which supports "the location of industrial and research-oriented businesses specializing in biofuels that can enhance agricultural productivity". These policies provide direct support for biomass energy facilities and establish a foundation for exemption procedures that prioritize projects serving environmental protection purposes, particularly those that address wildfire prevention and forest management through biomass utilization.

## *Process Clarity*

Ventura County's One-Stop Permitting portal centralizes planning, building, environmental health, engineering, and other development and environmental review tasks into a single online system, complete with coordinated intake, consolidated checklists, combined fee payments, and unified status tracking. These tools demonstrate how counties can bolster predictability and stakeholder engagement through improved customer service and interdepartmental coordination while remaining within the same state CEQA framework.

To achieve similar benefits, Lake County could develop a consolidated "Environmental Review and Permitting" portal on its Community Development Department website. This portal would serve as a single landing page linking directly to the Master Fee Schedule (including CEQA filing fees and Notices of Exemption), County Code Chapter 21 (Zoning & Planning Procedures and public-notice requirements), and the Environmental Filings (CEQA) page with all forms and guidelines. By assembling fee schedules, statutory procedures, CEQA protocols, and existing expedited-permit pathways for biomass projects in one clearly labeled location, the County would help applicants and stakeholders find requirements and timelines efficiently, reduce confusion, and speed up the entire review process.

## *Technical Expertise Integration*

The Lake County Planning Department is the lead county department for CEQA compliance with experienced planners who evaluate every project for compliance with environmental regulations. The Department coordinates with other county departments like the Water Resources Department, which in turn coordinates CEQA review on issues such as drainage, grading, and floodplain standards drawing on the Subdivision Regulations, Zoning Ordinance, Clear Lake Shoreline Protection, Storm Water Management Ordinance, and Grading Ordinance to seamlessly process environmental review with use permit technical project requirements.

On the issue of air quality impacts, Lake County may want to review the example of Placer County's Air Pollution Control District CEQA Review Program that provides local agencies with specific information on air quality compliance, including a comprehensive CEQA Handbook containing criteria for determining when air quality analysis is needed, appropriate analysis types, and specific mitigation measures. This systematic integration of technical expertise ensures consistent application of environmental standards across different project types, representing a more comprehensive approach than Lake County's department-specific integration. This type of guidance could be developed in partnership with the Lake County Air Quality Management District.

An assessment of how to support the various Lake County departments that participate in the environmental review process could prove beneficial. If there are specific departments with many new staff, or staff generally that are not familiar with these topics, investments in education could prove useful.

### *Development of Thresholds of Significance for Effective Mitigation Analysis'*

Like most counties, Lake County does not set explicit thresholds for determining when fuel-reduction or biomass-utilization projects become significant, a step that, if addressed before project submittals, could streamline approvals. Ventura County's Air Quality Assessment Guidelines<sup>18</sup> provide a useful example: they establish clear, quantitative limits for pollutants such as particulate matter, nitrogen oxides, reactive organic gases, and carbon monoxide. Any project that exceeds these thresholds must undergo a full CEQA air-quality impact analysis, complete with detailed modeling and mitigation. The County of San Diego's Multiple Species Conservation Program Subarea Plan (Section 8.5) establishes specific acreage thresholds for impacts to sensitive vegetation communities, riparian corridors, and occupied habitat of protected species, and requires formal mitigation plans typically with restoration ratios of 2:1 or greater, whenever those numeric triggers are exceeded<sup>19</sup>.

While establishing thresholds of significance can be somewhat time consuming, they help applicants and the public quickly determine whether project mitigation meets the standard of review, or a deeper assessment is needed, promoting consistency and transparency. When applied to fuel-reduction activities and biomass processing and associated land-use changes, these thresholds ensure all emissions are measured against the same benchmarks and subjected to in-depth evaluation when necessary.

### *Delegation of Authority*

Lake County operates with a relatively basic administrative framework under Article 64 of Chapter 21 of its county code, which delegates environmental review responsibilities to the Planning Commission and Zoning Administrator, with the Board of Supervisors retaining authority over publicly initiated projects. The delegation is broad, granting "to the fullest extent permitted by state law the responsibility for preparing and certifying in their final form, all environmental documents for projects subject to County jurisdiction" to these bodies, subject to appeal. This approach, while functional, might be improved for more efficient CEQA processing.

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<sup>18</sup> [VCAQ Guidelines Table 3-1 page 13](#)

<sup>19</sup> [San Diego's Multiple Species Conservation Program Subarea Plan \(Section 8.5\)](#)

The County of Lake could consider broadening the authority of the zoning administrator and the Planning Director to approve modest sized fuel reduction projects (that are not benefiting from the Governor’s CEQA exemption as described earlier) and micro and small businesses that use biomass residue. Providing for this review pathway can significantly shorten the review period for projects and, of course, continue to provide for appeals processes to the administrative hearing board or planning commission as the final stop on the administrative path, rather than the Board of Supervisors, can also significantly improve process time, while also ensuring projects are still overseen and the public is involved.

## The Recommendations: Strengthening and Streamlining CEQA Implementation in Lake County

Based on the input from stakeholders and the comparison of the Lake County Code to other Jurisdictions, the following recommendations are made:

### *1. Developing County Regulations that Support Exemptions for Wood Products and Biomass Businesses (a recommendation to Lake County)*

- (A) Create written policy direction about when fuel reduction or biomass use business applications should qualify for different exemptions, or the state suspension and explore how to fully utilize the Governors’ CEQA suspension to its fullest potential,
- (B) Add more specific policies within the General Plan and language within the zoning code that allow for projects to automatically clear permitting through the zoning designation or obtain an administrative permit rather than a conditional use permit.
- (C) Lake County might create a consolidated “Environmental Review and Permitting” portal on its Community Development Department website.
- (D) Assure that county department staff are up to speed on the impacts and benefits of fuel reduction and biomass use businesses.
- (E) Develop thresholds of significance for impacts relating to projects that do not qualify for the exemptions or suspensions so that processing can be handled more quickly in the long run.
- (F) Consider expanding the use of its Zoning Administrator or Planning Director for appropriate small fuel reduction or micro biomass use business approvals.

## *2. RRA Support with CEQA: a Handbook for wood products and bioenergy and other educational materials*

The RRA could consider funding the development of a CEQA handbook tailored specifically for bioenergy and wood products businesses. There are examples of such handbooks developed for industries that could provide examples. To further enhance early public involvement and support developers in proactive outreach, Lake County may want to incorporate a dedicated chapter in the CEQA handbook on “Collaborative Engagement Practices on biomass use” The RRA could also provide essential coordination by hosting workshops to align existing procedures across agencies.

The RRA could also host public meetings that help explain to the public general, as well as specific topics related to biomass. The RRA may want to keep the handbook connected to state resources by embedding live links to the Governor’s Office of Land Use and Climate Innovation’s State Clearinghouse portal and technical advisories. They would maintain a regularly updated directory of state and federal contacts, pre-fill common forms like Notices of Exemption and Determination, and guide applicants through coordination steps with agencies such as Fish and Wildlife, the Regional Water Boards, and CalFire. By playing this role, the RRA would help Lake County streamline its CEQA process, reduce delays, and ensure the handbook remains a practical, evolving resource.

On the technical side, the RRA could organize as a part of this process the collection of local data sets and monitoring results to develop chapters tailored to Lake County’s environment. For biological resources, GIS specialists would map habitat areas around Clear Lake and nearby wetlands, recommend survey methods, buffer zones, and mitigation measures based on local species lists. Air quality experts could adapt smoke-dispersion models and biomass emission calculators to reflect Lake County’s topography and weather patterns, then provide consultants with example calculations and reporting templates.

The proposed RRA technical approach would differ from the existing California Natural Diversity Database (CNDDDB) system by providing active coordination and customized guidance rather than passive database access. While the CNDDDB offers statewide species occurrence data that consultants must interpret on their own, the RRA would take a more hands-on approach by assembling local datasets, creating Lake County-specific habitat maps with tailored survey methods and buffer zones, and developing specialized tools like biomass emission calculators adapted to the county’s unique topography and weather patterns. This shifts the focus from simply providing raw biological data to delivering coordinated, value-added technical support specifically

designed for bioenergy and wood products projects operating in Lake County's distinctive environmental setting.

Finally, the RRA could orchestrate, in partnership with the County, a County wide Programmatic EIR to cover small fuel reduction or biomass use projects that have specific impacts and associated mitigation. This type of document could significantly support local work in these areas.

### *3. Enabling Special Districts to Take on Lead Agency Role*

Lake County's smaller jurisdictions face some of the highest challenges with limited internal capacity to guide CEQA reviews from start to finish. Empowering smaller jurisdictions to act as lead agencies for their own projects, rather than relying solely on the County for CEQA oversight, would accelerate defensible-space treatments and facilitate development of small-scale wood utilization businesses. The RRA can coordinate this transition by providing legal templates, technical assistance, and governance support.

Under CEQA Guidelines section 15051, any public body that holds primary responsibility for approving a project may serve as lead agency. Fire districts in Santa Clara<sup>20</sup> and Kern County have already exercised that authority for large vegetation-management programs, showing that a local lead-agency model is both legal and practical. By shifting lead status to a special district, environmental review can move faster, mitigation measures can be tailored to local fire plans, and applicants become more competitive for state grants that reward CEQA readiness. The RRA can make this happen by drafting model memoranda of understanding that spell out how and when lead-agency authority transfers from the County to a district.

It can also maintain a shared CEQA resource center with sample notices, completed project-specific analyses under the California Vegetation Treatment Program, and a roster of pre-qualified consultants that smaller agencies can hire at negotiated rates. Annual workshops, mini-grants for upfront consultant costs, and a "lead-agency starter kit" with checklists and template resolutions would further build capacity. To reduce administrative burden, RRA staff can file electronic notices on behalf of participating agencies within the statutory five-day window and keep a countywide CEQA registry that tracks statute-of-limitations deadlines. In summary, the RRA could help by supporting lead agencies, build capacity to handle independent CEQA review.

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<sup>20</sup> [santa-clara-county-firesafe-council-press-release-2024-dec.pdf](#)

#### *4. Staffing and Administration Protocols Prioritizing Education and Current Materials*

The RRA could partner with the County to enhance CEQA staffing and administrative protocols by leveraging RRA coordination, grant-seeking capabilities, and multi-agency networks. To kick off new-hire training, the RRA could secure funding—through grant applications and budget partnerships—and support enrollment of city and county staff in established programs like UC Davis’s CEQA Practitioner series. Under this arrangement, new staff would complete foundational courses such as “CEQA: A Step-by-Step Approach” and “Successful CEQA Compliance: An Intensive Seminar” during their first year, with the RRA overseeing enrollment, tracking progress, and consolidating feedback to refine future sessions.

For ongoing education, the RRA could organize an annual training series by contracting with subject-matter experts, such as the California Association of Environmental Professionals, to deliver at least eight hours of updates on changes to state statutes, significant case law developments, and emerging best practices. These workshops would cover critical topics like climate change analysis methodologies, expanded tribal consultation requirements, and environmental justice considerations. By managing logistics, securing group discounts, and hosting sessions in centrally located county facilities (or virtually), the RRA would ensure broad staff participation and cost-effective delivery.

To build deep internal expertise, the RRA could facilitate a structured mentorship and cross-training initiative modeled on Placer County’s program<sup>21</sup>. Experienced analysts drawn from RRA member agencies would be matched with newer CEQA staff for six-month mentorship rotations, focusing on specialized skills—from biological resources assessment protocols and wetland delineation to advanced air quality dispersion modeling and cultural resource evaluation techniques. The RRA would also coordinate staff attendance at targeted conferences, technical symposia, and field workshops, negotiating group registrations and travel arrangements to maximize learning opportunities within budget constraints.

Finally, the RRA can support Lake County in defining meaningful CEQA performance indicators such as document completeness, adherence to statutory timelines, responsiveness to public comments, and effectiveness of mitigation monitoring. The RRA would advise on best practices for peer-review panels, coordinate periodic procedural audits in collaboration with department leads, and compile an annual CEQA performance report highlighting successes and areas for improvement. In this advisory and facilitation role, the RRA would help ensure that Lake County’s CEQA team

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<sup>21</sup> [Learning & Development | Placer County, CA](#)

remains well-trained, well-resourced, and aligned with the latest legal and technical best practices.

## Conclusion

The recommendations presented here offer a structured approach for improving CEQA implementation in Lake County with suggestions to the County and the RRA. The County could prioritize developing regulations that support exemptions for wood products and biomass businesses. This includes establishing clear written policies for qualifying CEQA exemptions, incorporating supportive language into the General Plan and zoning code, creating a streamlined permitting portal, ensuring staff understand the impacts and benefits of biomass utilization, developing innovative significance thresholds, and supporting the expansion of other entities serving as lead agency in the County.

The recommendations to the RRA include funding the development of a CEQA handbook geared towards the development of wood products and bioenergy projects that is tailored to Lake County or funding a county wide programmatic EIR for fuel reduction and biomass residue-based businesses. It could also provide support to the public with workshops about the benefits of biomass use, and the associated relationship between that and CEQA and other land use laws, support the county with the development of a one stop permit desk and with educational opportunities for county staff related to biomass use businesses, and supporting other agencies within the county on their journey to become alternative lead agencies.

## Part 4: An RRA Led “Forest Biomass Use Action Center”

As Lake County’s wildfire risk reduction and biomass utilization efforts expand, a centralized Forest Biomass Use Action Center (Center) could serve as the linchpin for coordinating data, grant opportunities, technical guidance, and interagency collaboration. By tracking existing resources and developing new services, the Center will ensure that stakeholders, from landowners and local entrepreneurs to tribal governments and state agencies, can rapidly access the information they need to plan, fund, and implement projects related to fire risk reduction and forest biomass residues that could be used for economic and community betterment.

### Managing Information Flow

Effective wildfire risk reduction and forest biomass utilization in Lake County hinge on timely access to accurate, comprehensive information. At present, critical datasets, ranging from project plans for prescribed burns and fuel breaks to grant calendars and technical advisories, reside with the RRA, the Resource Conservation District, county departments, and tribal governments. These silos of information challenge stakeholders to navigate multiple websites, spreadsheets, and PDF archives, which can delay decision-making and can lead to duplicate effort. The Center would consolidate these resources within the RRA, managed by a coordinator who would be wholly focused on building bridges between organizations. This approach reflects recommendations from ERG’s RRA Financial Analysis report, which highlights the value of consolidating disparate data into a unified, searchable portal. By ingesting GIS layers, project charters, and grant deliverables through standardized formats, the center will ensure that landowners, biomass entrepreneurs, regulators, and tribal partners can locate relevant information more easily.

The RRA should consider maintaining automated data feeds and API connections with key external platforms, including the California Forestry Digital Marketplace and CalVTP’s project listings. They could schedule nightly imports that would capture newly published grant opportunities and updated technical guidelines, eliminating the need for staff to copy and paste information from source documents. ERG’s RRA Financial Analysis underscores that automated integration with external GIS and grant platforms can reduce staff time by up to 30% in pilot regions such as Central Sierra. Internally, project managers will log milestones—such as site assessment completion or grant application submissions—directly into the center’s database through an intuitive web interface. This approach not only accelerates data sharing across agencies but also creates an auditable record of interagency coordination, enabling RRA leadership to track progress against performance metrics and to identify bottlenecks in real time.

Recognizing that not all interested parties possess advanced GIS skills or database literacy, the center might feature a user-friendly dashboard that highlights priority items and upcoming deadlines. Interactive maps will allow users to filter biomass projects by forest type, ownership, and proximity to processing sites, while a customizable notification system will alert subscribers to new funding cycles, regulatory changes, and collaborative workshop opportunities. Technical advisories and grant-writing templates will be available for download in common formats, accompanied by annotated case studies that illustrate successful applications. By packaging complex information into digestible visuals and narrative guides, the center will democratize access to biomass-related data and empower even the smallest local organizations to pursue resilience projects with confidence.

Simultaneously with this digital infrastructure, there will be ongoing management from the Board of the RRA, or committees of such, who could determine the process to define data standards, user roles, and content stewardship protocols. Also, a multidisciplinary working group, comprising RRA staff, IT specialists, tribal liaisons, and grant consultants could meet quarterly to review the centers analytics, prioritize feature enhancements, and resolve data discrepancies. Training sessions and “office hours” would help stakeholders learn to navigate the center effectively, while a feedback loop will capture user suggestions and pain points for continuous improvement. Over time, this proactive management of information flow will foster a culture of transparency and collaboration, ensuring that Lake County’s Forest biomass initiatives advance efficiently and equitably across all communities.

It is important to recognize that GIS serves as the backbone for organizing and visualizing critical datasets, from prescribed burn plans and fuel-break locations to grant calendars and technical advisories, so that stakeholders can quickly locate and act on the information they need. A seasoned GIS and local economic development planner said that they appreciate the wealth of nearly 99 datasets and extensive workshops but notes that platforms like Planscape and regional resource kits have not yet clearly streamlined forestry project development or eased downstream challenges; the sheer complexity of reading, interpreting, and applying these overlays to real-world projects often outweighs their intended benefits. His team tends to generate GIS data from specific, on-the-ground initiatives rather than tapping statewide databases, and he wonders whether investments in fine-scale vegetation mapping truly address the most pressing needs when their practical applications remain elusive. He also observes that about 90 percent of projects advance through community proposals or networks like Firewise groups, while administrative hurdles, such as navigating archaeology requirements across multiple parcels, often prove more significant than data availability alone. To bridge this gap, the RRA could help its partner agencies provide targeted training on how to leverage GIS overlays, through hands-on workshops, peer-to-peer

learning circles, and “office hours” clinics, so that practitioners not only access the data but also understand how to apply it effectively in planning, permitting, and operational workflows.

## Grant-Writing Support

Securing funding for biomass projects can be an arduous task for small agencies, tribal partners, and community groups that lack dedicated grant-writing staff. ERG’s report highlights that integrated grant-writing templates and case studies raised successful application rates among community groups. To bridge this gap, the RRA could establish an integrated grant-writing support center designed to guide applicants from opportunity identification through submission and reporting. At the heart of this service will be an interactive funding calendar that aggregates federal, state, and private biomass and resilience grants, filtering opportunities by project type, eligibility criteria, and application deadlines. Users will be able to subscribe to customized alerts so that they receive real-time notifications when new solicitations open or when deadlines approach, ensuring no opportunity slips through the cracks.

Complementing the calendar, the RRA could maintain a repository of template documents ranging from project narratives and detailed budgets to letters of support and performance metrics that have been refined from successful grant applications such as the ICARP Adaptation Planning Grant Program (APGP) awards. Each template will be accompanied by annotated examples that highlight best practices in framing project goals, quantifying expected biomass volumes, and demonstrating co-benefits such as greenhouse-gas reductions and local economic development. These annotated templates will demystify grant language and illustrate how to align project descriptions with the strategic priorities of funding agencies, such as CEQA compliance, wildfire risk reduction, and green workforce development.

Recognizing that one-on-one coaching can dramatically improve application quality, the RRA could also host quarterly “Grant Clinics” led by the RRA coordinator in partnership with experienced grant-writing consultants. During these sessions, participants may submit draft proposals in advance for structured feedback, participate in peer review rounds, and learn how to identify matching funds, articulate compelling justification narratives, and navigate compliance requirements like CEQA and SB 1383. Virtual office hours could supplement these clinics, offering drop-in support for last-minute clarifications or troubleshooting. By combining technological tools—such as automated deadline reminders and editable template libraries—with personalized expert guidance, the Grant-Writing Support service will lower barriers to entry and empower even the smallest organizations to craft competitive, well-supported funding requests.

## State and Federal Agency Engagement

Building and sustaining effective partnerships with state and federal agencies is essential to amplify Lake County's biomass initiatives and ensure alignment with broader forest health, disaster response, and climate goals. The "Forest Biomass Advocacy in Action Program" could maintain a dynamic contact directory that goes beyond static phone lists, incorporating up-to-date organizational charts, individual roles, and subject-matter expertise for key programs at CAL FIRE, Cal OES, CalRecycle, the U.S. Forest Service, and NOAA. This directory will be paired with an interactive "issue tracker" that logs inquiries, technical consultations, permit applications, and funding requests. By recording each outreach effort, whether a data-request to CalRecycle on composting capacity or a site-visit coordination with U.S. Forest Service fuels specialists, the Program could create an auditable timeline of engagement, reducing duplication of effort and preventing critical follow-ups from falling through administrative cracks.

To help stakeholders interpret evolving regulations and capitalize on new grant opportunities, RRA staff could circulate concise quarterly briefings summarizing relevant policy changes and funding program updates. For example, when CalFire releases its annual Fire Prevention Grant guidelines or NOAA updates its Community Resilience Toolkit, RRA staff could help translate key eligibility criteria, application deadlines, and technical requirements into a clear narrative, supplemented by links to source documents. This synthesis should be crafted in close collaboration with agency liaisons, who will be invited to submit "agency notes" highlighting nuances, such as Cal OES's emerging wildfire mitigation grant under the Bipartisan Infrastructure Law or U.S. Forest Service pilot programs in tribal co-management of biomass byproducts.

Beyond information dissemination, the RRA could also coordinate joint site visits and technical workshops to foster two-way learning between local practitioners and agency experts. These events will showcase Lake County's unique fuel-load conditions such as red fir stands above 4,000 feet and the mosaic of private tribal lands interspersed with USFS management units, while enabling agencies to share the latest remote-sensing tools, prescribed-burn protocols, or carbon accounting methods. Follow-up workshop notes, GIS outputs, and "lessons learned" summaries will be archived in the center to build institutional memory and accelerate the uptake of best practices.

By institutionalizing these engagement processes combining real-time issue tracking, policy briefings co-authored with agency contacts, and immersive field workshops, the RRA could create this "Forest Biomass Advocacy in Action Program" and transform current ad hoc outreach into a structured, transparent system. In doing so, it will ensure that Lake County's biomass projects not only comply with regulatory requirements but also shape state and federal programs to reflect on-the-ground realities, ultimately

driving more effective, locally informed biomass utilization and wildfire resilience strategies.

## Administrative and Staffing Needs, Contracting Pathways, and Governance Updates

To sustain and expand the RRA to support biomass utilization, a dedicated administrative backbone is essential. At minimum, the RRA will need a full-time biomass use coordinator with a blend of program management, data-systems, and stakeholder-engagement expertise. This role could be staffed through one of three approaches: contracting a nonprofit partner or contractor to provide dedicated capacity under a service agreement; bringing in an existing RCD or county planning staff member into a half-time RRA assignment; or directly hiring a new RRA employee with clear job duties and performance metrics. Regardless of the mechanism, the coordinator's responsibilities will include managing data feeds, curating content, liaising with agency contacts, and overseeing user support services.

Alongside the coordinator, the RRA will require technical support for GIS administration, API integrations, and web-application maintenance. Rather than recruiting full-time programmers, the RRA can establish on-call contracts with local IT firms or leverage existing County, City and Tribal IT departments under interagency memoranda of understanding. ERG's analysis indicated that on-call contracting reduced overall IT support costs compared to in-house staffing. Contract scopes should specify service-level agreements for up-time, data updates, and security standards, with periodic performance reviews to ensure responsiveness to evolving center requirements. Similarly, grant-writing and communications consultants can be engaged on retainer to develop funding materials, produce newsletters, and facilitate "Grant Clinics" and training sessions.

With these administrative elements in place, the RRA will have the operational foundation needed to evolve from concept to functioning regional center. This strategic approach balances cost-effectiveness with professional expertise, positioning the organization to respond quickly to new opportunities while maintaining high standards of service delivery.

## Connecting Rural Communities

A comprehensive outreach program would be important for advancing fuel-reduction and biomass utilization in Lake County, yet current efforts remain fragmented across agencies, hindering project implementation and community buy-in. The RRA is uniquely positioned to transform this approach through its statutory authority as a Joint Powers Authority encompassing the County of Lake, Lake County Watershed Protection

District, multiple fire protection districts, public water districts, tribal governments, and cities.

Under its mandate to "develop educational and training tools to assist RRA members, the public, and non-member governmental agencies in discovering, assessing and reducing the risks associated with fire and other disasters", the RRA can coordinate county-wide outreach initiatives that address current problems of isolated, inconsistent messaging. The RRA's multi-agency structure enables it to leverage combined resources from fire districts, the county assessor's office, and water districts to develop comprehensive landowner databases and standardize liability protections across jurisdictions.

Engaging private landowners remains challenging given Lake County's scattered parcels, absentee owners, and liability concerns about prescribed burns. The RRA's inclusion of tribal governments as formal members, including the Habematolel Pomo of Upper Lake, Middletown Rancheria Band of Pomo Indians, Robinson Rancheria Band of Pomo Indians of California, and Scotts Valley Band of Pomo Indians, positions the Authority to develop culturally appropriate outreach strategies while serving as a trusted intermediary between tribal communities and other interested parties.

The RRA could establish a Community Outreach Division with dedicated staff to develop standardized participation agreements pre-approved by all member agencies' legal counsel, eliminating months-long negotiations currently plaguing fuel-reduction projects. The Authority's grant-seeking authority enables it to pursue federal and state funding specifically for outreach activities, implementing mobile office hours in remote communities and multilingual materials developed collaboratively with tribal partners.

## Public Outreach for Biomass Utilization Businesses

Lake County's experience with the Upper Lake biochar plant demonstrates how inadequate public engagement can hinder beneficial projects. The RRA is uniquely positioned to prevent such controversies through proactive outreach under its authority to "provide informational and educational resources to the public".

The current reactive approach, where communities first learn about biomass projects through formal hearings, has proven counterproductive. The RRA should establish a Biomass Development Oversight Committee bringing together tribal representatives, local business owners, environmental experts, and neighborhood liaisons before specific projects are proposed. This creates ongoing dialogue about biomass utilization as wildfire risk reduction, building foundational understanding that makes individual project discussions more productive.

The RRA's tribal government membership provides particular advantages, given that many biomass projects involve tribal enterprises and traditional ecological knowledge. The RRA should establish dedicated biomass education programs featuring hands-on demonstrations at community events, partnering with the Lake County Resource Conservation District, Tribal EcoRestoration Alliance and Tribal environmental protection agencies to provide ongoing technical education about biomass technologies, emissions controls, and economic benefits.



To strengthen public engagement, the RRA should consider establishing specialized community education workshops that address the unique complexities of bioenergy and wood products permitting. Many residents lack familiarity with the technical distinctions between these types of projects, creating unnecessary confusion during public review periods. These workshops would provide practical education on regulatory pathways specific to biomass facilities, including major use permit requirements, air quality permitting through local air management districts, and the interagency coordination required for projects involving multiple jurisdictions. Participants would learn to distinguish between projects using forest waste from fuel reduction activities versus

commercial timber harvesting operations, since these involve different regulatory frameworks and environmental considerations.

## Part 5: Recommendations

### 1. Forest Biomass Waste System Improvement Recommendations

#### **Mobile and Centralized Biochar Production**

Pursue a public-private partnership under the Lake County Risk Reduction Authority (RRA) to evaluate a combined mobile-and-centralized center model, fostering micro- and small-business development at sort yards for on-site biochar and other biomass-residue uses.

#### **Supply-Chain Organization and Infrastructure**

- Support the private development of one to three centralized sort yards with covered storage, tipping-fee arrangements, and basic inventory management to buffer seasonal supply fluctuations and maintain year-round feedstock availability.
- Leverage PG&E contractors' experience in fee-based disposal and provide centralized chipping and densification equipment (increasing biomass density up to 300 percent) to reduce transportation costs and ensure consistent feedstock quality.
- Seek funding with private partners to support the design and purchase of hauling and handling systems at new facilities to match existing local equipment (e.g., self-unloading dump trucks rather than large chip vans) for seamless integration with Lake County's small-scale vegetation-management infrastructure.

### 2. Biomass Business Competition Overview

- The Lake County RRA could help facilitate a biomass business competition in close collaboration with the Lake County Economic Development Corporation, 1Team 1Dream, and the county's Economic Development Program, combining their advisory services, proven competition expertise, renewable energy knowledge, and focus on diversification, infrastructure, job training, and quality of life. By adapting a successful model from a neighboring region, one that offered startup funding and technical support through a coordinated public-private effort, this competition would motivate innovators to turn underused forest biomass into sustainable products, generate employment throughout the value chain, and cultivate a self-sustaining cycle of entrepreneurship and workforce development.

With strategic grants and prize funding, hands-on technical assistance, interdisciplinary judging panels, and inclusive partnerships with tribal communities and educational institutions, the initiative would simultaneously mitigate wildfire risk, accelerate advances in feedstock collection and bioenergy conversion, and integrate carbon-reduction and circular-economy metrics into its evaluation framework, establishing Lake County as a leader in rural bioeconomy growth and ecological resilience.

### 3. CEQA Implementation in Lake County Recommendations

#### **Developing County Regulations that Support Exemptions for Wood Products and Biomass Businesses**

- Establish clear written policies defining when fuel-reduction or biomass-use projects qualify for CEQA exemptions or the Governor’s suspension and integrate those criteria into the General Plan and zoning code to enable administrative rather than conditional use permits.
- Create a consolidated “Environmental Review and Permitting” portal on the Community Development Department website and train county staff on the benefits and impacts of biomass businesses.
- Define significance thresholds for projects that require mitigation.
- expand delegated approval authority (e.g., Zoning Administrator or Planning Director) for small-scale fuel-reduction and micro-biomass applications.

#### **Comprehensive Lake County CEQA Handbook**

- Convene RRA-led workshops to harmonize cross-departmental procedures and terminology, then develop step-by-step workflows and standardized templates for Initial Studies, ND/MND, EIRs, Notices of Preparation, and public-comment notices.
- Incorporate technical guidance chapters—Clear Lake watershed protection, wildlife-habitat buffers, smoke-dispersion modeling, and biomass-emission calculations—using local GIS data, monitoring results, and sample reporting templates.
- Embed “Collaborative Engagement Practices” with early-outreach requirements, community-workshop toolkits, minimum notification timelines, comment-log forms, and RRA-provided grants or in-kind support to ensure equity and transparency.

## **Enabling Cities and Special Districts to Take on Lead-Agency Role**

- Empower eligible cities and special districts under CEQA Guidelines §15051 to serve as lead agencies for vegetation-management and small-scale biomass projects, with the RRA drafting model MOUs and shared CEQA templates.
- Maintain a centralized CEQA resource center—sample notices, completed analyses, pre-qualified consultant roster, and statutory-deadline registry—and offer mini-grants for upfront consultant costs.
- Provide a “lead-agency starter kit” with checklists, template resolutions, and electronic filing services to ensure Notices of Exemption are submitted within five days.
- Ensure Cities and Special Districts are trained in County and State Tribal Government to Government Consultation policies and practices.

## **Staffing and Administration Protocols Prioritizing Education and Current Materials**

- Secure RRA-facilitated funding and enroll new planning staff in foundational CEQA certification (e.g., UC Davis CEQA Practitioner) during their first year, tracking progress and refining future training.
- Organize annual advanced-workshop series on statute changes, case-law updates, and technical best practices (climate-change analysis, tribal consultation, environmental justice), leveraging group discounts and hybrid delivery.
- Implement structured mentorship and cross-training rotations among RRA member-agency experts, and define CEQA performance metrics (document quality, timeline adherence, public-engagement effectiveness) with periodic peer-review and procedural audits.

## **4. An RRALed “Forest Biomass Use Action Center” Recommendations**

### **Managing Information Flow**

- Consolidate project plans, grant calendars, technical advisories, and GIS layers into a unified, searchable center with automated data feeds and nightly API imports from key platforms (e.g., CalVTP, Forestry Digital Marketplace).

- Provide an intuitive web interface for logging milestones (site assessments, grant submissions) and maintaining an auditable interagency coordination record to track performance metrics and identify bottlenecks in real time.
- Offer a user-friendly dashboard with interactive maps (filterable by forest type, ownership, proximity to processors), customizable deadline notifications, and downloadable technical advisories and case-study guides.

### **Grant-Writing Support**

- Maintain an interactive funding calendar aggregating federal, state, and private biomass and resilience grants, with subscription alerts for new solicitations and deadline reminders.
- Curate a repository of annotated grant-writing templates and successful application examples—project narratives, budgets, letters of support—that align with CEQA compliance, wildfire risk reduction, and economic co-benefits.
- Host quarterly “Grant Clinics” and virtual office hours led by experienced consultants for draft-proposal feedback, peer reviews, and guidance on compliance requirements.

### **State and Federal Agency Engagement**

- Develop a dynamic contact directory and interactive issue-tracker for CalFire, USFS, NOAA, CalRecycle, and others, logging inquiries, technical consultations, and permit actions to reduce redundant communications by up to 40%.
- Circulate concise quarterly policy briefings co-authored with agency liaisons to interpret new regulations, funding guidelines, and technical advisories, with links to original documents.
- Coordinate joint site visits and technical workshops to share Lake County’s unique fuel-load conditions and remote-sensing tools, archiving lessons-learned summaries and GIS outputs in the center.

### **Administrative & Staffing Protocols**

- Hire or contract a dedicated Forest Biomass Use Coordinator responsible for managing the center, data integration, stakeholder liaison, and user-support services, funded via service agreements, RCD assignments, or direct RRA hire.
- Secure on-call IT and grant-writing support contracts under MOUs with county/tribal IT departments and local firms, with SLAs for up-time, data updates, security, and periodic performance reviews.

- Define clear performance metrics for the coordinator role (e.g., data-feed uptime, stakeholder satisfaction, grant-application success rates) and integrate into RRA governance and budget planning.

### **Connecting Rural Communities**

- Establish a Community Outreach Division to develop standardized, pre-approved participation agreements, deploy mobile office hours, and produce multilingual materials in partnership with tribal governments and local districts.
- Leverage the RRA's joint-powers structure to build comprehensive landowner databases, standardize liability protections, and coordinate county-wide educational campaigns.
- Offer culturally appropriate outreach strategies—co-developed with tribal liaisons—to build trust, address absentee-owner challenges, and ensure consistent messaging across jurisdictions.

### **Public Outreach for Biomass Utilization**

- Form a Biomass Development Oversight Committee of tribal representatives, local businesses, environmental experts, and neighborhood liaisons to foster continuous dialogue prior to project proposals.
- Deliver interactive biomass education programs at community events through partnerships with the Resource Conservation District and tribal environmental protection agencies, showcasing innovative technologies, emission control systems, and economic opportunities for local communities.
- Implement proactive, multi-channel engagement (workshops, webinars, newsletters) to build foundational understanding of biomass projects and reduce delays from reactive public hearings.

# EXHIBIT A

## Next Steps for the RRA: Initiating a Lake County Biomass Business Competition for 2026

### Phase 1: Foundation and Partnership Development (Q1-Q2 2026)

- Establish strategic partnerships with key economic development organizations
- Partner with economic development corporation as primary collaborator for business development expertise, funding mechanisms, and regulatory navigation
- Include additional partners: local universities (technical expertise), forest management agencies (biomass supply validation), established business incubators (ongoing support infrastructure)
- Form competition organizing team following established models with diverse expertise:
  - Competition directors
  - Technical managers
  - Marketing coordinators

### Phase 2: Competition Design and Structure (Q3-Q4 2026)

- Follow proven biomass innovation contest models like TU Delft Ideation Contest structure
- Implement dual-track approach:
  - Ideation Award for early-stage concepts
  - Prototyping Award for more developed solutions
- Accommodate entrepreneurs at different development stages while maximizing participation
- Design substantial prize structures to attract serious participants while remaining financially sustainable
- Consider prize ranges from \$5,000 to \$50,000 based on successful competition research
- Include investment opportunities in prize packages to enhance competition prestige

### Timeline Framework for 2026 Launch

#### Early 2026 (January-March)

- Establish organizing team Develop partnership agreements with economic development corporation and key stakeholders

#### Mid-2026 (April-June)

- Finalize competition structure, eligibility criteria, and prize packages
- Begin developing marketing materials and evaluation frameworks

#### Late 2026 (July-September)

- Launch registration and application processes
- Conduct outreach to potential participants through forestry networks, business communities, and academic institutions

#### Early 2026 (January-March)

- Application review and selection process
- Provide pre-competition mentorship and support services to selected participants

#### Mid-2026 (April-June)

- Competition events, judging, and awards ceremony

#### Support Services and Participant Benefits

- Establish mentorship programs connecting participants with:
  - Experienced entrepreneurs
  - Forestry experts
  - Business development professionals
- Provide comprehensive support services:
  - Business plan development assistance
  - Pitch coaching
  - Regulatory guidance
  - Networking opportunities with potential investors and partners
- Offer technical expertise access:
  - Market research resources
  - Legal guidance throughout competition process
- Note: Startups with mentors are 70% more likely to survive beyond five years and achieve 83% higher revenue growth

#### Prize Structure and Incentives

## Monetary Awards

- Grand prize: \$25,000-\$50,000
- Secondary prizes for innovation categories
- Multiple tiers of recognition

## Non-Monetary Benefits

- In-kind services (legal assistance, marketing support, demonstration facility access)
- Accelerator program placement opportunities
- Introductions to potential investors
- Speaking opportunities at industry conferences
- Ongoing mentorship relationships
- Note: Intangible benefits often provide greater long-term value than cash prizes alone

## Key Implementation Considerations

### Eligibility Criteria

- Open to: individuals, teams, existing businesses
- Requirements: innovative biomass utilization solutions within Lake County
- Must demonstrate: clear connections to local biomass resources and workforce development potential

### Evaluation Framework

- Judging criteria emphasis:
- Innovation
- Economic impact
- Environmental benefits
- Scalability
- Workforce development potential
- Diverse judge panel: forestry experts, business development professionals, investors, community representatives

### Regulatory Compliance

- Ensure compliance with competition regulations
- Protect intellectual property
- Meet local business licensing requirements
- Partner with legal professionals specializing in innovation competitions

## Communication Strategy

- Target multiple audiences: potential participants, community stakeholders, media outlets, potential sponsors
- Leverage platforms: digital platforms, industry publications, local media
- Maximize reach through comprehensive marketing and communication plan

## Long-term Success Metrics

### Measurement Indicators

- Number and quality of applications received
- Participant satisfaction scores
- Follow-up business creation rates
- Job creation within winning ventures
- Ongoing regional economic impact

### Ongoing Support

- Establish mechanisms for ongoing support of competition alumni
- Create network of biomass entrepreneurs for mentoring future participants
- Contribute to regional bioeconomy ecosystem growth
- Ensure lasting impact beyond immediate event
- Foster sustainable economic development aligned with environmental stewardship goals

### Expected Outcomes

- Stimulate innovation and entrepreneurship in biomass sector
- Address critical regional challenges: workforce development, forest management, economic diversification
- Provide adequate preparation time with 2026 timeline while maintaining implementation momentum
- Create lasting regional impact through comprehensive action plan approach