



Final Report:

Lake County Community Risk Reduction Authority Financial Analysis Study



Prepared for the Lake County Resource Conservation
District by Eastern Research Group, Inc.

Final—10/22/2025

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Left photo: Clear Lake (Terre Logsdon)

Right photo: Vegetation regrowth Boggs Demonstration Forest (J. Pyska)

Acknowledgements



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Disclaimer

ERG made every effort to ensure that the information contained in this report is accurate, complete, and obtained from reliable sources. However, some of the data and information in this report is drawn from perceptions gathered through interviews and discussions. ERG makes no guarantee of the completeness or accuracy of information provided.

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exacerbated by ongoing climate-related changes to forests—as well as legacy land management practices and a lack of resources for land management overall. Collectively, these factors have resulted in a growing volume of hazardous forest biomass that harms forest health and increases wildfire risk. The RRA is currently exploring sustainable ways to use the woody biomass that will be generated through land management strategies focused on improving forest health and mitigating wildfire risk. As part of this effort, the RRA commissioned ERG to conduct a comprehensive financial analysis to assess the feasibility of expanding the RRA’s scope to support beneficial biomass use, enhance local economic development, and improve long-term forest and community resilience.

This report evaluates the RRA’s current structure, identifies opportunities and challenges to implement beneficial biomass use activities, and outlines a five-year financial roadmap to support expanded functions related to these activities. The analysis is informed by a literature review, interviews with RRA members and partners, and research regarding other similar initiatives across California.

Key Findings

The financial analysis revealed several important insights into the RRA’s current operations and future potential:

- **The RRA provides a useful platform for ongoing collaboration and coordination around wildfire resilience and the beneficial use of biomass.** The RRA has successfully built a collaborative governance model that includes the County of Lake, fire districts, Tribal nations, cities, and water districts. Its ability to convene diverse partners and coordinate across jurisdictions has increased regional capacity for wildfire resilience and biomass management.

Lake County Snapshot

Lake County is mostly rural, with only two incorporated cities, a population of 68,163, and a poverty rate of 16.8 percent.

Since 2016, wildfires have impacted over 60 percent of Lake County’s land and resulted in the loss of 5.5 percent of its housing stock.

Land Ownership

Approximately 51 percent of the county is comprised of public lands.

Natural assets include:

- Clear Lake (the largest freshwater lake in California)
- Boggs Mountain Demonstration State Forest
- Mendocino National Forest
- Mount Konocti
- South Cow Mountain OHV Recreation Area

- **Despite its achievements, the RRA faces several barriers to expansion.** These include limited and inconsistent funding, coordination inefficiencies, and insufficient staffing. Additionally, community skepticism and resistance to new funding mechanisms—such as taxes—pose challenges to long-term sustainability and to expanding operations to support biomass utilization efforts.
- **Even given its challenges, there are clear ways in which the RRA could expand its impact and scope.** For instance, interview respondents highlighted the potential benefits of the RRA supporting development of a skilled local workforce for forest management and biomass use, acting as a broker between biomass producers and end markets, providing regulatory and permitting support for new biomass projects, and enhancing community outreach on the benefits of forest management and biomass utilization.

Recommended Functions, Financial Components, and Revenue Streams

To support an expanded role related to the beneficial use of biomass, the report recommends that the RRA pursue the following core functions:

- **Environmental Review, Project Siting, and Local Code Reform:** Assist with California Environmental Quality Act (CEQA) compliance, project siting, and local code reform to support the implementation of biomass facilities and projects.
- **Workforce Development:** Partner with local organizations to train and expand the available biomass-related workforce within Lake County (e.g., for biomass removal, local beneficial use projects), reducing reliance on external contractors and creating local job opportunities.
- **Coordination and Outreach:** Serve as a central hub to secure and manage state and federal grants, while leading landowner education and engagement efforts to build community support for beneficial biomass use efforts.

To support these functions, the report recommends that the RRA consider a variety of revenue sources:

- **Grants:** Grants are expected to be the primary revenue source in the near term. The RRA has already secured LCI funding, is expected to receive additional LCI funds in the next round of the pilot projects, and—due to its existing relationships and role in Lake County—is well-positioned to pursue additional state, federal, and philanthropic grants.

- **Member Dues:** Member dues are currently the primary stable funding source for the RRA, though limited in scale. The RRA may consider waivers or tiered dues to encourage broader participation.
- **Fees for Service:** While services are not currently offered, the RRA could phase in services over time related to efforts such as CEQA support, GIS mapping, and serving as a broker between biomass buyers and sellers.
- **Endowments and Gifts:** Philanthropic funding offers the potential in the long term to increase available revenue to the RRA. This potential will increase if the RRA is able to hire an Executive Director whose role could include leading fundraising efforts.

The proposed budget presented in the full report assumes the hiring of an Executive Director and a Program Coordinator, with gradual scaling of services and revenue diversification over time. By Year 5, the proposed budget envisions that the RRA will be able to reduce its reliance on grants from 91 percent to 70 percent of total revenue, with increased contributions from fees for service and endowments and gifts.

Conclusion

The Lake County RRA is uniquely positioned to lead regional efforts in wildfire resilience and the beneficial use of biomass. With a strong role and visibility in Lake County, diverse partnerships, and growing community engagement, the RRA can play a pivotal role in reducing wildfire risk, improving forest health, and fostering economic development.

This financial analysis provides a clear strategy, based on current conditions, for expanding the RRA's functions and funding base over the next five years. Continued state funding will be critical to support the RRA while it expands its scope and operations to take on this additional role. While fees for service have the potential to reduce dependence on grant funding over time, grants will remain essential in the initial years. By coordinating and catalyzing biomass-related efforts, supporting the growth of the biomass workforce, and providing ongoing outreach to raise awareness of biomass opportunities, the RRA can support localized biomass processing infrastructure and contribute to the region's overall resilience and economic development.

1. Background and Introduction

1.1. *Lake County Community Risk Reduction Authority Financial Analysis Study*

California is working to reduce hazardous fuels and promote fire-resilient ecosystems. Forest management often results in an accumulation of woody biomass, which, when removed, helps reduce wildfire risk and can improve forest health. Additionally, biomass removal can support local communities by stimulating economic activity through marketable wood products and bioenergy.

To address the need for and forest health benefits of woody biomass removal, California’s 2021 Wildfire and Forest Resilience Action Plan (Governor’s Forest Management Task Force 2021) recommended that the California Office of Land Use and Climate Innovation (LCI—formerly the Office of Planning and Research) develop pilot projects to address feedstock barriers and enhance forest sector markets that promote sustainable wildfire resilience. LCI thus launched its Forest Sector Market Development Program and funded pilot projects to (1) the North Coast Resource Partnership (NCRP), (2) Fall River Resource Conservation District (RCD), (3) Placer County Water Agency, (4) Marin RCD, (5) Mariposa County RCD, and (6) the Lake County Risk Reduction Authority (RRA). With the funding from LCI, the RRA is leading a beneficial biomass use initiative to reduce wildfire risk and support local economic development—the Lake County Biomass Aggregation Pilot Project (Lake County Biomass Project). The Lake County Biomass Project is identifying viable pathways for local biomass utilization and economic development in the county.

As part of this project, the RRA hired [ERG](#) to conduct a financial analysis that included an evaluation of beneficial biomass use options and the development of recommended strategies that align with the county’s resilience and growth goals. The analysis builds on work conducted by Mules Ears Consulting that summarized the extent of available forest biomass in Lake County. Findings from this report also informed development (led by CLERE, Inc.) of an Entity Action Plan for the RRA.

1.2. *Lake County*

Lake County—bordered by Mendocino, Colusa, Sonoma, Napa, Yolo, and Glenn counties—is a mostly rural county with a population of 68,163 and only two incorporated cities, Clearlake and Lakeport (U.S. Census Bureau, 2023). The county is rich in natural assets, including Clear Lake—the largest natural freshwater lake in California—wineries and vineyards, and the dormant volcano, Mount Konocti. Approximately 51 percent of the county is comprised of public lands, dominated by federally managed lands in the

northern portions of the county. State-owned forested lands in the southern portion of the county include Clear Lake State Park, Boggs Mountain Demonstration State Forest, and the South Cow Mountain OHV Recreation Area (Figure 2). Conversely, the southern region mostly consists of fragmented parcels of privately-owned lands (Mules Ears Consulting LLC 2025).

As of 2016, Lake County was experiencing economic growth but still fell far below the state average and nearby counties by all income metrics (per capita personal income, median household income, personal income after transfer payments, poverty rates, etc.) (Economic Forensics and Analytics et al.,

n.d.). In 2022, Lake County had a poverty rate of 16.8 percent, with 11,175 residents living in poverty; and in 2023, 19.6 percent of the population was classified as having severe housing problems, defined by overcrowding, high housing costs, or lack of kitchen or plumbing utilities (DATA USA, n.d.; County Health Rankings and Roadmaps, n.d.).

1.3. Wildfire Risk and Management Needs

Climate hazards severely impact Lake County, especially wildfires. In California, a legacy of fire suppression policies, the banning of Indigenous cultural burning practices over the last two centuries, and ongoing climate-related changes to forests, have led to overgrown, fuel-rich forests that contribute to today’s extreme wildfire patterns. Although recent policy shifts at the state and local levels—including in Lake County—now support prescribed and cultural burns, wildfire activity has continued to increase over the past decade (County of Lake, 2023). The county has experienced repeated severe fire events (see Figure 3), including the 2015 Valley Fire, which burned 76,067 acres and destroyed

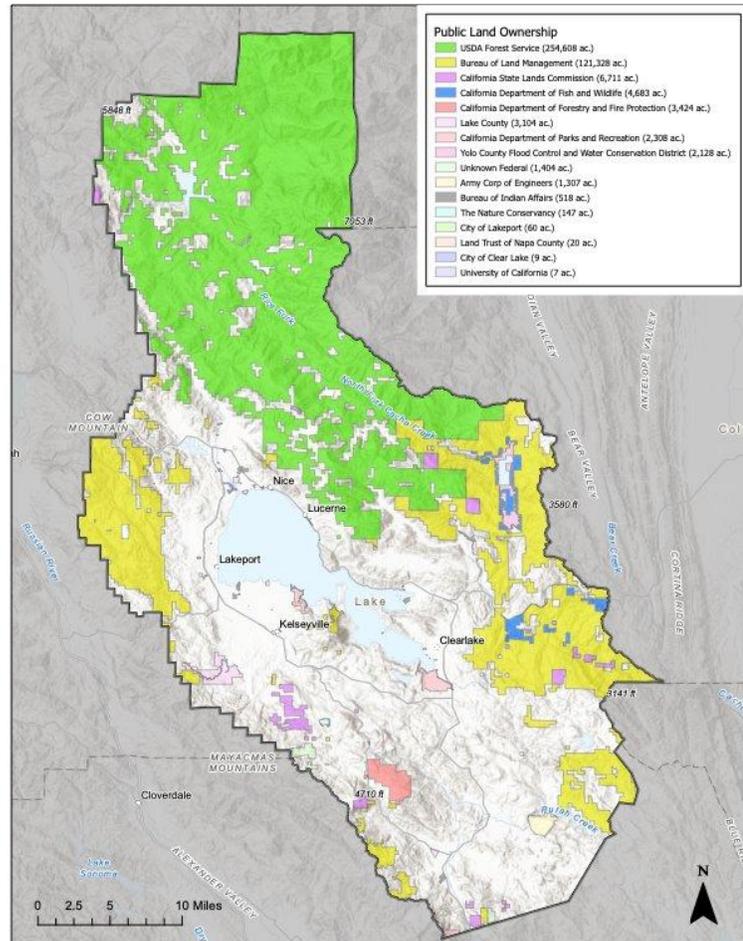


Figure 2. Map of study area land ownership. Source: Mules Ears Consulting, 2025

nearly 2,000 structures, wiping out half of the conifer forestland in the Cobb area and 95 percent of Boggs Mountain Demonstration State Forest. The 2018 Ranch Fire and 2020 August Complex burned 940,000 acres in the Mendocino National Forest, destroying over 82,000 acres of conifer forest. These high severity fires can prevent forest recovery due to the loss of seed sources across vast burned areas (Mules Ears Consulting LLC 2025). Since 2015, wildfires have destroyed over 60 percent of Lake County’s land and 5.5 percent of its housing stock, worsening the local housing and displacement crisis (Hutchingson, 2019).

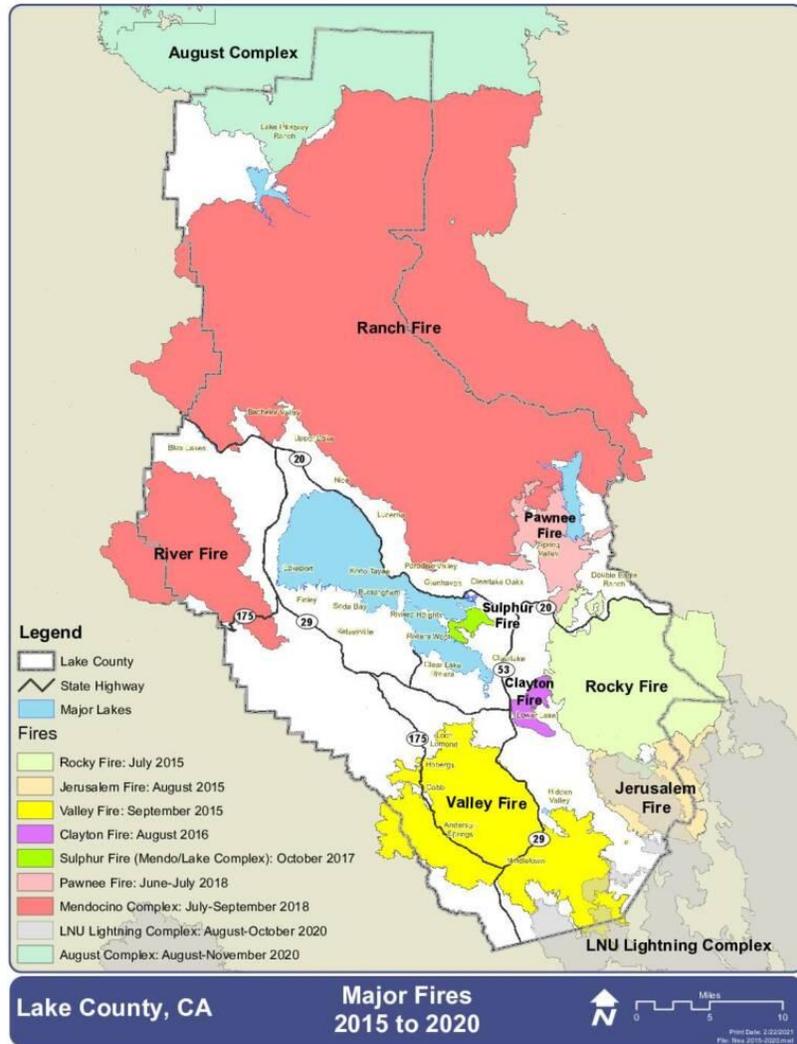


Figure 3. Lake County Fire History. Source: Lake County Fire Safe Council, n.d.

Compounding these wildfire impacts is a tree mortality crisis driven by prolonged drought, groundwater depletion, multi-species bark beetle infestations, and the recent emergence of the Mediterranean oak borer which spreads lethal fungus to oak woodlands. In 2022, Lake County declared a State of Emergency for pervasive tree mortality, with an estimated 590,000 dead trees across 31,000 acres, not including wildfire-related losses (Mules Ears Consulting LLC 2025).

Several ongoing efforts are underway in Lake County to mitigate wildfire risk. The Lake County Community Wildfire Protection Plan (CWPP) identifies wildfire risks and hazards and outlines actions to reduce them, including fuel hazard reduction, fire safety initiatives, community education, and fire-protection projects (County of Lake 2023). The Lake County Home Hardening Program—led by a partnership between the County of Lake, North Coast Opportunities (NCO), Cal Office of Emergency Services, and CAL FIRE—improves the

resilience of homes (North Coast Opportunities, n.d.). The Federal Emergency Management Agency (FEMA) has awarded NCO \$22.2 million to create defensible space and harden 500 homes in the Kelseyville neighborhood (Federal Emergency Management Agency 2023). In addition, the Clear Lake Environmental Research Center (CLERC) is implementing a \$9.8 million Community Wildfire Defense Grant from the U.S. Forest Service to implement fuel reduction projects (California Wildfire & Forest Resilience Task Force 2024). Finally, the Workforce Alliance of the North Bay (WANB), in collaboration with Tribal EcoRestoration Alliance (TERA), recently received an over \$4.7 million grant from the California Department of Housing and Community Development’s Community Development Block Grant—Disaster Recovery Workforce Development program. This grant will support WANB and TERA in implementing the Lake Wildfire Resilience Training program, which will help residents participate in training and capacity building activities related to wildfire resilience and restoration (Workforce Alliance of the Bay, n.d.).

As these wildfire resilience efforts expand, some will generate large volumes of woody biomass. Current regulations, lack of infrastructure, and economic conditions in Lake County, however, will make it difficult to sustainably and beneficially process this biomass. The northern part of the county is dominated by federally managed lands, where forest management priorities are focused on post-fire restoration rather than commercial timber harvest, limiting large-scale biomass removal opportunities. In the southern part of the county, fragmented private parcels pose scale challenges, as small, non-contiguous project areas drive up planning and implementation costs and reduce operational efficiency. The lack of industrial timberland and minimal recent market-driven harvesting means there is no consistent supply of biomass to provide consistent support for increased processing infrastructure. Additionally, in the absence of strong forest product markets, most vegetation management work relies on grants or utility-driven projects, with limited options for biomass disposal. Contractors typically use small-scale equipment suited for localized work rather than large-volume transport, making it difficult to move and process biomass efficiently at scale (Mules Ears Consulting, LLC 2025).

1.4. Study Purpose

Among the beneficial biomass reuse pilot projects underway in the State of California, Lake County is uniquely positioned because of the existing Joint Powers Authority (JPA) in place to support these types of initiatives. As part of the project, the RRA is considering expanding the scope of the RRA to support a biomass utilization program under this JPA structure. This study evaluates potential funding and financing mechanisms, identifies cost drivers and revenue opportunities, and outlines possible financial scenarios to support local economic development goals. The analysis also considers how the

expansion of the RRA could enhance program implementation efficiency and align with available infrastructure, regulatory frameworks, and funding streams.

2. Overview of the Lake County Risk Reduction Authority

2.1. History of the RRA

The Lake County Risk RRA was formed in 2018 to address fire, earthquake, and environmental hazards. The RRA was established under a Joint Powers Agreement that created the RRA as a Joint Powers Authority comprised of several fire protection districts—Lakeport, Northshore, South Lake County, Kelseyville, and Lake County Fire Protection Districts—and the County of Lake (Lake County Board of Supervisors and Lake County Watershed Protection District, 2018). A 2021 amendment expanded Lake County RRA’s membership to include representatives from Tribal nations, the cities of Lakeport and Clearlake, and independent water districts (Lake County Board of Supervisors and Lake County Watershed Protection District, 2021). (See box to the right for a list of these members.)

A JPA is a legal entity that allows two or more government agencies to collaborate and share resources—like funding, staff, and expertise—to accomplish common goals while maintaining their individual authorities. The JPA framework allows the above entities to collectively operate the Lake County RRA, coordinating efforts across multiple fire districts, local governments, and other partners to improve disaster prevention, preparedness, and response (California Joint Exercise of Powers Act, n.d.). Under a JPA, each member agency retains its individual authority while working together on activities or services. The agreement that established the RRA outlines the terms of cooperation, governance structure, and responsibilities of each party. This institutional arrangement provides a strong foundation for advancing wildfire resilience, forest health, and biomass utilization efforts. By working under a shared governance structure, the RRA can operate at a larger geographic scale, align cross-

Lake County RRA Members

Fire Protection Districts

- Lakeport
- Northshore
- South Lake County
- Kelseyville
- Lake County

Cities

- Lakeport
- Clearlake

Tribal Nations

- Scotts Valley Band of Pomo Indians
- Robinson Rancheria of Pomo Indians
- Middletown Rancheria of Pomo Indians
- Habematolel Pomo of Upper Lake

Independent Water Districts

- Callayomi County
- Clearlake Oaks County
- Cobb Area County
- Lower Lake County

jurisdictional priorities, bring in diverse partners, and more effectively leverage funding and implementation capacity.

2.2. RRA vision and goals

The Lake County RRA aims to reduce climate and environmental hazards throughout the county. According to the JPA bylaws that created the RRA, key functions include offering low- or no-cost resources, creating property inspection programs, managing funding, providing educational resources, improving community infrastructure, and enforcing laws for disaster resilience (Lake County Board of Supervisors and Lake County Watershed Protection District, 2018).

The RRA also plays a critical role in supporting Lake County’s overall economic development goals, outlined in the *Lake County Economic Development Strategy*, by improving infrastructure resilience and mitigating environmental risks, which is essential for attracting and supporting businesses in sectors such as scientific research, agriculture, entrepreneurship, and tourism. The RRA’s activities enhance the county’s capacity to support these targeted industries and boost economic growth.

2.3. Current partnerships and structure of the RRA

The Lake County RRA is a partnership between the members listed in Section 2.1. Beyond these members, RRA planning documents reference several existing and prospective partnerships. These include supporting CLERC and other partners within the county with project implementation, permitting, and grant efforts; promoting community-based programs such as Fire Wise Communities and the Lake County Prescribed Burn Associations (PBAs); and coordinating with partner agencies to support community outreach. The RRA’s foundational documents also identify the California Earthquake Authority, Blue Ribbon Commission for the Rehabilitation of Clear Lake, and local Tribes (beyond member Tribes) as potential allies in advancing shared goals.

2.4. Current funding approach

The RRA’s estimated annual operating budget is currently approximately \$35,000. The JPA documentation gives the RRA the authority to use public funds, property, or resources from its member agencies to fund its operations. The RRA collects \$5,000 per voting member in membership dues each year and receives in-kind staff support from the County of Lake and the RCD.

The following sections outline the methodology used in developing this report, summarize findings from interviews regarding potential functions for the RRA to consider and funding

models from other JPAs, and provide detailed cost considerations and funding options for the RRA as it moves forward.

3. Financial Analysis Study Methodology

3.1. *Literature review*

ERG reviewed existing resources from the other LCI-funded pilot projects and JPA financing reports. The team also conducted a literature review of 15 documents (see Appendix A) related to JPA financial models and feedstock aggregation projects to identify financial processes and sources used by other JPAs, with a focus on feasibility for application for the RRA.

3.2. *Interviews and Partner Engagement*

ERG conducted ten interviews with RRA members, as well as those involved in biomass utilization, forest management, and wildfire resilience efforts in the county. The interviews were designed to assess the RRA's progress, goals, and potential funding opportunities; better understand financing mechanisms and fee structures; and identify challenges and opportunities specific to Lake County.

ERG held several meetings with JPA members and partners to vet potential funding options. ERG presented and refined the funding scenarios through ongoing discussions with the RRA and its Biomass Subcommittee.

3.3. *Funding research*

ERG developed a funding database that documented potential revenue streams, application requirements, and funding stability to help identify sustainable funding sources for the RRA beyond member contributions (see Appendix B). The team assessed the feasibility of various funding mechanisms—such as benefits districts, membership fees, and state funding—and developed five-year revenue projections to support the RRA's long-term financial sustainability.

4. Summary of Key Findings

4.1. *Benefits and strengths of the RRA to date*

To help inform opportunities for the RRA, ERG asked interview respondents to comment upon the current strengths of the RRA. Interview participants highlighted several key

strengths, particularly related to wildfire resilience, collaboration, coordination, and capacity building:

- **Capacity building:** Participants highlighted that the RRA’s coordination, collaboration, and partnerships have effectively increased regional capacity for wildfire resilience through providing shared resources and expertise that members and partners are able to use in implementing their own activities.
- **Diverse partnerships:** Participants noted that, in addition to coordination between its members, the RRA also engages with a wide range of community members and partners within and beyond the county through regular meetings and collaboration with other counties.
- **Regional collaboration and cross-sector coordination:** Interviewees emphasized the value of the RRA’s diverse membership (e.g., Tribes, local governments, fire districts, water districts), which allows for members to gain alignment on shared priorities and fosters inclusive solutions across often siloed sectors like water, fire, and land management.
- **Wildfire risk reduction:** Many participants said they value the RRA’s role in helping track and report on biomass management activities undertaken by members and partners, such as brush and understory cleaning, to reduce wildfire risk.

4.2. *Challenges of the RRA*

While the RRA has achieved significant progress that can serve as a foundation for expanding its activities, it also faces several ongoing challenges. Interviewees shared what they viewed as its most pressing barriers, particularly as it looks to expand its activities to encompass new beneficial biomass reuse efforts:

- **Broader Lake County challenges:** Several participants emphasized that larger regional issues—such as aging infrastructure, high poverty rates, workforce shortages due to a lack of locally-trained wildfire resilience crews, and declining tourism—compound local resilience efforts.
- **Coordination challenges:** Interviewees described challenges in inter-agency coordination, as well as unclear internal roles within the RRA, which hinder operational efficiency.
- **Funding limitations:** Several interviewees cited difficulty securing sustainable financing, in part due to community resistance to funding mechanisms that could create durable, long-term financing, such as taxes.
- **Infrastructure gaps:** Participants noted that as the RRA considers opportunities for beneficial biomass reuse, it will have to contend with infrastructure limitation in

Lake County—such as few local facilities for reuse and inadequate transportation logistics for biomass processing.

- **Limited capacity:** Participants reported that the RRA still lacks sufficient staff, technical support, and operational tools to fully meet its goals, particularly considering the desire to expand its activities to better support beneficial biomass reuse.
- **Negative community perceptions:** Some participants expressed concern about public perception of the RRA and a need for improved outreach, particularly for underserved populations.

4.3. *Opportunities for the RRA*

Participants also identified a range of opportunities that the RRA could leverage to strengthen its wildfire resilience efforts as well as overcome the challenges identified above:

- **Alternative financing:** Some participants recommended exploring alternative funding mechanisms, such as carbon credit markets, biochar commercialization, and models like Climate Resilience Districts.
- **Disaster and economic resilience:** Interviewees encouraged alignment of wildfire resilience efforts with broader economic strategies for long-term community recovery and resilience.
- **Expanding internal capacity and membership:** Interviewees expressed that the hiring of additional staff would expand internal capacity and expertise, particularly if the RRA is able to increase its funding. Additionally, interviewees also suggested that the RRA could consider expanding its membership to engage other key groups throughout the region—such as other water districts that are not currently part of the RRA, additional Tribes, and other local entities involved in risk reduction and wildfire resilience activities.
- **Infrastructure investment:** Several interviewees identified opportunities to invest in mobile biomass processing technologies (e.g., carbonizers), as well as local composting and bioenergy facilities.
- **Market connections:** Respondents saw an opportunity for the RRA to act as a broker between biomass producers and end markets, such as clean fuels and biochar.
- **Outreach and education:** Participants emphasized the importance of improving outreach on wildfire risk reduction needs to hard-to-reach populations, such as senior citizens, through town halls and trusted community organizations like churches.

- **Technical assistance and regulatory support:** Interviewees proposed that the RRA could provide regulatory support and fee-for-service consulting to help local businesses and landowners launch biomass-related businesses and navigate the regulatory complexities associated with these activities.
- **Workforce development:** Respondents suggested that the RRA could coordinate local training programs to build a skilled local workforce, reduce reliance on external contractors, and boost economic opportunity in the community.

4.4. Functions and Funding Models of Other JPAs and Similar Entities

The recommendations of the other Forest Sector Market Development Program pilot projects provide useful models that the RRA could consider in expanding its activities. This section compiles information and key findings from those pilot programs, as well as other existing JPA or cooperative entities that support wildfire risk reduction in California. Collectively, these lessons learned from other proposed or existing JPAs were used to inform potential funding and operational models for expanding the Lake County RRA.

4.4.1. Summary of Pilot Projects

Error! Reference source not found. includes a current overview of proposed entities, funding models, and activities for each pilot project other than Lake County. While it is important to acknowledge that each project is unique and in different stages of development, they all offer valuable insights relative to Lake County. Key takeaways from the other pilot projects include:

- Three of the pilot projects recommended the formation or expansion of a JPA. JPAs were preferred in instances where the consolidation of public services among existing agencies could enhance efficiency and capacity for biomass management. JPAs provide the ability to negotiate and support long-term feedstock contracts and offer services for a fee. Among the pilots, the RRA is unique in that the JPA was already formed prior to the pilot effort, offering an opportunity to expand services and function within the determined structure of the JPA.
- For the pilots that proposed a new or expanded JPA, the most common recommended ways to fund the JPAs are through fees for service, grants, and endowments/gifts. While the RRA currently has a lean operating budget that fits its scope, these sources of funding represent new revenue sources to consider as the RRA decides how to fund any expansion of the scope of its activities.
- Three of the pilot projects recommended a non-profit or 501(c)3 organization. Non-profits were preferred in cases where a pre-existing organization could assume the desired activities and where capacity was limited to form and sustain a new entity.

The existence of the RRA allows Lake County, which also has limited capacity, the ability to draw on an existing organizational structure, partnerships, and reputation to advance local biomass efforts.

- A common theme across all pilot projects is the need to standardize supply of woody biomass for aggregation and processing. The quality of biomass, proposed end products, and approach to consolidating, contracting and processing vary across regions.

Table 1. Description of LCI-funded pilot biomass utilization projects

Pilot Project and Sub-Regional Pilot Project (if applicable)		Proposed Entity and Funding Model	Proposed Activities
NCRP Pilot <i>Awardee: NCRP (NCRP and Watershed Research and Training Center n/r)</i>	Dinsmore Pilot Project	Existing or new non-profit organization that functions as single member owner of two businesses (one for fuels reduction contracts, one to operate the Dinsmore aggregation facility).	Emphasis on building community capacity for fuels reduction projects to increase the yield of woody biomass needed to supply a facility for aggregation and processing.
	Mendocino/ Humboldt Forest Reciprocity Cooperative	Existing 501(c)3; grants and donations.	Pole aggregation business development for use in furniture and housing construction; creation of educational curricula.
	Sonoma County Pilot Project (Regenerative Forest Solutions 2025)	501(c)3 to partner with private entities, likely with a separate JPA to manage wildfire prevention activities.	Community-scale wood management through a “wood products campus” for purchasing, transporting, processing, and selling underutilized small-diameter timber.
North Eastern Sierra-Cascade Pilot (“Shasta OPR pilot project”) <i>Awardee: Fall River RCD</i> (CLERE Inc. 2023)		JPA; a variety of funding models are under consideration, including contract mechanisms, state and federal grant funding, tax credits, bonds, and fees.	Administer the flow of biomass between landowners, suppliers, and buyers; negotiate and support long-term feedstock contracts; provide business and community support functions.
Tahoe Central Sierra Pilot <i>Awardee: Placer County Water Agency</i> (Landmark Environmental, Inc. 2023)		Proposed JPA funded through fees for service and grants, potentially with endowments/gifts.	Manage biomass collection, transportation, and utilization contracts for biomass feedstock.
Southern Central Sierra Pilot <i>Awardee: Mariposa RCD</i> (ERG 2024)		Integration with existing JPA, with funding to support a new program through grants, long-term contracts, an expanding model of fees for service.	Manage biomass collection, transportation, and use contracts for biomass feedstock; provide private landowner support for biomass reduction and geographic information system (GIS) mapping support.
Marin County Pilot <i>Awardee: Marin RCD</i> (Marin Biomass Project, 2025)		Various entities are under consideration, including a cooperative forum called the “Marin Biomass Collaborative.” Funds are available through an existing parcel tax; additional biomass markets (E.g. biochar) are in consideration.	Develop biomass utilization pathways and reduce waste; coordinate across relevant Marin entities (e.g., Stop Waste Marin, Marin Wildfire Prevention Authority) .

Pilot Project and Sub-Regional Pilot Project (if applicable)	Proposed Entity and Funding Model	Proposed Activities
	Additional details are currently in development.	

4.4.2. Other Relevant Organizations and Funding Models

To further explore potential funding options to support the beneficial use of woody biomass, ERG conducted research on existing organizations and their funding models. This research originally was part of ERG’s contributions to the Southern Central Sierra Pilot financial analysis (ERG, 2024). This section synthesizes ERG’s research to further explore and discuss the financial and operational considerations of governance options for wildfire resilience, including organizational structures, funding sources and mechanisms, costs, and key lessons learned. ERG interviewed eight representatives from relevant organizations¹ to gather key information on operations, budgets, financing mechanisms, and the feasibility of financing options for organizations focused on wildfire resilience. The primary funding mechanisms for the interviewed entities included:

- Taxes and bonds (2 out of 8 entities interviewed)
- Dues (3 out of 8 entities interviewed)
- Fees for service (1 out of 8 entities interviewed)
- Grants (3 out of 8 entities interviewed)

The main services provided by these entities were activities and functions designed to increase wildfire resilience, such as landscape management, fuel reduction, defensible space (three out of eight entities). Other services provided included mapping and California Environmental Quality Act (CEQA) support, supporting economic development, bioenergy facility development, land management, contracts with USFS, and coordination for circular economy approaches related to woody biomass.

These findings regarding the functions and funding mechanisms build from previous research conducted by CLERE (2023) as part of the same pilot program. Table 2 summarizes entities that operate in California and function in roles that are relevant to biomass aggregation and wildfire risk reduction, based on ERG interviews and the research from CLERE, Inc. (2023).

Table 2. Summary of other organizations that operate in California in services related to wildfire management and biomass marketing, based on CLERE 2023, ERG 2024, and supplemental research.

¹ The entities represented in interviews were the Marin Wildfire Prevention Authority, Upper Mokelumne River Watershed Authority, Central Sierra Economic Development District, Golden State Natural Resources and Golden State Finance Authority, Amador-Calaveras Consensus Group, Marin County RCD, and Tuolumne River Regional Park JPA.

Entity	Description	Funding Resources
Amador-Calaveras Consensus Group	An informal and community-based volunteer organization conducting wildfire resilience and forest health projects to sustain local economies throughout Amador and Calaveras counties.	Grants
Eastern Sierra Council of Governments	Established JPA formed to address regional issues, in partnership with non-profit organization.	Grant funding, other.
Golden State Natural Resources (GSR) and Golden State Finance Authority (GSFA)	Entities focused on financing projects to promote forest resilience and rural economic development. Both entities are looking to procure, manufacture, and export 1 million tons of industrial wood-grade products. GSR is an affiliate of GSFA and shares board members. GSFA is affiliated with the Rural County Representatives of California (RCRC) and other entities evaluating the feasibility of woody feedstock aggregation and associated pilot projects. Both GSFA and RCRC are JPAs.	Dues, fees for service
Marin Wildfire Prevention Authority	An established JPA focusing on forest health, wildfire prevention, and fire safety work across multiple jurisdictions in Marin County, California.	Funded through Measure C, a 10-year parcel tax estimated to raise \$19 million annually; Grants
Tuolumne River Regional Park JPA	A JPA focused on acquiring, developing, maintaining, and operating land at the Tuolumne River Regional Park in Modesto.	Dues
Upper Mokelumne River Watershed Authority (UMRWA)	Established JPA conducting forest health work through nine member agencies, including those from Alpine, Amador, and Calaveras counties, in addition to the Jackson Valley Irrigation District and East Bay Municipal Utilities District. MCRCD is evaluating partnering with UMRWA in conducting wildfire resilience work either as part of UMRWA's JPA or with UMRWA as a key member entity of a new JPA.	Grant funds, member dues, leveraged federal and state investments
Western Placer Waste Management Authority	Established JPA formed to own, operate, and maintain a sanitary landfill. Processes wood waste and markets for re-use, including a proposal to site for biomass energy generation.	Biomass markets (re-use of recovered wood, biomass fuel, production of bio char), grant funds to support testing of new technology.

5. Recommended Functions, Financial Components, and Revenue Streams for an Expanded Lake County RRA

Based on analysis of similar organizations, review of documents related to the RRA and other pilots, and interviews with RRA members and directors, a suite of functions² emerged

² Note that CLERE, Inc. is currently working on developing an Entity Action Plan for the RRA. The Entity Action Plan will include more detail regarding the RRA's proposed functions moving forward and the steps the RRA needs to take to enact these functions.

that ERG recommends the RRA consider as it moves forward. The sections below outline these recommendations, as well as the cost considerations and potential revenue associated with these functions.

5.1. Recommended Functions of the RRA

Based on our analysis, the following services are recommended for the RRA to pursue:

- 1. Provide Support for Environmental Review, Project Siting, and Local Code Reform:** Many interviewees highlighted the regulatory hurdles when planning and implementing new biomass projects—from the permits and regulations associated with biomass removal to the design, siting, and implementing a new biomass facility. RRA members and potential partners cited a demand for environmental review support, especially for conducting CEQA for biomass removal and aggregation projects. They also identified the need for mapping support and services to help identify suitable sites for new biomass facilities. The RRA has an opportunity to provide support for regulatory processes in Lake County for biomass projects and as well as CEQA processes. The RRA—in collaboration with key partners, such as the County (who serves as the CEQA lead) and the Lake County RCD, who is working on strengthening its capacity to potentially lead CEQA for fuels reduction projects—could provide technical support and assistance for some CEQA efforts to small-scale business owners or connect them to legal support for more complex CEQA documents, permitting requirements, land use and ownership issues, and regulatory support services. The RRA could also work with its County of Lake agency partners to lead a process to improve local codes that facilitate the regulatory and CEQA processes for new businesses and projects while continuing to protect environmental resources. Collectively, regulatory and permitting support, along with other services such as GIS analysis and mapping, would increase the success of efforts to plan, design, and implement new biomass facilities within Lake County.
- 2. Build Workforce Capacity for Biomass Removal:** Interviews conducted as part of this project highlighted the need to expand the available workforce within Lake County to advance biomass-related efforts. As the RRA builds capacity, it has an opportunity to partner with others to build a local workforce for biomass removal and local biomass beneficial use projects. The RRA could advance this objective by connecting with existing training and certification programs (e.g., the work that WANB and TERA are leading as part of the new Lake Wildfire Resilience Training Program), collaborating with the Lake County Economic Development Corporation on existing workforce training activities, investing in local workforce development

programs and partnerships, and providing shared resources and expertise. This function would likely be something that the RRA would grow over time and grow with the demand for this workforce.

3. **Advance Biomass Efforts and Outreach.** A primary strength of the Lake County RRA is its ability to coordinate and foster networks across diverse organizations working towards similar goals. The RRA should continue to provide this valuable service by facilitating forums for discussion and exploring opportunities to advance small-scale biomass utilization projects throughout the county. Two key components include:
 - a. **Funding consolidation and grant coordination:** In its role as a coordinator and convener, the RRA could effectively coordinate and aggregate state and federal grant funding. It could serve as the lead entity for researching grant opportunities, coordinating proposal development, and providing financial administration services. As a fiscal coordinator, the RRA could reduce competition and duplication of efforts across RRA directors and members and partners, while filling a need for coordinated grant support. This role would build upon roles that the RRA serves, including tracking grant applications across county organizations. This role is critical given that the RRA is unlikely to secure fees for service for the first two or three years of operation and will be primarily reliant on grant funding. The RRA should also explore funding mechanisms such as private investments, community-based initiatives, and innovative mechanisms (e.g., carbon credits, insurance, biochar markets, local electricity production).
 - b. **Landowner education and outreach:** The RRA should continue to host regular meetings with diverse community members, encourage cooperation with other counties, and coordinate partners working on forest health and resilience efforts throughout the county (e.g., Tribes, fire districts, cities, water districts). The RRA has successfully built trust and enhanced community engagement, outreach, and education, and there is value in continuing to strengthen community relationships (e.g., through town halls, outreach events). With the growing emphasis on personal landowner responsibility for biomass removal and wildfire risk reduction, the RRA should build capacity to develop and disseminate education materials and trainings to build landowner capacity to reduce risk and plan for emergencies. The RRA is well positioned to fill the need for targeted outreach to private landowners who may be harder to reach through traditional means. Community engagement has the benefit of building trust and

educating landowners on the importance and long-term cost savings of regional risk reduction efforts through biomass removal projects.

ERG recommends that the RRA work with the State of California over the next five years to build its capacity to undertake the functions outlined above. In the near term, the most likely roles for the RRA are serving as a coordinating body for grant funding and providing fees for service as described above. To develop stable revenue sources and funding mechanisms, ERG recommends that the RRA expand its role to more directly support coordinated biomass removal and beneficial use. This role could include the following:

- **Biomass broker:** Act as a market connector for biomass utilization to buy and sell biomass.
- **Biomass data collection and analysis:** Hire staff or consultants to continue to gather data related to biomass removal needs, feedstock analysis, processing, wood product demand, and market analysis, financial modeling, and business opportunities. These services could help potential businesses understand available opportunities and make informed decisions regarding business development.
- **Coordination of long-term feedstock contracts:** Develop and coordinate long-term feedstock contracts to offer a method for biomass suppliers in Lake County (e.g., businesses, licensed timber operators, landowners) to provide biomass to entities that need it for generating wood products, bioenergy, and other products. This could include establishing a price collar so both producers and suppliers are protected against fluctuations in the market, ensuring the market does not drop below or rise above set parameters. (Note that this idea is being explored in depth by many of the other pilot projects.)
- **Equipment coordination:** Own, insure, lease and maintain equipment for biomass removal and processing.
- **Support for new green waste programs:** Coordinate with the County to explore opportunities for expanding green waste programs and assisting landowners in understanding how to dispose of their biomass through an expanded green waste program.
- **Technical assistance and funding coordination:** Provide technical assistance to help small-scale, local businesses get started and help secure funding (e.g., grant writing support, project siting, mapping support, technical assistance and forestry, business planning and administration, creating connections with financing and lending).

5.2. Costs

Stable and consistent funding and resources are critical to support forest health, wildfire resilience and the beneficial use of woody biomass. Local governments and non-governmental organizations working on wildfire resilience in Lake County are often under-resourced and have limited capacity to undertake the scale of work necessary to manage biomass removal and use and reduce risk. To understand the financial viability of an expanded RRA, ERG assessed current and ongoing costs, as well as projected costs based on the expanded set of functions described in Section 5.1 above. Scenario-specific costs are over a five-year period, and the assumptions for these costs are presented in Section 5.4.1, with additional details in Appendix C. Note that within these scenarios and depending on the activities and functions the RRA chooses to pursue, some costs may be supported by member entities that would provide in-kind services (e.g., staff or administrative services).

5.2.1. Initial, Ongoing, and Other Potential Costs

The costs below are necessary for most JPAs and are costs that ERG considered as initial in the financial analysis. Section 5.4.1 contains more detail regarding these costs and related assumptions.

- Hiring of contracted or permanent staff, including salary, benefits, and raises if applicable (note that some of these costs, such as benefits, may not be applicable if hiring contractors instead of staff), to expand upon the in-kind staffing support that the RCD currently provides to the RRA.
- Insurance (e.g., disability, general, professional).
- Accounting services.
- Legal services.
- Bank fees.
- Office supplies.
- Computer, software, phone, and information technology equipment and services.

Beyond these initial and ongoing costs, there are other costs that may be applicable depending on the RRA's functions and services. These costs include:

- Paying building rent and utilities fees.
- Owning and maintaining infrastructure (i.e., capital investments and long-term maintenance).
- Purchasing additional software or programs to support the provisions of additional fees for service by the JPA, such as GIS mapping or CEQA support.

5.3. Revenue Options for an Expanded RRA

The following section provides a summary of the revenue streams that were considered for an expanded Lake County RRA based on web-based research, interviews, and discussions with members and other partners involved in the RRA. The description of the options includes potential revenue, the challenges and opportunities associated with each option, as well as other considerations.

Table 3 presents the likelihood and priority of the various revenue streams considered for the expanded Lake County RRA. It also contains specific notes on feasibility ranked as low, medium, and high, which are defined as:

- **Low.** The likelihood of the expanded RRA securing funding from this option is considered “low” due to the current organizational structure, capacity, and desire of directors, as well as the need for additional infrastructure investments to support the revenue stream.
- **Medium.** The likelihood of the expanded Lake County RRA securing funding from this option is considered “medium” due to the anticipated ease of overcoming specific structural, capacity, and infrastructure needs to make the revenue stream feasible.
- **High.** The likelihood of the expanded Lake County RRA securing funding from this option is considered “high” if it is already a secured source of funding for the RRA or if the funding could become feasible given minimal initial investments in structural organization, additional capacity, and infrastructure.

Table 3. Summary of revenue options for the Lake County RRA, including likelihood, priority, and feasibility of each option.

Revenue Option	Likelihood Level	Priority Level	Notes on Feasibility
Grants	High	High	The RRA secured grant funding for this pilot project, and many of its member organizations rely heavily on grant funding. Given the amount of available biomass and limited infrastructure in Lake County, grant funding is highly likely to be the primary source of revenue to support RRA operations over the next 3-5 years.
Dues	High	Medium	Member dues are a primary source of revenue currently for the RRA. While some noted that the dues can be a barrier to entry for low-resourced groups, it is likely that dues will continue to provide foundational support for the basic functions of the RRA.
Fees for Service	Medium	Medium	Fees for service are unlikely to provide a significant source of revenue in the short term. Over time, the RRA can consider phasing in fees for service to help offset the cost of operations. Services could include CEQA support, GIS and mapping support, brokering biomass supply, and more.

Revenue Option	Likelihood Level	Priority Level	Notes on Feasibility
Endowments or Gifts	Medium	Medium	Endowments and gifts are currently a small portion of revenue for organizations in Lake County, but a contracted executive director for the RRA could build critical relationships to pursue philanthropic funding through endowments and gifts.
Taxes/Bonds	Low	Low	Lake Counties' residents are not currently in support of raising taxes to support this measure.

Overall, given the potential likelihood of other revenue sources, ongoing state grant funding will be critical for continuing and expanding the scope of the RRA's operations. Given the amount of available biomass in the county, fees for service will be less viable, at least in the short term. Over time, the RRA can consider phasing in fees for service as demand grows. The coordinating nature of its proposed expanded functions reduces the opportunity for grants. However, the RRA could still administer larger implementation grants with multiple partners and receive administrative and grant management funding.

Based on comparisons of the likelihood and priority levels of the potential funding scenarios outlined in Table 3, the primary revenue sources considered by this financial analysis include grants, fees for service, and endowments or gifts, as described below.

5.3.1. Grants

According to discussions with personnel at LCI, the next round of funding for the woody biomass aggregation pilot projects is anticipated in 2027. The 2025 Key Deliverables developed by the California Wildfire and Forest Resilience Taskforce specifically reference the work of the pilot projects as one of the Taskforce's high priority actions, illustrating the commitment of the state to secure money for supporting these projects (California Wildfire & Forest Resilience Task Force, 2025). The RRA could use the next round of funding, projected to be \$1,000,000 or more, to support the development of its expanded activities, and it could consider distributing the funding over a five-year period to ensure consistent financial support. This state funding is expected to be the most significant source of financial backing for the RRA during its next phase, and this seed funding from the state can help the RRA increase county support for this effort and demand for this work, in addition to helping build its capacity for securing more sustainable long-term funding sources in the future.

In addition to the grant funding from LCI, the RRA could seek grant funding from federal³ and other state entities to support regional priorities related to woody biomass use, forest health, and wildfire risk reduction. Given that the RRA's primary functions will be related to

³ Note that given the evolving landscape of available federal funding, there may be fewer federal grant opportunities than there have been in past years.

coordination and program development, there are limited grant opportunities that are viable to support that role. However, the role for the RRA would be administering large-scale implementation grants and that usually includes reserving a percentage of the total grant amount as funding for the RRA for administrative services. In securing grant funding for projects that RRA organizations can implement together, the RRA will benefit from clearly identifying and communicating to both potential funders and partners its goals and objectives and the value that the RRA adds as a coordinating and administrating entity.

Another option for the RRA is to pursue small-scale grants to support other proposed roles related to reducing wildfire risk, such as landowner education and outreach, workforce training and capacity-building, and regional partnership development.

To further explore the potential for the RRA to secure grant funding, ERG evaluated 42 funding programs that are consistent with the work of the RRA and its members, including federal, state, and philanthropic grant programs. While the landscape of federal and state grants is evolving, Table 4 provides a sample of grant programs that could feasibly fund the activities of the RRA. For example, the 2023/2024 State Fire Capacity Combined Grant Program granted 1.5 million across 15 counties for fuels reduction projects such as community chipper programs, fuel breaks, and roadside/defensible space projects, as well as wildfire risk and resilience education, outreach, and engagement. If continued, this type of funding would be well-suited to support similar work in Lake County. The full funding database⁴ is available in Appendix C. The availability of relevant grant programs and potential funding for the RRA further demonstrates relatively high feasibility and potential for grants as a primarily funding mechanism for the RRA in the near term.

Table 4. A sample of past and current grant programs that could support the activities of the RRA. Estimates of potential funding for Lake County RRA are based on an analysis of past grant amounts awarded for similar types of wildfire resilience and biomass reduction efforts in California.

Funding Program	Funder Type	Total Funding Amount	Potential Funding for the RRA
Office of Land Use and Planning	State agency	Continued funding beginning in FY27 of up to \$1 million over 5 yrs	\$1 million (\$250k/yr)
2023/2024 State Fire Capacity Combined Grant Program	Federal (subgrants through CA Fire Safe Council)	>\$1.5 million	\$100,000
Gordon and Betty Wildfire Program	Foundation	n/a	\$400,000
Community Wildfire Defense Grant	Federal (USFS, USDA)	\$1 billion over 5 years	\$2 million/5 yrs (\$400k/yr)
CCI Wildfire Prevention Grants	State Agency (CCI, CAL FIRE)	>\$1 billion	\$500,000

⁴ Note that while ERG reviewed 42 potential funding programs, during analysis, ERG removed 10 programs that are not relevant to the RRA. The funding database includes information for the remaining 32 programs.

5.3.2. Fees for services

In addition to grant, RRA could phase in fees for services based on needs that emerge in the county and the capacity of the RRA to perform those services. Fees for service have the potential to provide long-term sustainable funding to offset costs and to supplement grant funding but are unlikely on their own to provide enough revenue to cover all costs.

The primary services the RRA could provide are described in Section 5.1. The RRA may also explore the feasibility of providing additional services in the future, such as expanding its support of wood products facilities and support for private landowners seeking to beneficially dispose of their biomass.

Environmental Review, Project Siting, and Local Code Support

CEQA and other regulatory support services are unlikely to be a significant source of revenue in the short term but could provide revenue if new RRA staff or contracted support has the required technical knowledge to provide services to new or existing businesses. As part of the Entity Action Plan, led by CLERE, Inc., the RRA will be exploring the potential need and demand for CEQA support services. The Action Plan will explore the following questions:

- 1) How does the Lake County RCD's role in CEQA intersect with the potential role of the RRA, and how will the RRA and RCD work together to provide the necessary regional support?
- 2) What is the scale of regulatory and local code support needed?
- 3) Is there also a need for GIS mapping and site review support?
- 4) What investment (e.g. software, staff, contracted support) is needed to support identified services?

Small-Scale Support for Local Business and Private Landowners

The RRA is well-positioned to consider a role in providing technical assistance to help small-scale, local businesses get started (e.g., grant writing support, project siting, mapping support, technical assistance and forestry, business planning and administration, creating connections with financing and lending). The RRA could develop these services based on the gaps and challenges currently faced by small wood products businesses.

Similarly, in the future, the RRA could assess its ability to secure funding for, own, and operate localized biomass processing infrastructure. The RRA will need to conduct an in-depth analysis to identify market demand, siting, investment and operational costs, willingness to pay, and projected revenues from operating the processing infrastructure.

Unlike other pilot projects, due to the amount of available biomass and the smaller nature of the potential biomass facilities in Lake County, the RRA is unlikely to manage large-scale woody feedstock contracts. However, it may act as a market connector for biomass utilization to buy and sell biomass. This service will also require future research to better understand the current market scenario, needs, and feasibility within Lake County.

5.3.3. Endowments or Gifts

The RRA expansion over the next five years could support the addition of an Executive Director (either as staff or a full-time contractor) who can lead the pursuit of philanthropic funding such as endowments or gifts. Beyond grants, endowments and gifts are a high priority for Lake County in the short term given the limited availability of biomass and the need to build the program to support fees for service. Lake County is a viable candidate for philanthropic support, and there are a variety of foundations and donors in California that have a history of supporting forest health and wildfire resilience efforts. Similar to grant funding, the RRA will need to develop its messaging and communication about the role and value of the RRA in advancing forest health and wildfire resilience, as well as the economic and community building opportunities associated with the beneficial use of biomass.

5.3.4. Member Dues

The RRA currently collects member dues, which will continue to be a source of funding for RRA operations. Based on interviews with RRA partners, the membership dues are seen as a barrier or burden to participation for some potential members. If desired, the RRA could consider a waiver for entities that cannot afford to contribute.

5.3.5. Additional Funding Sources

Interviews with members and partners of the RRA further explored funding mechanisms and their suitability for expanding the roles and services of the RRA. A few additional sources of funding emerged that the RRA could consider in the future:

- Cooperative models to share equipment and other costs.
- Corporate sponsorships and local industry partnerships (e.g., PG&E, geothermal energy producers, vineyards).
- Voluntary carbon credit markets.
- Tribal partnerships and funding sources.

5.4. *Funding pathway and assumptions*

This financial analysis for an expanded RRA considers various types of funding that the RRA can phase in over a five-year timeframe. These funding options are intended to provide revenue sources for consideration and are not meant to limit the RRA from pursuing

additional funding mechanisms or sources. The RRA may choose to focus on some approaches or services as they gather more information about regional biomass needs and opportunities, membership changes to the RRA, grant and philanthropic funding opportunities, and other variables.

5.4.1. Assumptions

The budget developed for the Lake County RRA is based on the following assumptions:

- **Facilities.** The RRA will want a physical presence for at least one staff person at a local office, but space is unlikely to be available at any of the member agencies. The costs assume the need to rent a small office space and purchase office supplies as needed.
- **Dues, member agencies, and staffing support.** The RRA can collect \$35,000 per year in member dues if all voting members submit their dues. The budget assumes current members will pay annual dues, and that the dues will remain constant over five years. It also assumes that no new members will be joining the RRA and contributing dues.
- **Legal Services.** The RRA will likely require some legal services, especially in the first year to support any changes made to the structure or new systems being put in place. The budget reflects higher legal fees in Year 1, but less in subsequent years.
- **Phasing of services over time.** The financial analysis phases likely costs and revenue sources over a five-year period, considering the following:
 - **Year 1.** With the upcoming LCI grant expected to provide \$1,000,000 over the next five years, the RRA will initiate growth by hiring at least one full-time Executive Director (ED) in Year 1. The ED will lead the RRA in securing additional grant and philanthropic funding, in addition to performing all primary operational duties of the RRA. In Year 1, the ED will be supported by a program coordinator to help support grant-writing, coordination, and capacity building. We assume modest local, state and federal grant support in Years 1, 2, and 3. Assuming funding supply is limited in the early years, before additional grants can be secured, the program coordinator will only be supported for half-time in Year 1 and Year 2 but may become full time if funds allow in Year 3, 4, 5.
 - **Year 2.** The RRA will continue to pursue grants and build relationships with potential funders.
 - **Year 3.** The RRA will begin to coordinate larger scale grants and provide fees for service such as CEQA and regulatory support, biomass products support and coordination, business and economic development, and private

landowner support for biomass reduction. If funds allow, the program coordinator may advance to a full-time position to support a growing need for services and grant support.

- **Year 4 and beyond.** In addition to bringing in large-scale grants and providing fees for service, the RRA will begin to benefit from relationships built with philanthropic organizations and may receive endowments and gifts to supplement growing grant- and fee-based revenue. The RRA will have identified sustainable funding pathways for the coming 5 years in anticipation of the end of the 5-year LCI grant.
- **Operational Reserve Fund.** Beginning in Year 1, the RRA will place 75 percent of any profits it makes each year into an operational reserve fund that will provide a buffer to maintain operations in years when costs may exceed revenues. The RRA may choose to use the operational reserve fund to invest in passive income, contribute to a larger endowment, expand operations and services (e.g., hire more staff or contractors), or use the funds in other ways as determined by RRA members.

5.4.2. 5-Year RRA Budget

Table 5 presents a summary of anticipated costs and revenues for operating the RRA over the five-year period from 2027 to 2031, based on the assumptions outlined in the previous section. Costs include three percent salary increases per year. Salaries will constitute the greatest cost to the RRA, but the role played by the ED and program coordinator will be critical for sustaining and increasing grant funding, services, and other revenue sources into the future. As shown in the budget, the RRA will rely heavily on grant funding for all five years, but the contributions of revenue from fees for service, endowments and gifts will increase in later years. Because of this, total net income will likely remain steady in Years 1 and 2 but has the potential to increase in Years 3, 4, and 5 depending on the success of grant applications and other revenue sources. Grants will form 91 percent of the RRAs revenue in Years 1 and 2 but will drop to 70 percent by Year 5. This underscores the importance of funding from LCI to support an ED and program coordinator to build the capacity and diversify the portfolio of funding sources.

Table 5. Proposed Five-Year RRA Budget

	Year 1 (2027)	Year 2 (2028)	Year 3 (2029)	Year 4 (2030)	Year 5 (2031)
Revenue					
Fees for Services					
Biomass products support and coordination	\$0.00	\$0.00	\$30,000.00	\$30,000.00	\$30,000.00
Environmental review, siting, and regulatory support	\$0.00	\$0.00	\$40,000.00	\$40,000.00	\$60,000.00
Private landowner support for biomass reduction	\$0.00	\$0.00	\$22,500.00	\$22,500.00	\$22,500.00
Subtotal	\$0.00	\$0.00	\$92,500.00	\$92,500.00	\$112,500.00
Dues					
Member Agency Contributions	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00
Subtotal	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00
Grants					
Grants - local	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00
Grants - state					
<i>e.g.: State Fire Capacity Combined Grant Program</i>	\$15,000.00	\$15,000.00	\$0.00	\$0.00	\$0.00
<i>e.g.: CCI Wildfire Prevention Grants</i>	\$0.00	\$0.00	\$75,000.00	\$75,000.00	\$0.00
<i>Office of Land Use and Climate Innovation</i>	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00	\$200,000.00
Grants - federal					
<i>e.g. Community Wildfire Defense Grant</i>	\$120,000.00	\$120,000.00	\$120,000.00	\$120,000.00	\$120,000.00
Grants - other (e.g., philanthropic)	\$0.00	\$0.00	\$0.00	\$67,000.00	\$67,000.00
Subtotal	\$345,000.00	\$345,000.00	\$405,000.00	\$472,000.00	\$397,000.00
Endowments and gifts					
	\$0.00	\$0.00	\$0.00	\$20,000.00	\$20,000.00
Subtotal	\$0.00	\$0.00	\$0.00	\$20,000.00	\$20,000.00
Total Revenue	\$380,000.00	\$380,000.00	\$532,500.00	\$619,500.00	\$564,500.00
Costs					
General business and operational expenses					
Fundraising expenses	\$500.00	\$515.00	\$530.45	\$546.36	\$562.75
Accounting fees	\$3,000.00	\$3,090.00	\$3,182.70	\$3,278.18	\$3,376.53
Banking fees	\$250.00	\$257.50	\$265.23	\$273.18	\$281.38
Office space	\$10,800.00	\$11,124.00	\$11,457.72	\$11,801.45	\$12,155.50
Legal services	\$10,000.00	\$5,000.00	\$5,000.00	\$5,000.00	\$5,000.00
Office Supplies	\$4,000.00	\$1,000.00	\$1,030.00	\$1,060.90	\$1,092.73
Postage and Delivery	\$200.00	\$206.00	\$212.18	\$218.55	\$225.10
Telephone and Internet Expenses	\$1,200.00	\$1,236.00	\$1,273.08	\$1,311.27	\$1,350.61
Website and Promotion	\$2,500.00	\$2,575.00	\$2,652.25	\$2,731.82	\$2,813.77
General business expenses - Other	\$5,000.00	\$5,150.00	\$5,304.50	\$5,463.64	\$5,627.54
Audit Expenses	\$7,800.00	\$7,800.00	\$7,800.00	\$7,800.00	\$7,800.00
Subtotal	\$45,250.00	\$37,953.50	\$38,708.11	\$39,485.35	\$40,285.91
Insurance					
Directors Insurance	\$1,125.00	\$1,158.75	\$1,193.51	\$1,229.32	\$1,266.20
Disability insurance	\$3,000.00	\$3,090.00	\$3,182.70	\$3,278.18	\$3,376.53
General & Professional Liability Insurance	\$10,000.00	\$10,300.00	\$10,609.00	\$10,927.27	\$11,255.09
Worker's Compensation	\$9,240.00	\$9,517.20	\$9,802.72	\$10,096.80	\$10,399.70
Insurance Expense - Other	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00
Subtotal	\$24,365.00	\$25,065.95	\$25,787.93	\$26,531.57	\$27,297.51
Salary and benefits					
Contracted staff - 1 full time Exec Director	\$120,000.00	\$123,600.00	\$127,308.00	\$131,127.24	\$135,061.06
Contracted staff - 1 program coordinator (50% Y1 & Y2; 100% Y3, Y4, Y5)	\$33,000.00	\$33,990.00	\$70,019.40	\$72,119.98	\$74,283.58
Consulting fees	\$0.00	\$0.00	\$30,000.00	\$30,000.00	\$45,000.00
Subtotal	\$153,000.00	\$157,590.00	\$227,327.40	\$233,247.22	\$254,344.64
Travel (non-project related)					
Gas	\$3,000.00	\$3,090.00	\$3,182.70	\$3,278.18	\$3,376.53
Parking	\$100.00	\$103.00	\$106.09	\$109.27	\$112.55
Per diem	\$1,500.00	\$1,545.00	\$1,591.35	\$1,639.09	\$1,688.26
Subtotal	\$4,600.00	\$4,738.00	\$4,880.14	\$5,026.54	\$5,177.34
Total expenses	\$227,215.00	\$225,347.45	\$296,703.57	\$304,290.68	\$327,105.40
Number of FTEs	1.5	1.5	2	2	2
Grand Total Revenue	\$380,000.00	\$380,000.00	\$532,500.00	\$619,500.00	\$564,500.00
Grand Total Costs	\$227,215.00	\$225,347.45	\$296,703.57	\$304,290.68	\$327,105.40
Total Income (prior to allocation to reserve fund)	\$152,785.00	\$154,652.55	\$235,796.43	\$315,209.32	\$237,394.60
Annual Operational Reserve Fund Allocation	\$114,588.75	\$115,989.41	\$176,847.32	\$236,406.99	\$178,045.95
Total Net Income (after allocation to reserve fund)	\$38,196.25	\$38,663.14	\$58,949.11	\$78,802.33	\$59,348.65

6. Conclusions and Recommendations

The Lake County Biomass Aggregation Pilot Project led by the Lake County RRA and supported by LCI, represents a significant step in Lake County towards reducing wildfire risk, improving forest health, and promoting local economic development through the beneficial use of woody biomass.

Our analysis underscores the importance of coordinated efforts and strategic planning in achieving these goals. The RRA's role as a coordinator and convener is crucial in facilitating on-the-ground efforts and decision-making across diverse entities, securing grant funding, and reducing competition and duplication of efforts. The recommended services—including grant support and coordination, environmental review, siting, and regulatory review assistance, workforce and business development, and landowner education and outreach—are designed to enhance the RRA's capacity to address climate and environmental hazards effectively and catalyze the beneficial use of biomass and the development of small biomass businesses.

Continued state funding will be critical for the RRA to expand its scope and operations. While fees for service may become viable in the long term, grant funding will remain essential in the initial years, particularly given the smaller nature of available biomass in Lake County. By helping streamline biomass-related efforts, promote growth of the biomass workforce, and conduct ongoing outreach to raise awareness of biomass opportunities, the RRA can support localized biomass processing infrastructure and contribute to the region's overall resilience and economic development.

In conclusion, the Lake County Biomass Aggregation Pilot Project has the potential to significantly reduce wildfire risk, improve forest health, and provide economic opportunities for the region. With ongoing support from the state and a strategic approach to service expansion and funding, the RRA can play a pivotal role in enhancing the resilience and sustainability of Lake County's ecosystems and communities.

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Appendix B: Funding Database

Please see the Microsoft Excel file “RRA_Funding_Sources_Database_092425” for more details on potential federal, state, and philanthropic funding opportunities the RRA could consider pursuing.

Appendix C: Budget Details

Please see the Microsoft Excel file “RRA_Budget_Years 1 -5_092425” for more details on the proposed budget for the expanded RRA and assumptions used in developing the budget.