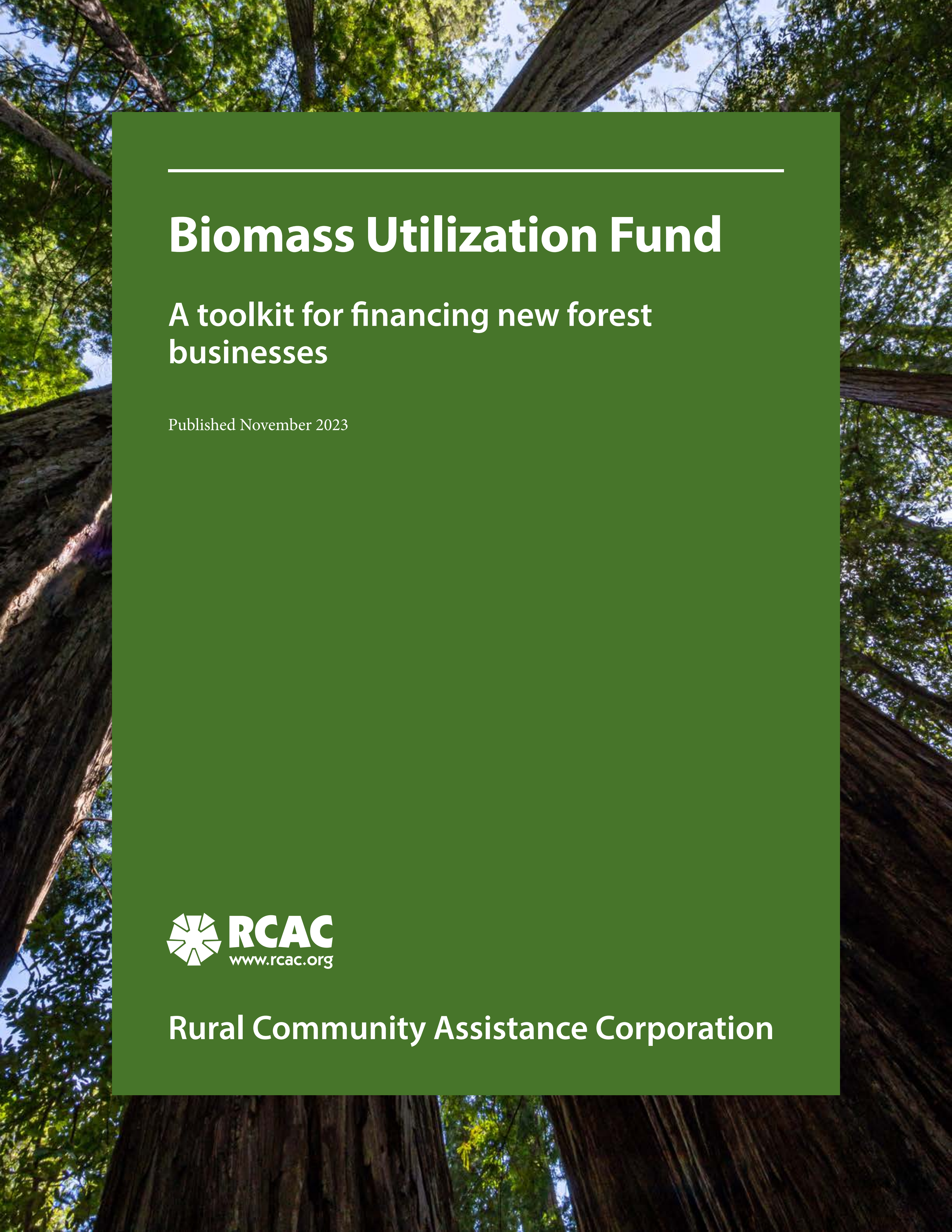

Biomass Utilization Fund

A toolkit for financing new forest businesses

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Rural Community Assistance Corporation

Contents

Background

The National Disaster Resilience Competition (NDRC) was a national program administered by the US Department of Housing and Urban Development (HUD) that provided grants totaling $1 billion to communities to rebuild in a more resilient way following major disasters. The funds were awarded competitively and were designed to promote risk assessment, planning, and the implementation of innovative resiliency projects to better prepare communities for future extreme natural events.

The State of California through the Department of Housing and Community Development (HCD) received a $70 million NDRC grant to help restore forest and watershed health, support local economic development, and increase disaster resilience in the rural areas affected by the 2013 Rim Fire. One of the California NDRC grant project activities is the development of a Biomass Utilization Fund (BUF) in Tuolumne County. The goal of the BUF is to finance new businesses that will utilize low and no value biomass created by forest resilience work. HCD partnered with Sierra Nevada Conservancy (SNC), another state agency, and with Rural Community Assistance Corporation (RCAC) to implement a loan and grant program to finance biomass utilization businesses in Tuolumne County.

RCAC is a Community Development Financial Institution (CDFI) and will manage the loan approval and servicing and provide technical assistance to the new businesses. The grant capitalizes the BUF at $18 million to provide critical gap project financing and equity to allow biomass projects to attract additional financing from other sources. Financing start-up biomass facilities is one of the most difficult issues these potential companies encounter, especially capital during the first years of operation when revenues may not cover all operational expenses. Three projects of the five originally submitted were successful in completing the application process and will be discussed further in the toolkit. Another biomass application mentioned in this toolkit is a biomass energy facility that will sell power back to Pacific Gas and Electric (PG&E). The biomass energy facility is not part of the BUF program but highlights the obstacles to financing a power project even with significant grants.

Executive Summary

The biomass utilization fund or "BUF" as described in this toolkit is a unique program and funding source to utilize woody biomass from forest harvest, thinning and removal of dead wood. The BUF program uses a partnership approach of agencies, nonprofits, and businesses to establish biomass utilization projects within Tuolumne County, California. The partners could have directly funded one or two projects depending on cost, with grants from the $18 million BUF fund, but chose instead to use a CDFI with business lending experience (RCAC) to work with projects on the financial aspects and use the HUD grant to subsidize other funding sources for the proposed projects. This approach also creates a revolving loan fund for biomass projects, which is a significant outcome of the BUF grant.

Additionally, the program chose to provide job training programs through a local agency, Mother Lode Job Training (see Gaps in State Capacity and Partnership Need) and RCAC contracted services for environmental documents and permitting and for financial review through National Development Corporation (NDC). The funding provided by RCAC through the grant and "wrap around technical assistance" through contractors, agencies' staff, and nonprofits creates a unique approach to funding biomass startups.

This toolkit describes progress to date with three projects, and the plan to obtain funding for each of them. Funding challenges along with other currently identified issues are described in the toolkit, and it is anticipated the toolkit will be updated with final project outcomes.

Lessons learned from the BUF program

Three startup projects were successful in moving to the next level in the BUF program after responding to a Request For Proposals (RFP) from RCAC. The BUF program manual, discussed later in the toolkit, is a good source to show how the projects are slated to be financed and operated. RCAC provides a great deal of financial and business planning technical assistance to the businesses seeking BUF financing.

A couple stand-out lessons are that all of the applicants needed support preparing pro forma financials, and all of them were optimistic in their operating projections. BUF staff and consultants spent many hours assisting the applicants with reviewing and revising their financials to ensure all costs of operation were included and revenue projections were realistic. Adjusting the detailed financials to account for timing of income, expenses, and calculating the appropriate amounts needed cash flow and working capital, as well as setting correct allocations for replacement reserves was challenging but well worth the time and effort to ensure achievable outcomes.

The BUF is designed as a subsidy program, not a primary financing mechanism. It has very flexible terms, in that the entrepreneurs have time to get their new businesses developed, operational and build a market for their product before payments are due. The program allows principal deferral and interest payments that can start at zero, with full interest payments at just 3 percent. Lenders typically want to see at least 25 percent equity in new businesses. The capital cost of most start-up businesses is not as high as in forest-based businesses. Two of the participating businesses have capital costs of more than $14 million, which means the entrepreneur would typically need to have equity of more than $3.5 million. In our experience the forest-based business entrepreneurs do not have this level of capital. They have great social and intellectual capital, but not the financial resources needed to induce a private lender to take a risk on such an expensive start-up business.

For the most part RCAC has been asking the entrepreneurs to invest between 5 and 15 percent equity into their projects. For United States Department of Agriculture (USDA) guaranteed loans for start-up businesses, 25 percent equity is required. In all cases the BUF program will consider providing the balance of the equity in the form of recoverable grants. In some cases , the grants will be partially recovered from residual cash-flow after debt service payments as the business becomes profitable. The BUF recoverable grants are structured to act as equity, but if/when the businesses meet certain performance benchmarks, the businesses return a negotiated amount to the BUF for re-lending. In one case, the grant will allow the entrepreneur to secure a guaranteed loan from USDA.

Two additional factors contribute to the requirement for entrepreneurial equity. The first is the desire to finance several businesses and create as many new employment opportunities as possible. From the outset, the goal was to create at least 70 full time, well-paying jobs. The three businesses in the program will produce nearly 70 jobs, but they have a combined capital cost of over $40 million, and the BUF has only $18 million in lendable principal. Even creating 70 jobs for $18 million is way outside the typical government investment to job ratio. Thus, to reach the 70-job threshold, the program needs to leverage $22 million in non-program funds. The second factor has to do with HUD's Community Development Block Grant (CDBG)[1] regulations, which require that the new business owners not earn an excessive return because of the subsidy provided by the BUF. The BUF is intended to ensure that the owners receive a market rate of return, but not a windfall because of the funding.

Project snapshots

Project #1 - Tuolumne Biomass LLC (TBLLC)

This project proposed to replicate a successful business model of a wood sorting yard that is currently operating in Wallowa County, Oregon which is owned and operated by Heartwood Biomass, LLC. This project has a process that will sort and utilize multiple sources of biomass into widely used marketable products. The strength of this project is the experience of the project team and previous business that had been operating in Oregon for 10 years. A simple product, bundled firewood, is the major product line for this project and they are proposing to develop an agricultural post and pole business over time.

[1] NDRC funding (CDBG-NDR) was awarded through the federal CDBG program and carries many of the same requirements, however, per the applicable Federal Register Notice there are some waivers HUD built into the funding, which is why this grant is known as CDBG-NDR.

The project forecasts a five-year ramp-up period where expected volume throughput grows from 10,000 bone dry tons (BDT) to 20,000 BDT per year. At full capacity and with current product assumptions, TBLLC could convert over 20,000 BDT of biomass into value-added products, representing approximately 2,000-4,000 acres of treated forest annually.

TBLLC forecasts it will create 16.5 full time equivalent (FTE) jobs at the new facility within one year after it opens. Sixteen (16) of these jobs will be full-time, with one half-time log procurement specialist. TBLLC will work with the local Workforce Development Board, Mother Lode Job Training, to identify lower income individuals to make these positions available to apply for, and if hired, to train them for advancement.[2]

The challenge of this project is the need for working capital funds during the first few years of starting up the business. The BUF program recognized this issue when reviewing the submitted pro forma and plans to provide start-up funding through the BUF grant.

The environmental analysis for this project showed no significant impacts. As part of the environmental review completed to satisfy the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), studies were conducted on noise and sensitive receptors (a prison facility 1,100 feet away) and greenhouse gasses (GHG). Potential air quality issues were also modeled for the project. The studies showed no significant impacts and a net decrease in GHG for the project verses the current burning of biomass residue in the forest after harvest or clearing.

Project #2 - Carbon Based Solutions (CBS)

An existing company, BioCarbon Technologies Inc. (BCT) processes biochar and related biocarbon products for use in specialized markets. BCT will form CBS for the project in Tuolumne County, California. Uses for biochar include agriculture soil remediation, water purification, and other applications (for example animal feed). BCT is working in conjunction with Biochar Now LLC (BCN), a Colorado-based company with a patented process to produce biochar from woody biomass. CBS, in conjunction with BCN, will produce biochar and biocarbon products in Tuolumne County. CBS's custom blending operations allow the customer to follow the chain of custody from production to application to ensure quality control.

The major challenge for this project is the financial strength of CBS. Finding a source of senior debt that the project can support is proving difficult. In addition, the market for biochar is just developing in California. CBS has contracted for a market study that better characterizes the demand for biochar and to develop adequate financial projections for this project to pay back loans and possible grants. This project was the most difficult to put together financially.

Ultimately, CBS could not obtain financial commitments within the time constraints of the BUF grant funds funding cycle. With no environmental impact analysis completed, and lack of a permit, RCAC and the BUF team had no choice but to move CBS committed BUF funds to the other two projects.

[2] Mother Lode Job Training's hiring process will follow all Section 3 of the Housing and Development Act of 1968 requirements to identify and open positions to Section 3 Workers and Section 3 Targeting Workers. Section 3 - Economic Opportunities | HUD.gov / U.S. Department of Housing and Urban Development (HUD)

Should CBS be able to find the needed funding, the company plans to hire over 20 employees initially. CBS will also work with Mother Lode Job Training to identify lower income individuals to make these positions available to apply for, and if hired, to train them for advancement. CBS will buy feedstock from local vendors who will increase their employee base to meet the additional demand for low and no value wood. The business intends to initially process approximately 22,000 tons of low and no value wood from the forest, converting it into biochar.

Project #3 - Tuolumne Bioenergy Inc. (TBI)

TBI, which is owned by Force Energy Corporation, intends to develop a wood pellet manufacturing facility on a 3.27 acre leased property in an industrial business park in Sonora, California. Wood pellets are densified wood products that will be produced from wood chips derived from the thousands of piles of biomass accumulating in the Tuolumne County region. The pellet enterprise will utilize approximately 44,000 BDT of biomass annually to produce 30,000 tons of premium wood pellets.

The project will employ an estimated 25 people when completed. TBI will work with Mother Lode Job Training to identify and train staff to take most of the roles in the production process. The starting average wage will be $19, well above the California minimum wage; TBI plans to provide health benefits to all workers and regular salary increases as employees become more seasoned. The starting salaries for the shop employees will be very close to 80 percent of the area median income.

This project seems to have the best chance of securing the private financing needed to leverage the BUF subsidy.

NEPA and CEQA environmental analyses reviewed possible impacts related to emissions, flooding, soil contaminants, and cultural resources. The additional environmental studies required for the Air Quality District caused some delay in the project. The studies showed no significant impact for the project.

Summary of project issues

Start-Up Funding and Initial Working Capital

All three projects lack the equity typically needed to secure the private funds to match the BUF program. The high capital costs of the projects exacerbated this problem, especially when dealing with new start-up companies.

Cost Stability

The Covid-19 pandemic influenced the rising cost of construction materials and equipment, this made estimating the cost and contingency needed for each project difficult. Equipment manufacturers would only offer a few months' window on commitment of price for delivery of each project's equipment. Much of the capital cost of each project is equipment, and another major capital cost is cash flow during the early years of operations, both of which added to the complexity of financing. A key issue was dispersal of funds for equipment purchase when the delivery of the equipment might not be for six months. RCAC is working with local banks to provide possible financing to deal with this issue. Also, since the equipment was being financed with HUD funds, a comparison of the equipment to be purchased was required to show the cost was "reasonable" under HUD guidelines.

Environmental Analysis Work

Because the projects are using HUD grant funds, NEPA requirements were applied in addition to state CEQA requirements.

Timing

A key issue was the delays caused by environmental review, Covid-19 supply chain issues, inflation on equipment costs, air quality requirements, wetland issues, appraisals and increasing costs.

Next steps

The Healthy Forest Fund

Currently, two of the BUF projects discussed in this toolkit are being funded through RCAC's traditional loan fund process, but all three of these proposed projects demonstrate the need for philanthropic support for this emerging new forest economy. Not only will these three projects benefit from financing, but it is the state's and RCAC's intent to revolve a majority of the funds invested in these financing deals and leverage them with other philanthropic funds to create an economic development fund known as the Healthy Forest Fund. Once the CDBG National Disaster Resilience grant (CDBG-NDR) funding begins to revolve, effectively launching the Healthy Forest Fund, RCAC will be able to fund subsequent projects at rates and terms that meet the needs of the newly developing businesses. The Healthy Forest Fund will operate outside of the traditional RCAC loan fund so that investments do not have to be tied to specific projects. RCAC has investors in its traditional loan fund that have specific requirements for their funds invested through RCAC so the current RCAC loan fund does not have the flexibility to develop a suitable funding package for BUF projects, thus the new Healthy Forest Fund is needed. In the Healthy Forest Fund, investors may spread their investments over the portfolio of projects being financed, or limit their investment to a specific deal(s).

By segregating forest-based projects to a separate fund, the inherently high risks associated with financing new businesses, especially businesses that need to build a market and have high capital costs, the Healthy Forest Fund will not have an adverse impact on the financial strength of the RCAC traditional loan fund. That strength is critical to the historic financing the organization has provided for development projects across the West. In addition, the guidelines for operating the Healthy Forest Fund may be written in a much less constrained manner than the guidelines for our traditional loan fund, creating Healthy Forest loan products that have more flexible and lower cost terms than is typical in RCAC's traditional small business lending.

Purpose of the toolkit

The purpose of the toolkit is to offer insight into various applications, processes and challenges that the BUF was designed to overcome in providing financing for biomass start-up businesses. The toolkit describes the projects and any associated issues concerning environmental guidelines, financing, and product marketing. It also details lessons learned from the three projects selected for funding.

The toolkit provides highlights on developing a biomass power project in Northern California and the funding sources used to put that type of project together.

This toolkit is designed to assist biomass projects in California and other states and provide tips and resources to future biomass utilization projects. As well, this toolkit will provide state and federal agencies a better understanding of the financial and implementation challenges of supporting biomass businesses. The toolkit includes links to biomass projects and funding that may be available in other Western states and describes the status of the three BUF projects and the plans to obtain funding for each of them. Funding challenges along with other issues are described as they currently stand. The toolkit will be updated with final project outcomes in 2024-2025.

This toolkit is divided into sections that describe the establishment of the BUF program, the program in action, and finally, the BUF project case studies. More specifically:

- **Section 1:** Feasibility studies, partnerships established, and establishing the program manual
- **Section 2:** The BUF program in action, financial issues, technical assistance provided and environmental review
- **Section 3:** Case studies of the three BUF projects and a biomass power project outside of the BUF program

Section 1

Development of Community Based Development Organization (CBDO) Agreement

Because of the federal character of the funds, RCAC qualifies as a CBDO under HUD regulations allowing the state to enter into a subrecipient agreement with RCAC for administration of the BUF. A major challenge around the agreement negotiation was getting comfortable with RCAC administering the revolved funds. It was agreed that the SNC, under the California Natural Resources Agency, would have an ongoing relationship with RCAC loan fund staff in the administration of the initial loans and the revolved funds. In this manner the state continues to have input and there is a collaborative decision-making process for how the funds should be administered.

Creation of program manual, application, and funding guidance

RCAC developed a specific biomass utilization fund program manual in coordination with SNC to assist potential BUF project applicants with details of the program, including the HUD and RCAC loan fund requirements and how to submit an application. Within the manual are helpful examples of how borrowers can leverage funding sources and their equity to get the best terms on the loans.

The CDBG-National Disaster Resilience grant (CDBG-NDR) has a "core team" of key stakeholders in the program, and the program manual established their role in screening potential projects before they are submitted to RCAC. The core team looks at the social and forest benefits of the new businesses and their compliance with HUD requirements, not the financial feasibility. The manual provides an outline and checklist of items a project would need to move forward under the BUF program or to seek funding from public and private sources.

The program manual is included in the appendix.

Limits in state capacity and partnership need

None of the state agencies participating in the NDR grant could individually administer the BUF portion of the grant due to limited staffing and system infrastructure, as well as limited loan originating and servicing expertise. At the local level, the County of Tuolumne and the Forest Service are also partnering in the overall BUF program, and while they agreed to assist in consulting on the creation and administration of the fund, the state still needed to contract with a third-party that had the experience, capacity, and willingness to fully administer and manage the BUF program and funding.

Two other factors were critical in choosing a nonprofit partner to administer the BUF. The first was the ability of a CDFI to leverage the resources provided, and the second was to contract with a CBDO so the state could grant the funds, and once they were used to fund an eligible project, the nonprofit could retain the revenue and continue to provide financial support to new biomass businesses in California. RCAC was chosen because it is committed to not just providing the BUF financing, but to helping the new businesses navigate the other sources of capital needed to fund their projects, and as a CDFI and a CBDO it has experience making state and federally guaranteed loans in rural communities.

Further, in addition to the contractors RCAC secured for environmental, permitting, market and feedstock studies, two additional partners were engaged:

- Mother Lode Job Training in Sonora, California was contracted with to help secure employees and assist with meeting federal Section 3 goals for the BUF project businesses, and to provide training for the potential employees.
- The National Development Council (NDC) was also retained to assist RCAC with the financial structuring of the BUF projects to ensure the projects meet USDA and RCAC underwriting requirements, as well as CDBG-NDR conditions.

BECK feedstock feasibility study

Early in the implementation planning HCD and SNC recognized the need to clarify the availability of feedstock if new businesses were going to be developed, and they contracted with the Beck Group to conduct the study. The feedstock supply area (FSA) considered in this project is an area defined by a 40-mile radius around the Camage Avenue Industrial Park in Sonora, California. That site was selected from several sites considered because it is the closest to most of the forest resource in Tuolumne County. Proximity to the forest resource is important since minimizing transportation cost is a critical component in the economic viability of any BUF project. To aid in assessing supply, the FSA was subdivided into Zone 1 (< 20 miles from the Camage site) and Zone 2 (between 20 and 40 miles).

TIP: In discussions with US Forest Service professionals, they felt that feedstock within 20 miles of the biomass facility is the most cost effective to remain profitable.

Within the FSA there is about 816,000 acres of forestland. However, not all that forested area can be considered productive or accessible for supplying a biomass facility with raw materials. Therefore, about 321,000 acres were excluded because they are in National Parks, Wilderness Areas, areas with slopes greater than 35 percent, etc. Thus, after exclusions there is an estimated 495,000 acres of productive forestland, 45 percent of which is privately owned and about 55 percent of which is publicly owned. A subset of the privately-owned forestland area, (87,000 acres) is owned and managed by industrial timberland owners.

The biomass feedstocks considered in this study were a combination derived directly from forests including timber harvest residuals, pre-commercial thinning, standing dead trees removed concurrently with timber harvests, standing dead trees removed within 100 feet of existing roads, standing dead trees removed from within 101 to 1,000 feet of existing roads, plantation thinning, and biomass from community programs. Additionally, biomass from non-forest direct sources was also considered including mill residues, orchard removals, urban/industrial wood, and tree service companies.

The result of the study shows a total potentially available annual volume of 641,800 BDT. After applying screens to filter out material not readily available, the practically available annual volume is estimated to be 508,300 BDT. Finally, after accounting for material used by existing facilities the *Net Quantity Available is 42,800 BDT*.

The feedstock study was considered very conservative and is based on conditions on the ground at the time it was done. Data on changes in feedstock supply from the US Forest Service and existing uses indicate considerably more than the estimated 42,800 BDT for the BUF projects.

Social and Ecological Resilience Across the Landscape (SERAL)

Based in Sonora (Tuolumne County), the Yosemite Stanislaus Solutions (YSS) is a collaborative group of diverse interests working together to assist the USFS, Bureau of Land Management, Yosemite National Park, and private land managers in achieving healthy forests and watersheds and in developing recovery and restoration plans for the Rim Fire and other areas in need of rehabilitation. YSS is working collaboratively with federal partners on a large project designed to improve the ecological health of a large swath of the Stanislaus National Forest. The project is called "Social and Ecological Resilience Across the Landscape" (SERAL).

The SERAL project area spans approximately 118,000 acres located within the YSS collaborative area with 80 percent within USFS jurisdiction. The SERAL proposal was developed with the objective of designing vegetation treatments that benefit the environment, the economy, and the community. The proposal includes the use of prescribed fire, hand thinning conifers, mastication, mechanical forest thinning and biomass removal, non-native invasive weed control and limited salvage operations. This area, adjacent to Sonora, has not burned in many years and is considered a serious wildfire threat.

In March 2022 the USFS released an environmental impact document for this huge forest treatment project, culminating two years of planning. The draft decision includes 30,000 acres of forest thinning and biomass removal. The timing of this landscape-scale forest thinning project is critical. A 2021 aerial survey estimated 587,000 dead trees on 95,000 acres in the Stanislaus National Forest which begins near Sonora.

Section 2

The BUF program in action

Seasonal issues with biomass access, Forest Service requirements, and landowner agreements

The project area within Tuolumne County lies within the Stanislaus National Forest. Access to Forest Service roads and areas of biomass is generally limited from May 1 through October 31 each year. This schedule may be modified and can potentially be shorter due to fire danger or longer due to dry weather. Biomass projects must be able to work around this schedule and may need to access private land or provide storage of biomass on the project site. Each of the biomass projects moving forward with RCAC funding will use storage on their sites and are aware of the seasonal access issues of the forest. Biomass projects should consult with the governing forest agencies on specific forest access requirements and permits on private and state forest lands. The season during which it is acceptable to access the biomass applies across land ownership and has some options depending on weather and elevation.

TIP: When you can access a federal forest is up to the local national forest office and it is important to research road requirements, access issues and seasonal restrictions for any biomass project.

What in these projects and the BUF program would be applicable to other western states?

While the CDBG-NDR BUF program and projects are only currently applicable to Tuolumne County, California, it is important to note that the revolved BUF funds will become available to other forested parts of the state in the future. Since this toolkit provides experience of biomass projects that will utilize forest residue and down wood like other western state forests, a discussion of what is happening in other states was reviewed. In researching state programs for the toolkit, RCAC participated in discussions between Washington state forestry staff and a presentation to the BUF core team from Colorado and Montana forestry financing agency's programs on biomass projects. Naturally, given similar topography and ecosystems, each of the projects under RCAC's BUF program financing have applicability to most western states.

Washington State Department of Natural Resources (DNR) has developed a strategic plan which includes wood energy and biomass utilization. Some funding was appropriated by the Washington legislature in 2021 but has not been finalized yet for biomass utilization. Washington DNR planning staff are interested in the outcome of the Tuolumne County biomass projects, especially biochar, which has been proposed several times in Washington. View the DNR strategic plan here.

Both Colorado and Montana have state funding sources for forestry projects. Colorado will fund start-up businesses using a nonprofit to facilitate lending the funds, much like the role of RCAC in the BUF projects. Montana only lends to existing businesses and excludes start-up businesses.

- Montana Loan Fund: http://dnrc.mt.gov/grants-and-loans
- Colorado Loan Fund: https://csfs.colostate.edu/2022/08/30/loan-program-helps-reduce-wildfire-severity-while-improving-profits-for-wood-products-businesses/

Idaho and Oregon have both developed toolkits for biomass utilization and list several small projects and larger power facilities. Most of the funding sources listed in the toolkits are small and generally for predevelopment costs. The small projects listed, especially in Idaho, were funded under a USDA Forest Service grant program of "Fuels for Schools". This program promoted the use of woody biomass to replace fuel oil heating in schools. This program was also popular in Montana.

- Idaho Toolkit: https://oemr.idaho.gov/wp-content/uploads/2017_06_09_Idaho_Biomass_Guidebook.pdf
- Oregon Toolkit: https://owic.oregonstate.edu/sites/default/files/pubs/biomass.pdf

Arizona and New Mexico were researched online. Arizona did not have much data listed for biomass projects or funding. New Mexico did a study of potential biomass uses through a USDA Forest Service grant. The study listed biomass energy facilities as a main use of biomass.

While the Tuolumne County BUF program is unique, as discussed above, it is easily scalable and applicable to other western states and, potentially, any densely forested areas.

Challenges the BUF projects experienced in moving forward

The biggest obstacle the three BUF projects encountered was obtaining funding for the complete project. While RCAC manages the BUF loan fund monies, this fund was designed as a gap loan only, rather than providing 100 percent financing for any project. This is because the core team and RCAC wanted to (1) set the program up to revolve funds repaid through the residual receipt loans and (2) to share the risk by ensuring the BUF funded start-ups had significant "skin in the game". This meant that additional funding was needed for each project.

RCAC loan fund staff and the BUF project team provided technical assistance to each project to develop a package of funding. Investors and lenders do not yet fully understand biomass projects and with start-up businesses, there is often little equity to bring to the project. The project sponsors were all technically sound, but they did not have the entrepreneurial experience to obtain funding from investors or conventional sources of financing. Two of the project leaders noted it would have been helpful early in the project process to receive technical funding assistance from entrepreneurs.

The market for biomass products, especially biochar and the pellets, was an issue two of the BUF projects needed to clarify. While there is a market for these two products, it was not documented in their proposals to a level that lenders would feel secure. This required additional market studies to both show the potential market for sales of the biomass products and meet USDA guaranteed loan requirements. The market study for TBI showed potential markets locally for the pellets and within a reasonable radius of the Sonora plant.

Environmental

Another key challenge for the projects was the time it takes to comply with environmental studies to achieve permitting. Since the BUF funds are derived from federal sources, NEPA requirements apply to the projects. While the BUF funds provide for the cost of the NEPA assessment and permit assistance, the time it is taking to complete these studies and consult with lead agencies is extensive.

One environmental area specific to TBI was emissions modeling for the construction and operational activities associated with the manufacturing of the pellet facility. Proposed biomass facilities need to consider emissions from facility equipment and any combustion process. TBI had to deal with diesel emissions in the forest and emissions at the project site. TBLLC, specifically, encountered an issue with emissions from the dryer facility on their site and possible impact to the adjacent state prison facility. Both emission issues from the two projects caused delays and additional studies but were ultimately found to be in compliance with the air quality requirements in both the NEPA and California Environmental Quality Act (CEQA).

Addtionally, as part of the environmental review process, seasonal wetlands were identified on two proposed sites. The project proponents spent considerable time investigating the wetland areas and adjusting their site plans to avoid disturbing them.

In fact, even though CBS did not get started on environmental review and applying for a permit until after the BUF's second round funding cut-off date, it is important to mention that challenges in dealing with the wetland on the CBS site and securitization of equity funding caused CBS to be excluded from this first round of BUF funds. The project is still viable and is proceeding with permitting and environmental review.

A further environmental challenge included the exact location of the sewer hookup for one project being unknown, which caused uncertainty as to whether the hook up was in the 100-year flood plain or not. For this reason, additional environmental review was required to consider potential impacts of connecting to the sewer.

The time it took to develop environmental documents to allow permitting was a major factor increasing cost of the three projects and the delay in funding. Fortunately, BUF funds were used to cover environmental costs, so the three projects did not have to expend predevelopment funds for this expense. Also, some of the environmental issues were unknown to some of the project sponsors as all of them are located outside of California.

As indicated above, any biomass project in California must meet all NEPA requirements if there is federal funding in the project, as well as meeting all CEQA requirements, and if any project were to secure USDA guaranteed business loan funds, USDA environmental requirements would also apply. Environmental requirements are extensive, costly and time consuming and planning for this work is part of any project's critical path. An iterative design and environmental review process based on thorough and complete site information could help avoid delays for potential projects.

What makes these businesses hard to finance?

Lenders typically want to see at least 25 percent equity in new businesses. Two of the three participating businesses have capital costs of more than $14 million, which means the entrepreneur would typically need to have equity of more than $3.5 million. In our experience the forest-based entrepreneurs do not have this level of capital. They have great social and intellectual capital, but not the financial resources needed to induce a private lender to take a risk on such an expensive start-up business.

For the most part RCAC has been asking the entrepreneurs to invest between 5 and 15 percent equity into their projects. For USDA guaranteed loans for start-up businesses, 25 percent equity is required. In all cases the BUF program will consider providing the balance of the equity in the form of recoverable grants. In some cases, the grants will be partially recovered from residual cash-flow after debt service payments as the business becomes profitable. The BUF recoverable grants are structured to act as equity, but if/when the businesses meet certain performance benchmarks, the business returns a negotiated level to the BUF for re-lending. In fact, in one case, the grant will enable the entrepreneur to secure a guaranteed loan from USDA.

The BUF applicants were relatively unfamiliar with business finance principles. RCAC has provided substantial financial and business planning technical assistance to the applicants. They all needed support preparing pro forma financials, and were optimistic in their operating projections. BUF Program staff and consultants spent many hours assisting the applicants with reviewing and revising their financials to ensure all costs of operations were included and revenue projections were realistic. Addtionally, the work of projecting the timing of income and expenses, as well as calculating the amount of cash flow, working capital and replacement reserves needed also proved challenging.

Conventional/guaranteed debt without supply commitments

Projecting the supply of low- and no-value wood at prices the businesses can support is a significant challenge. The fact that the Forest Service will not enter into removal contracts of longer than five years makes it difficult to demonstrate the viability of the businesses beyond the five-year contract period. Despite confidence in the supply of material in the forest, predicting access to that supply is based mostly on the faith and assumption that the efforts underway currently will continue. The businesses are sensitive to the cost of wood, and most of the cost is tied to transportation. If the Forest Service does not award a local removal contract and the hauling distance increases by just 15 miles, this can have a measurable impact on the cost of raw materials. If there is limited elasticity in the price of the product, transportation costs can erode profits and even jeopardize the viability of the business.

Fortunately, in California, the state is making very significant investments in more resilient forests to redouble the Forest Service's efforts. Both the state and the Forest Service have expressed a long-term commitment to addressing wildfire threat and forest health issues, but both are subject to the availability of funding and the will of both state and federal legislators. It is especially difficult for conventional lenders to get comfortable with this level of political uncertainty, but most of RCAC's activity is government funded on a short-term basis, so RCAC is experienced at evaluating these risks. The loan fund has a long history of getting comfortable with government funding programs and has a commitment to taking risks that conventional lenders are reluctant to accept and sometimes prevented from taking. The flexibility of the CDBG-NDR BUF funds allowed RCAC to build on its deep experience in rural lending to overcome this major barrier to financing biomass businesses.

Leveraging entrepreneurial equity funds for BUF subsidy dollars

The BUF is designed as a subsidy program not a primary financing mechanism. It has very flexible terms, so that the entrepreneurs have time to get their new businesses built, operational, and a market established for their product before payments are required. The program allows principal deferral and interest payments that can start at zero percent with full interest at just three percent.

While the terms are favorable, the businesses are subject to rigorous underwriting, with staff and consultants questioning the operating and profitability assumptions. To the extent that the pro forma operating assumptions suggest that the business can support market rate debt, the entrepreneurs are expected to secure that financing from outside the program.

Two additional factors contribute to the requirement for entrepreneurial equity funds. The first is the desire to finance a number of positions and to leverage as many new employment opportunities as possible. From the outset RCAC's goal was to create at least 70 full time, well-paying jobs. The three businesses in the program will produce nearly 70 jobs, but they have a combined capital cost of over $40 million, and the BUF has only $18 million in lendable principal. Even creating 70 jobs for $18 million is way outside the typical government investment to job ratio. Thus, to reach the 70-job threshold, the program needs to leverage $22 million in non-program funds. The second factor has to do with CDBG regulations, which require that the new business owners not earn an excessive return because of the subsidy provided by the BUF. Higher internal rates of return suggest that more private debt could be supported by the businesses, and therefore more leverage is demanded so that the returns are controlled at "reasonable" rates. RCAC spent considerable time and effort working with applicants to balance affordable capital needs with a reasonable rate of return to make the projects successful and compliant.

Complicating this financial picture is the fact that in the early years of operations none of the businesses can support much debt. All of them need to demonstrate that they can supply a market before they can really build market demand. This factor contributes to the need for patient funding, and the ability to support negative cash flow for at least one to three years.

Equity in relation to capital cost

It is typical that lenders want to see at least 25 percent equity in new businesses. In the typical start-up, the capital cost of starting the business is not as high as it is in forest-based businesses. Two of the participating businesses have capital costs of more than $14 million, which would mean that the entrepreneur would need to have equity of more than $3.5 million. In our experience the forest-based entrepreneurs do not have this level of capital. They have great social and intellectual capital, but not the financial resources needed to induce a private lender to take a risk on such an expensive start-up business.

For the most part the program has been pushing the entrepreneurs to bring between five and fifteen percent equity to their projects. In all cases the BUF funds can be structured to provide the balance of the equity. RCAC is doing this by making deferred payment loans and recoverable grants. In some cases, the grants will be recovered later as the business becomes profitable and some of that profit will recover a portion of the grant. The recoverable grants are structured to act as equity, but if/when the businesses meet certain performance benchmarks, the business returns a negotiated level to the BUF. In one case, given the equity structure of the BUF loan program, the entrepreneur will be able to secure a guarantee from USDA.

The BUF has structured the recoverable grants as no interest loans, maximizing the return of principal and roll-over funds. It is hoped that this structure will be attractive to third party lenders. Certainly, other structures are feasible, and other program managers may choose to structure the repayments differently, but the key characteristics RCAC has found necessary are complete deferral of payment until some benchmark of financial performance is met, and the clear repayment term that makes the grant recoverable only from cash flow after debt, operating expenses, and some level of return to the business principals.

One item of expense that precedes recoverable grant payment is replacement reserves. This has been challenging given the high capital costs of the businesses. After substantial consideration, the program decided to limit the operating reserve requirement by agreeing to provide subsequent capital for machinery replacement should the reserves prove insufficient. RCAC will add this new capital to the principal amount of the recoverable grant and to the extent possible, be repaid during the life of the loan. As part of the BUF loan, RCAC is allowing the business to collect reserves, just not the level that they thought was needed.

The California Department of Forestry and Fire Protection (CAL FIRE) introduced new grants to fund biomass energy, manufacturing and businesses along with workforce development in the forest areas in California. This funding could provide up to $2 million in grant funds to projects utilizing BUF funds. The grants would give the three projects needed equity to leverage for additional funding. All three projects in the BUF program applied for the CAL FIRE grant program. TBLLC was awarded $2 million from CAL FIRE and TBI was awarded $1 million. The CAL FIRE grants will greatly help increase equity for better financing for both BUF projects.

Business plans and financial projections

The BUF applicants were all fairly new entrepreneurs. RCAC has provided a substantial amount of financial and business planning technical assistance to the businesses seeking BUF financing. All the applicants needed support preparing pro forma financials, and all of them were optimistic in their operating projections. BUF staff and consultants spent many hours assisting the applicants in reviewing and revising their financials to ensure all costs of operation were included and revenue projections were realistic. Adjusting the detailed financials to account for timing of income, expenses, and calculating the appropriate amounts needed for cash flow and working capital, as well as setting correct allocations for replacement reserves was challenging but well worth the time and effort to ensure achievable outcomes.

As stated previously, projecting the supply of low- and no-value wood at prices that the businesses can support is a significant challenge. The fact that the Forest Service will not enter into removal contracts of longer than five years makes it difficult to demonstrate the viability of the businesses beyond the five-year contract period. Despite confidence in the supply of material in the forest, predicting access to that supply is based mostly on the faith and assumption that the efforts underway currently will continue. The businesses are sensitive to the cost of wood, and most of the cost is tied to transportation. If the Forest Service does not award a local removal contract and the hauling distance increases by just 15 miles, this can have a measurable impact on the cost of raw materials. If there is no elasticity in the price of the product, transportation costs can erode profits and even jeopardize the viability of the business.

There is an opportunity to secure some biomass material from private and industrial timberlands that are not constrained by federal contracting rules. Access to this biomass source will require the development of relationships to secure these agreements. There is an increased need for salvage logging in the wake of huge fires. This is a policy issue that needs to be addressed at the state and federal level.

Fortunately, in California the state is making very significant investments in more resilient forests to redouble the efforts of the Forest Service. Both the state and the feds have expressed a long-term commitment to sustainable forests, but both are subject to the availability of funding and the will of both state and federal legislators. It is especially difficult for conventional lenders to get comfortable with this level of political uncertainty, so it is critical that biomass projects have funders that are able to weather the potential inconsistency in availability of program funding.

Technical assistance (TA) needs: technical, financial, and entrepreneurial

The three BUF projects benefited from technical assistance (TA) funded by the HUD grant. If other states were to establish a similar program like the BUF, funds for technical assistance could play a very important role in moving the projects forward at a faster pace. RCAC funded TA on financial structuring through NDC, permitting and environmental support from Ascent Environmental and hiring support from Mother Lode Job Training.

Funding challenges were a hurdle for the three BUF projects. The TBI project applicants remarked that having access to an experienced and well-connected entrepreneur who could assist in seeking out funding sources for start-up businesses would have been helpful. TBI did rely on RCAC for significant TA on funding but still needed to find additional equity to help pull a funding package together. RCAC continues to look for alternative funding sources through investment groups, equity funds, insurance funds, consultants, and other nonprofits for the BUF projects.

Environmental permitting was handled by a consultant that has worked in Tuolumne County and was tasked with developing documents that met the NEPA and CEQA requirements. Because the three projects were funded with HUD monies, NEPA was required in addition to state environmental procedures. The requirement for NEPA compliant processes and documents, and that it covered all three projects as required by HUD, slowed the process down. Additionally, two of the project sites were on raw land and one needed a zoning change of use which made environmental review more complicated and time consuming for those projects, but the other project used a fully developed industrial site in Sonora, California, which lessened the environmental review needed on that one.

In summary, the BUF program used HUD funds to secure needed TA to move projects forward and reduce funding issues. If a state wants to get started with encouraging and supporting biomass projects, forming a biomass team of agencies, business managers, and a funder like a CDFI who are well versed in forest-based businesses would ensure higher degree of success. Biomass project proponents should seek out states with programs in place to address TA and funding.

The role and advantages of CDFIs

Being able to take these risks, and having comfort with federal constraints and nuances are two factors highlighting the importance of a CDFI as a partner in the financing scheme. That said, RCAC does not have the long-term debt that can support businesses without state and federal guarantees. This is another factor pushing RCAC to establish the Healthy Forest Fund with a focus on permanent, revolving debt.

CDFIs are socially motivated lenders that are not regulated in the same way as commercial banks. CDFIs were first established to provide financing in communities and to groups that were not able to secure financing from commercial banks. The Community Reinvestment Act (CRA), requiring banks to invest in the areas where their deposits come from has led the banks to invest in CDFIs in disadvantaged communities rather than trying to do the work themselves. Thus, CDFIs were chartered to take more risk and provide credit where the conventional markets are less likely to work and be profitable.

Given the range of obstacles, it is not conventional lenders or commercial banks who will finance the new forest economy. RCAC came to this realization rather late in the BUF implementation, but it is now pursuing a few strategies to secure the resources needed to directly finance the new businesses which are actively forging a new, green industry.

Specifically, RCAC needs to overcome two obstacles to provide the needed financing. The first is the limited funds available for long-term financing. Most of RCAC's lending is short-term; the investments in the traditional loan fund are mostly three-to-five-year investments and, currently, only RCAC equity can be used on longer term loans. To begin to open additional options for long-term financing, RCAC is in the process of approaching socially motivated investors that can be used for permanent business financing. This strategy will be described in more detail later in this document.

The second obstacle is the covenants RCAC has with its current loan fund investors. If even one of the loans that finance the new businesses were to fail, it would impact the credit rating of the overall loan fund. Furthermore, the current loan fund investors do not want RCAC to put their investments at risk in ways that were not a part of the CDFI's lending activity when they invested.

Therefore, as noted earlier in the toolkit, staff are proposing to create a fund outside of the traditional loan fund. RCAC will invest some capital in this new fund, but it will not be more than would have been put up to secure a loan guarantee. The fund will be tied to a select pool of loans outside of the traditional loan fund. By telling the investors up front that they will be helping to fund a series of forest related businesses, RCAC will tie their investments to specific loans, and their repayment will be contingent on the performance of the loans. Staff believe that there is adequate security so that the loans will be relatively secure, and even if a venture failed RCAC would be able to recoup most of our loans by liquidating the security or finding a new entrepreneur to take over the business.

It should be noted that the BUF program has greatly increased RCAC's business lending experience in forest product businesses and the need for complicated loan packages tailored for each business.

For a CDFI to participate, it will need state or federal investments in the businesses, which will be subordinate to the financing provided by the CDFI. The BUF is providing subordinate debt and grants to the businesses participating in the program. In addition, the CDFI partner in the financing of new forest businesses will need support as it works to secure capital for the non-governmental financing of the loans.

Next steps and where to go from here

The Healthy Forest Fund

What is clear from our experience with these projects is having a source of government financing that works as equity or subordinate debt is not sufficient funding since the private portion of the financing is still not available. RCAC believes that CDFIs need to do more to take the place of the private financing. RCAC does not have the capital structure today to provide substantial long-term loans or investments without government guarantees, which have proven very difficult to obtain. As a result, RCAC is moving to create the Healthy Forest Fund, which will operate outside the normal parameters of RCAC's traditional loan fund. The goal of the fund is to identify socially motivated investors willing to take risks limited to a specific or group of projects working in the forest sector.

Investors in the traditional loan fund do not have their invested funds tied to a specific project or loan. Their security is in the overall health of the fund, and RCAC has entered into covenants that restrict how the fund is operated and managed. The funding needs and risks associated with the forest industries identified in this toolkit do not fit those parameters. By creating a separate Healthy Forest Fund, RCAC can seek new funding sources that can take additional risk and provide less conventional terms, and not impact the operations and financial health of RCAC's traditional loan fund.

RCAC is working with the Impact Finance Center (IFC) to identify socially motivated investors that understand the importance of this work and are willing to make investments in the kinds of businesses included in this toolkit. The goal of this work is to identify investors who will invest through RCAC and who might invest directly with the businesses. It is IFC's experience that motivated investors will be interested in these proposals, and that they will be able to supplant the need for conventional private financing, but the work is just beginning. An update will be added once there has been more time for this strategy to bear fruit .

The "Build Back Better Act" passed by Congress and signed by President Biden may also help future biomass projects. The act included millions in grant funding for development of small diameter wood facilities for forest thinning. The act also provided millions in low interest loans for wood utilization facilities like the three BUF projects. The funds will be administered by the USDA, Forest Service and the Department of Interior.

Section 3

Case studies: Lessons learned from the program

Discussion of three proposed projects for Biomass Utilization Fund (BUF) program and a proposed biomass power facility

RCAC developed a Request for Proposals (RFP) and an evaluation team to solicit projects to access the biomass funds in Tuolumne County. A committee of state and federal agencies, stakeholders, county officials and RCAC eventually selected three projects to move forward. Resources from the NDRC grant were allocated to help the projects with environmental review, permitting, feedstock analysis, employment services, financial management assistance and funding assistance. The three projects were required to develop business plans and demonstrate possible markets for their products. None of the three projects selected was currently a company or business in Tuolumne County or California. The BUF's flexible terms were the key motivation for each project, although each business was previously involved with biomass in one way or another.

TIP: Technical Assistance (TA)—also called capacity building for businesses—is critical to their success, especially for small or "boutique" types of businesses, like the BUF projects. The owners/developers may be very smart but the complexity of expanding or starting up a business (especially in rural communities) demands a lot of capacity building/TA. That TA can come from outside the business via third parties or can come from the business hiring professionals that help to identify critical issues and finding solutions. The three BUF projects greatly benefited from "wrap around" technical assistance from multiple sources.

Project 1: Tuolumne Biomass LLC (TBLLC)

Project description

This project proposed to replicate a successful business model of a wood sorting yard that is currently operated by Heartwood Biomass in Wallowa County, Oregon. This project has a process that will sort and utilize multiple sources of biomass into marketable products widely used. The strength of this project is the experience of the project team and previous business that has been operating in Oregon for 10 years.

A simple product, bundled firewood, is the major product line for this project and they are proposing to develop an agricultural post and pole business over time. The project is modeled from Heartwood Biomass (formerly known as Integrated Biomass Resources), an existing biomass facility in Wallowa, Oregon. This business model enables more complete utilization of woody biomass inputs, particularly small-diameter logs and biomass residuals from forest restoration and fire mitigation projects, creating local jobs, producing a diversified group of wood product lines, and generating energy for on-site demand.

Heartwood Merchandising line in Wallowa, Oregon

Project strengths

Tip: In discussions with the RIM fire restoration coordinator with the U.S. Forest Service at the Stanislaus National Forest, we found that biomass projects that are multi-product driven are the preferred approach.

The Heartwood business model realizes economic efficiencies by operating a merchandizing line to recover maximum value from a range of products from the biomass supply. The facility will produce agricultural posts and poles, bundled firewood, and fiber residuals with the opportunity to expand into additional product lines in the future. These materials include short saw logs, biochar, and dried chips for energy projects.

In addition to wood products, the business model requires an energy component for process heat, which can be generated using residuals leftover from the manufacturing of the various product lines.

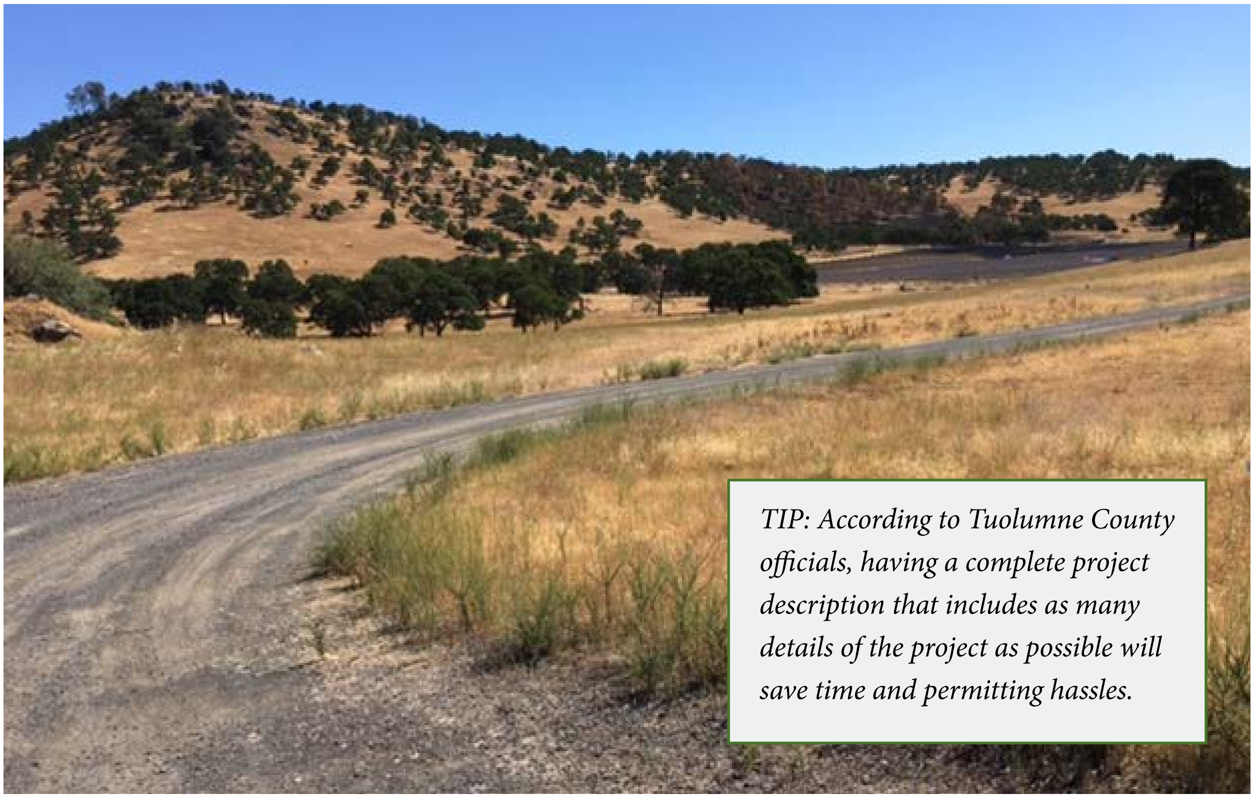
The project forecasts a five-year ramp-up period where expected volume throughput grows from 10,000 BDT to 20,000 BDT per year. At full capacity and with current product assumptions, the BUF could convert over 20,000 BDT of biomass into value-added products, representing approximately 2,000-4,000 acres of treated forest annually.

TBLLC forecasts it will create 16.5 full time equivalent (FTE) jobs at the new facility within one year after it opens. Sixteen (16) of these jobs will be full-time, with one half-time log procurement specialist. In addition, two senior management positions will be shared 50-50 with the Heartwood's Oregon facility.

By year four TBLLC's employee workforce in Tuolumne will grow to 20.5 FTE's and to up to 22.5 FTEs by year seven. Except for the managing director and sales manager, which are half-time positions shared with the Oregon facility, the jobs will be filled locally. The production crew will consist of nine jobs starting out at $18 per hour or $37,440 annually, which, by definition, is a low-moderate (L/M) income job as per CDBG guidelines. These jobs will be filled with the assistance of Mother Lode Job Training. These employees will receive extensive training and have advancement opportunities. They will also receive employer-paid health and dental insurance and three weeks paid vacation. The office manager, operations director, log procurement specialist and the two millwrights will also be hired locally and could potentially be low-to moderate income individuals.

Key strengths of this project include: a business model implemented from a successful business model in Oregon, multiple product lines to use biomass, cogeneration facility for power, and knowledge of existing California markets, especially for bundled firewood.

The proposed TBLLC BUF site is a greenfield location at a former gravel pit located at 6060 O'Byrnes Ferry Road, Jamestown, CA 95327. The site's owner has extensive experience with the logging industry and co-owns Sierra Resource Management, a local logging contractor, and is supportive of the success of this business. TBLLC has executed a letter of intent with the site owner in pursuit of a lease agreement. The site will need action from the Tuolumne County Commission to allow the use for the BUF project. In addition, development of a water supply and wastewater system will be required.



TIP: According to Tuolumne County officials, having a complete project description that includes as many details of the project as possible will save time and permitting hassles.

TBLLC proposed site on O'Byrnes Ferry Road, Jamestown CA

The estimated cost of the TBLLC project is just over $14 million dollars.

Project challenges

TBLLC is an extremely difficult business to finance. The business has an established market for the firewood but has limited demand for either the posts and poles or other potential uses for waste biomass. The ramp up period for the business is projected at five years, and for the first several years the business projects operating at a loss. Thus, there is no real possibility of financing the business with conventional debt.

The applicant is bringing equity investors to provide nearly 15 percent of the financing needed. The investor group is the same group that has invested in the Wallowa business, so there is familiarity on both sides and an understanding of the market challenges inherent in the business. The balance of the financing is coming from the BUF funds in three tranches. First is a loan that will have a deferred payment provision for the first two years and then graduates over the next several years to 3 percent amortized payments. The second tranche is a straight grant of BUF funds, and the third tranche is a recoverable grant. The recoverable portion of the grant is structured to provide the TBLLC partners with a reasonable return on their investment but then capture any return above that agreed upon return. The entire financing package is based on the amortization period for the loan portion, and any recoverable grant loan has not been paid when the loan is fully paid will be forgiven.

Project 2: Carbon Based Solutions (CBS)

Project description

An existing company, BioCarbon Technologies Inc. (BCT) processes biochar and related biocarbon products for use in specialized markets. BCT will form CBS for the project in Tuolumne County, California. Uses for biochar include agriculture soil remediation, water purification, and other applications (such as cattle feed). BCT is working in conjunction with Biochar Now, LLC (BCN), a Colorado-based company with a patented process to produce biochar from woody biomass. BCT, in conjunction with BCN, will produce biochar and biocarbon products in Tuolumne County.

BCT's custom blending operations allow the customer to follow the chain of custody from production to application to ensure quality control. Their scientific custom blending process ensures the biochar matches the specific soil or water treatment requirements. BCT is currently the only biocarbon processor to follow strict guidelines to ensure quantitative biochar results. A lack of oversite and regulation in biochar production leads to many defective products. BCT is leading the change in the industry to educate better and provide a superior product to their customers.

Project strengths

CBS is the second new business selected by the BUF core team in Tuolumne County and is requesting subordinate financing from the Biomass Utilization Fund. The business will initially process approximately 22,000 BDT of low- and no-value wood from the forests converting it into biochar. Biochar is a product that has many beneficial uses in addition to sequestering carbon. Biochar production in Tuolumne County has an added advantage, it can use fire-damaged trees as part of its feedstock. The product provides soil re mediation for agricultural land and at the same time reduces the moisture loss from the soil. It can be used in cattle feed to reduce the methane gas produced by cattle flatulence. It can also mitigate the methane produced by composting. These latter two uses could help farmers and composters comply with California state laws requiring them to reduce greenhouse gas emissions.

CBS has several patents and technology that allows it to make extremely high-quality biochar, and their real financial strength is in this higher quality product. But the market is undemonstrated, and therefore the financial assumptions are based on production of a biochar that is standard in the market today. The company plans to hire over 20 employees initially, the majority of whom will earn less than $20 per hour to start. CBS will also work with Mother Lode Job Training to identify lower income individuals to take these positions and to train them for advancement. CBS will buy feedstock from local vendors who will increase their employee base to meet the additional demand for low and no value wood.

Project challenges

Like TBI, CBS faces the financing challenges of lacking sufficient equity, exacerbated by the high capital cost of their production facility. The market does not reflect a demand for the high-quality product they know they can produce, and which is fundamental to solid financial performance. The business will produce significant environmental benefits and could lead the market. The fact that CBS can use burned wood is significant given the highly flammable nature of California forests. In addition to the market challenge, the CBS partners cannot meet the 25 percent equity requirement typically required of new businesses. This is an especially high bar given the high capital cost of the start up of the biochar business. CBS is continuing to talk with potential partners who will provide the company with approximately 10 percent equity in the $12 million plus venture. However, CBS could not obtain a financial commitment within the time constraints of the BUF grant funding cycle. With no environmental impacts analysis completed and lacking a permit, RCAC and the BUF team had no choice but to move CBS committed BUF funds to the other two projects.

Key strengths of this project include significant knowledge of biochar, customized blended biochar products, partnered with an existing facility in Colorado, and patented process for biochar with approvals from EPA and USDA.

CBS proposed biochar facility location is on approximately 13 acres within the Tuolumne County Industrial Zone. The site will need both water supply and wastewater disposal for the new business. The facility will accept feedstock in the form of logs from dead and dying trees and residual wood-like sawdust and forest trimmings. The Sonora Industrial Zone is at the center of a geographic area containing a readily available biomass supply of all varieties of waste wood (chips, logs, shred, municipal waste wood, pallets, construc-tion, and demolition, etc.) CBS expects to have its choice of low-cost feedstock, thus allowing for expansion, additional technologies, and ongoing variable costs in the early years of operation.

CBS Proposed site off State Highway 120 in Sonora CA

Project 3: Tuolumne Bioenergy (TBI) Inc.

Project description

Tuolumne Bioenergy intends to develop a wood pellet manufacturing facility on a 3.27 acre leased property in an industrial business park in Sonora, California. Wood pellets are densified wood products that will be produced from wood chips derived from the thousands of piles of biomass accumulating in the Tuolumne County region. The pellet enterprise will utilize approximately 44,000 BDT of biomass annually to produce 30,000 tons of premium wood pellets.

The company will promote the cost and environmental benefits of pellet stoves by comparison to propane. (Natural gas pipelines are rare in the forested foothills and mountains of California, and heating with wood pellets is both more efficient and cost effective than propane heat.)

The facility and feedstock supply will involve the following processes:

- Buskirk Engineering, based in Indiana, will supply two turnkey pellet mill lines. Buskirk will ship the pellet equipment mounted on skids for convenient installation. There will be six 18-inch pellet mills, three mills for each of the two lines.
- Forest-source woody biomass, which is stacked in piles in the forest after wildfire reduction activities, will be processed in the field by a Bruks chipper attached to a Ponsse Forwarder, which is an eight-wheel tractor device that can load large amounts of biomass into the mounted chipper and bin. The chipper is very powerful and can grind up to 20-inch logs into specified chip sizes.
- The chips are conveyed from the collector bin into a large metal container at a nearby landing. A Peterbuilt hook truck lifts the metal container onto the truck to be transported to the pellet mill.
- At the mill site, the co-located biomass combined heat and power system will use roughly one third of the total biomass to power the pellet mill and dry the chips.

Project strengths

TBI plans to source its own biomass by accessing waste burn piles in the forest, chipping them on site and trucking the chips to the pellet plant. The plant will produce its own electricity, and the heat created by the electric generation will dry the wood to the necessary moisture content. It is estimated that approximately one-third of the 44,000 tons of biomass will be consumed in the production process, with the balance being compressed into marketable pellets.

The project will employ an estimated 25 people when completed. The owners will work with Mother Lode Job Training to identify and train staff to take most of the roles in the production process. The starting wage will average $19 per hour, well above California minimum wage. Currently there is a labor shortage in the area and businesses compete for employees. The owners plan to provide health benefits to all workers and regular raises as employees become more seasoned. The starting salaries for the shop workers will be very close to 80 percent of the area median income.

The wood pellets will be sold in 40-pound bags to the local retail market and distributed wholesale to regional and national chains, which sell to the domestic home heating customer. These suppliers include hardware stores, home heating equipment dealers, and farm supply centers. One-ton bulk bags can also be shipped.

Key strengths of this project include procuring raw materials for the pellets in the forest, using specialized equipment to process the raw biomass and loading into trucks for shipping to site. Specialized equipment offers opportunities for other projects and products. Other strengths are that the power is produced on the manufacturing site and the applicants have experience in wood products and energy. The project site is zoned industrial and is located close to material supply areas.

TBI proposed site on Camage Road Sonora CA

Project Challenges

TBI is a startup business that has a capital cost of over $14 million. The owner has less than five percent equity, the BUF fund will provide 60 percent of the project financing subordinate to the RCAC senior loan. RCAC plans to secure a USDA Rural Energy for America (REAP) 80 percent guarantee for its senior loan to complete the financing package. To enhance the loan guarantee request, RCAC will provide a significant portion of the BUF funding as a recoverable grant, which will act as debt in USDA's view. Banks would not accept this structure and would want to see at least 25 percent equity in the loan.

Conventional lenders would also want to see feedstock commitments equal to the term of the loan, but the forest service cannot typically give a commitment of more than five years.

RCAC plans to provide both construction and permanent financing on the project. The construction financing will be subject to RCAC's normal rates and terms. RCAC will draw BUF funds during construction and they will be used to reduce the RCAC loan balance and be provided to the project at no interest. RCAC's loan will be interest-only the first year of operations; and the BUF loan will be interest only for multiple years supporting the market development of TBI. It is assumed that the BUF loan will become fully amortizing by the end of year three, but at rates and terms significantly below what is available in the conventional market, further guaranteeing the success of the new business.

Hat Creek Bioenergy LLC (example project)

Project description

Hat Creek Bioenergy, LLC plans to develop a 3 mega Watt (MW) woody biomass-fueled energy facility on a leased portion of a large industrially zoned site owned by an aggregate and construction business, Hat Creek Construction in rural Shasta County, near the small town of Burney. This project is not part of the BUF program but provides additional details on a biomass project that is common across Western states. Hat Creek construction will lease approximately 10 acres to the LLC for the bioenergy project. The project will use byproducts of forest restoration activities, including dead trees, small-diameter trees, and slash in the forest understory as biomass feedstock, which will be converted to electricity with the potential to produce biochar as a value added byproduct. The case study shows the difficulty in developing biomass power projects even with a significant policy framework in California.

Project strengths

The plant has a signed power purchase agreement with PG&E, made possible by the California Public Utilities Commission (CPUC) Biomass Market Adjusting Tariff (BioMAT) program. The Forest BioMAT program provides a very advantageous price for community scale biomass (3 MW or smaller) energy projects compared to other sources of power. Hat Creek is also the recipient of a California Energy Commission Electric Program Investment Charge grant and an award of Federal tax credits for which they are seeking an investor. The project sponsor and principal owner will invest 40 percent of total project cost.

The plant will process over 29,000 BDTs of biomass annually, helping to increase the resilience of the forests surrounding the plant. In addition, the facility has the capacity to produce biochar as a byproduct of the generating process, which could have significant value commercially and environmentally as markets are identified. The plant will employ 16 workers directly and indirectly and increase employment in forest thinning and hauling to supply the biomass for the plant. It will also employ over 60 laborers during the 18-month construction period.

Hat creek bioenergy LLC secures a 20-year power purchase agreement with PG&E

As a result of Senate Bill 1122, signed by the Governor on September 27, 2012, the California Public Utilities Commission ("CPUC") established the BioMAT Tariff. The bill requires PG&E to purchase 48MW of power from small woody biomass energy plants no greater than 3 MW in size. At the commencement of the BioMAT program, the available contract price was set at $.127 kilo-watt hour (kWh) adjusting based on market acceptance and market depth provided by multiple bioenergy projects. In December 2017 Hat Creek Bioenergy, LLC accepted a price of $0.19972 kWh from PG&E, and the power purchase agreement was executed by both parties in 2018.

Project challenges and capital stack

Despite the many advantages of this proposal, the financing is still a challenge. The economics work if there is not a significant change in the availability or price of biomass. To mitigate this supply chain risk, the developers are working with the USDA, Forest Service and local Resource Conservation Districts (RCDs) to secure Master Stewardship Agreements (MSA). The MSAs allow the partners to complete the necessary NEPA documents and bid the forest thinning and hazardous fuels work, thereby keeping a steady product flow moving and a supply chain of biomass residuals. Short term biomass contracts have also been secured with local loggers.

The estimated project cost is $26.6 million to be financed as follows:

$10.2m..Owner- Investment Tax Credit Equity

$4.8m..California Energy Commission Grant

$0.250m..U.S Forest Service Grant

$1.6m ....California Department of Forestry Loan

$9.0m..Commercial Bank senior loan with USDA (REAP) guarantee

With this combination of significant private at-risk capital, tax credits, state, and federal grants and a CDFI loan backed by the USDA's loan guarantee program, the return on investment is solid for the investors who plan to hold the project for 20 years, matching the length of the public utility Power Purchase Agreement.


TRUCK DUMP
RADIAL STACKER
FUEL STORAGE PILE
VEGETATION BUFFER
FUEL CONVEYOR SYSTEM
THERMAL OIL HEATER
ASH HOPPER
ORC GENERATOR
AIR COOLER
CONTROL ROOM
HAT CREEK BIOENERGY
PRELIMINARY SITE LAYOUT

Appendix

Biomass Utilization Fund (BUF) Program Loan Application, Instructions and Policies

Biomass Utilization Fund (BUF) Program Loan Application, Instructions and Policies

www.rcac.org

Biomass Utilization Fund (BUF) Program Loan Application, Instructions and Loan Policies

Updated: May 5, 2020

This document contains BUF loan application and loan origination policies for all financial assistance provided by the BUF program and other RCAC sources. The BUF program will not provide 100% financing, applicants are expected to have equity in their proposed ventures and may bring other financing as part of their overall financing package. RCAC will work with applicants to structure their request to conform with the requirements of the program, to maximize the use of non-BUF funding, and to ensure that the final financial projections provide a fair rate of return to the applicant.

Applications are being accepted now and all applications received by June 12, 2020 will be given the same consideration. Applications received after June 12 will be evaluated based on the availability of funds. Recipients of Biomass Utilization Fund loans must document job creation and expend all funds by **April 30, 2022**.

RCAC will accept applications that are not complete and will work with applicants to complete all of the information to approve a loan request. As long as an applicant is responsive to requests for additional information, they will maintain their priority for consideration, if an applicant is deemed unresponsive another application may be moved to prior consideration.

Application

1. Loan application form (Please complete in detail and sign.)
2. Current Balance Sheet for Business and Principals with 20% or More Ownership Interest
3. Year-to-Date Profit and Loss Statement
4. Audited or Unaudited Financial Statements for Most Recent Three Full Operating Years:
    - Balance Sheet
    - Profit and Loss
    - Tax Returns
5. Pro Forma for new business
    - Sources and uses for business development
    - Operating pro forma—income and expense
    - Estimated cost of biomass used
    - Evidence of secured financing commitments for development and long-term
    - Equity investments
    - Desired rates and terms for financing sought
6. Business Plan (as per the suggested outline.) And with the following additions for the BUF Loan Program:

Job Creation: Public Benefit and National Objective

- New, permanent employment opportunities must be created
- Over fifty one percent (51%) of new full time jobs shall employ low- and moderate-income individuals living in the County
- Use the job tracking form in application to identify permanent jobs and for each job specify:
    - Salary each position will be paid
    - Benefits
    - What level of experience, education, or training is needed, and if such training will be provided
    - When the job is expected to start
    - Which jobs will be filled by low- and moderate-income workers
    - Provide a timeline for hiring new positions

Biomass Utilization

- The use of biomass by the project or borrower, to create wood products or energy, is a requirement to qualify for this program.
- If the business proposal is to supply biomass rather than use it, explain how your proposal will expand your ability to harvest additional material from the forest for beneficial use.
- Reliance on supply from the forests
- Any contracts in hand for biomass (attach)
- Use of other feed stock
- Price sensitivity of biomass

7. Instructions for Resolution to Borrow and Resolution to Borrow (RCAC form or equivalent)
8. Personal history/resume (for individuals with a 20% or greater ownership interest) If the applicant is a nonprofit, public entity or federally recognized Tribe talk about the experience of the senior staff who will oversee the business.
9. Board of Directors list including: name, address, phone numbers and experience that member brings to the Board, if applicable
10. Articles of Incorporation and Bylaws (including any amendments), or Certificate of Formation and Operating Agreement, if applicable
11. Copy of Fictitious Business Name Certificate or copy of DBA name filing as appropriate for state (if applicable)
12. Project status in Tuolumne County
    - Status of business development
    - Timeline for business to become operational
    - Ownership structure
    - Management structure of operating business

- Development team
- Site identification—location map, preliminary title report
- Documentation of site control
- Feasibility work completed/needing further work
- Architectural and Engineering status/timeline for completion
- Plans and specifications for work to be completed
- Third party cost estimates or pricing information
- Status of permit applications and completion
- Timeline for securing funding, starting construction/business preparation and placing business in operations
- Biomass contracts secured/in negotiation—attach copies of contracts

13. Environmental studies initiated/completed – once an application is submitted no "choice limiting action" can be taken until the project receives authorization, clearance, under CEQA and NEPA. RCAC has funds to assist in financing CEQA and NEPA reviews.
14. Uniform Relocation Act (URA) Acquisition Compliance: If the proposed project involves purchase, leasing, conversion or demolition of any existing occupied structures on the proposed project's site that will cause displacement of any "persons", URA requirements will apply. If URA applies, then application must describe how a project relocation plan will be developed and estimates of relocation costs and compliance requirements.
15. Federal Prevailing Wage / Labor Standards Compliance, will requested BUF funds be used for payment of any construction and/or equipment installation? If yes, applicant must provide details on how prevailing wage standards, both state and federal, are included in project cost estimates, or why they do not apply
16. Signed Certification of No Conflict of Interest
17. Signed Certification of No Job Pirating
18. Small Business Verification—applicant must meet the SBA definition of a small business and certify that it qualifies. If the applicant in a nonprofit or government entity the requirement around small business is waived. The regulation and size limits can be found at: https://www.ecfr.gov/cgi-bin/text-idx?SID=b919ec8f32159d9edaaa36a7eaf6b695&mc=true&node=pt13.1.121&rgn=div5#se13.1.121_1201

Notes to the Loan Application

As much as possible, applications should include all of the requirements listed above. If an application is not inclusive of all requirements listed above, RCAC will work with applicants to complete the application process as it underwrites the loan request. As long as applicants continue to respond to requests for additional information processing will continue. However, if an applicant does not respond in a timely manner, RCAC may place an application on hold and process another more responsive applicant ahead of an unresponsive applicant.

The following guidance is offered to help applicants better understand the information needed in order to fully underwrite an application.

2. Provide personal financial statements for the business and all principals, current to the end of the last quarter.

3. If the business, non-profit, public entity or Tribal venture is operational, provide a profit and loss statement, or equivalent, for the current year. If the business is a start-up provide data on the amounts you have invested already what the funds have been used for.

5. Pro forma financials

- Provide a capital development budget showing the anticipated costs of the development and the sources of funds that will pay for the different costs
- Provide an operating pro forma showing income and expense for the first 5 years of business operations (new or expanded), at least
- Show labor expenses in detail, positions hired, salary and benefit costs associated with each position and when you expect to hire the staff included in your proposal
- Show cost of biomass and other materials that will be used in the business on a cost per ton of bone dry tons of material.
- Explain the role of the investors, including the amounts of investment
- If there are existing financial commitments provide a list of the various sources and the status of each loan
- Explain how much CDBG loan you are requesting and the rates and terms that you would like to achieve (see hypothetical funding examples below in Attachment B)

6. Business plan—the applicant should follow the RCAC outline for the business plan and add two sections, one on low- and moderate-income Job Creation and the other on Biomass Utilization. If the business will not use but rather supply biomass, that is an eligible project. If there are items in the business plan which are not finalized, submit as complete a document as possible, additional information can be supplied as the review requires it. A mandatory application requirement is that the venture create new, permanent employment opportunities predominantly for low- and moderate-income individuals in Tuolumne County. Applicants should complete the worksheet provided in the application and be sure to show when new employees are expected to be hired. RCAC is responsible for monitoring the creation of jobs,

which it will do through an agreement with Mother Lode Job Training. Mother Lode's monitoring will continue until one year after the hiring of the last position.

12. Project status in Tuolumne County

- Provide a timeline for the development of the new/expanded business venture in Tuolumne County and showing operations starting no later than 4/30/22
- What steps in the process are complete?
- Describe the ownership and management of the new business
- Describe any permits that will be required for the business and the status of any permit applications
- Describe any environmental analysis conducted for the proposed business to date, if any. RCAC has dedicated funds that may be used to complete environmental review for eligible applicants.
- Describe permits required and timing of permits.
- Has a site for the new business/ business expansion been identified?
    - Is it owned or controlled via an executed lease agreement?
    - Is it currently, secured through an option to purchase, purchase contract or pre-lease option agreement
    - If yes provide a preliminary title report and the purchase/lease contract
- Provide any architectural and/or engineering drawings completed to date, and discuss the amount of work needed to complete the design work
- If biomass contracts have been secured provide a copy of the agreement(s) and/or discuss negotiations for biomass supply.

14. If some form of site control is in place, as described above, and there is a "Person" (household or other business, etc.) on the site that will be required to relocate for the project to move forward, then URA relocation requirements shall apply RCAC may have BUF funding available to assist with federal and state relocation requirement compliance.

15. If the project requires BUF funding to be used for any construction/installation work, then the applicant shall comply with the requirements of both federal and state prevailing wage laws. RCAC has BUF funding available to assist with labor standards compliance. Applicant must explain how any BUF construction estimates have taken these requirements into consideration.

16. Sign the certification that the project is not pirating jobs from another jurisdiction

17. Sign the certification that there is no conflict of interest in the application.

18. Complete the certification process and submit documentation.

Policy Attachments to the Loan Application

The following attachments lay out the loan fund policies for the BUF program. All applicants will be evaluated for financing from standard RCAC loan underwriting (see Attachment D) before being awarded funds under the BUF program. Applicants may bring their own financing in lieu of RCAC sources. However, should RCAC analysis suggest that the applicant needs additional non-BUF financing applicants will need to supplement their existing financing to meet program requirements.

Attachment A. BUF Loan Underwriting Criteria

Loan Application		• Normal business loan application components from RCAC website as modified for the BUF program.
Loan Size		• Not to exceed \$8,000,000 for non-BUF portion and \$15,000,000 for BUF portion, \$23,000,000 maximum loan amount.
Interest Rate		• 3% interest BUF funds • Standard risk-based business loan interest rate matrix for other funds
Term		• Not to exceed 30 years
Fees		• Standard loan fees on non-BUF portion • No application or loan origination fees on BUF loans
Use of Funds		As authorized under the BUF loan policy Attachment.
Underwriting Standards		• Normal business underwriting standards will be used to create a funding package for the business. • To the extent feasible, non-BUF funds will be used first. • BUF funds will only be used to the extent that the internal rate of return to owner is reasonable and there is not undue enrichment. • The decisions on loan composition will follow the policies and processes described in the Loan Award Guidelines.
Eligible Applicants		• For profit businesses • Nonprofit businesses • Public Entities • Federally recognized Tribe

Attachment B: BUF Loan Policy

General
In addition to meeting all of the standard underwriting policies and procedures in the RCAC loan fund Policies (see Attachment D) applicants for funding under the Biomass Utilization Fund (BUF) will be required to meet the following requirements of the Community Development Block Grant National Disaster Resilience (CDBG-NDR)application and the general CDBG Economic Development regulations. BUF and CDBG are used interchangeably in the documents below.

1.1 ELIGIBLE COSTS
The BUF is funded by CDBG-NDR funds and as a result is non-discretionary and restricted to certain eligible costs. Specifically, CDBG ED activity eligible costs generally include:

- operating capital and inventory
- furniture fixtures and equipment (FF&E), with or without installation costs
- project site improvements, new construction or rehabilitation of leased space or owned building (some restrictions on exterior improvements)
- engineering and architectural plans
- local permits or fees, provided these costs are not choice limiting under the National Environmental Policy Act (NEPA)
- purchase of manufacturing equipment (with or without installation costs)
- refinancing of existing debt when done in conjunction with restructuring of other existing financing debt(s) and using BUF funds for other eligible costs
- purchase of real property, when it provides positive cash flow for new jobs
- relocation grants for persons displaced due to funding of the project
- purchase of existing business; public infrastructure in support of the project
- environmental review (RCAC may procure environmental consultants at no cost for eligible applicants.)

1.2 INELIGIBLE ACTIVITY COSTS
CDBG funds are non-discretionary, limited to certain eligible costs described in Section 3.1 above and there are also a large number of ineligible costs. Some ineligible CDBG project costs are:

- costs incurred prior to submittal of loan application and environmental review completion
- costs associated with residential housing development (mixed use project)
- costs associated with supporting "other" businesses the borrower has an interest in
- costs on a funded project NOT meeting a national objective
- personal expenses such as cars, home repairs, not directly associated with the business
- costs of paying off credit cards (personal or business)
- costs of paying off any personal debt not directly associated with business
- providing a revolving line of credit (LOC) is not eligible

- cash payments of any kind made directly to the assisted business owner(s) (wages or draws) from loan proceeds
- costs associated with a funded project when the owner(s) or business is found to be on federal debarred list
- research and development for future production (speculative)
- financing private "exclusive" recreational facilities

1.3 REQUIRED SIX CDBG UNDERWRITING STANDARDS

In addition to documenting that the project meets CDBG public benefit standard, the project must also be documented as meeting six HUD underwriting standards, per federal regulation 24 CFR Part 570.483(e). These underwriting standards are required because there are no federally mandated commercial underwriting standards to document "due diligence". The six HUD underwriting standards are general and qualitative and are supported by the commercial underwriting standards applied to application review.

The Six Underwriting Standards are:

- project costs are documented as reasonable (typically, third party cost estimates)
- all sources of funding for the project are documented with final commitments
- to the extent practicable, CDBG funds are not substituted for other available funds, financing or equity
- documentation that project is financially feasible (based on cash flow projections to support jobs and debt service, etc.)
- to the extent practicable, the return of the owner's equity investment is not unreasonable (based on level of equity and proposed CDBG loan terms); (N/A for CF loans)
- to the extent practicable, CDBG funds are disbursed on a pro-rata basis with other financing provided for the project

1.4 MEETING OTHER FEDERAL AND STATE REQUIREMENTS

There are a number of other federal laws and requirements that are triggered by use of CDBG funding. RCAC will ensure each project is documented as being in compliance with these regulations. Detailed information on federal requirements under the CDBG-NDR program are contained in the latest version of HCD's Grant Administration Manual (GAM).

- National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA): Every project funded under the Program must be reviewed under HUD NEPA regulations 24 CFR Part 58 and HCD must sign and certify an Environmental Review Record (ERR) for it prior to HCD approval of loan fund disbursements. HCD is required to sign and certify the correct NEPA ERR, per the current Environmental Requirements. HCD or other public entities will also need to conduct a review under the California Environmental Quality Act (CEQA).

  The ERR level of review is based on the project's "aggregated" scope of work, which includes all proposed project funding. Any construction or equipment installation proposed will require a higher level of environmental review, which requires more work and time to finalize an ERR. The ERR will be started early in application process, as soon as the project is deemed eligible and scope of work is finalized. RCAC may retain an Environmental Consultant at no cost to the Borrower. Once a CDBG loan application is submitted, no project activities, especially construction or acquisition, can be undertaken until completion of the ERR, as this would be a "choice limiting action" under NEPA regulations.

- Prevailing Wage Compliance: If a project proposes to use CDBG funds to pay for any construction or equipment installation, then federal and state labor standards compliance must be documented. Davis-Bacon Act (40 USC 276a - 276a-5) and related laws are "triggered" when any CDBG funding is used to pay for any project construction costs. Lender will follow HCD guidance for prevailing wage compliance on funded projects. The project must also comply with California Prevailing Wage rules and requirements.

  Additional labor costs will be added to projects proposing to use CDBG to pay for new construction, rehabilitation or equipment installation. RCAC will work with loan applicants to ensure project compliance. The additional time and work required by prevailing wage regulations will be disclosed to the borrower as soon as possible. Any additional costs resulting from this regulation will be incorporated into the CDBG loan request.

  RCAC will retain a prevailing wage compliance consultant at no cost to the borrower to ensure that federal and state requirements are met.

- Acquisition and Relocation Laws: Projects that propose to use CDBG funds to pay some or all of real property acquisition will require documenting compliance with 49 CFR Part 24 Acquisition laws. These same regulations apply to any projects funded with CDBG that cause displacement of persons or businesses. RCAC will follow HCD guidance in current GAM for projects that trigger compliance with these laws.

  RCAC staff will work with loan applicants to ensure the business is in compliance with any state and federal acquisition /relocation laws triggered by the project, and inform them of any additional time, costs required due to acquisition or relocation regulations.

- Required Prohibition of Job Pirating Certification: RCAC will require all applicants to sign a certification of no job pirating. Job pirating is prohibited per CDBG federal regulation 24CFR 570.482 (h). Job pirating is defined as using CDBG public funds to facilitate the moving of a business and associated jobs from one jurisdiction to another (business attraction). As such, CDBG federal funds cannot be used to attract / subsidize a business to move from one labor market area to another or keep a business from moving out of a labor market by making a retention argument. Any questions regarding possible job pirating will be submitted to HCD for final determination.

- Required Conflict of Interest Certification: In accordance state and federal regulations, no member of the governing body and no official, employee or agent of the local government, nor any other person who exercises policy or decision-making responsibilities (including members of the loan committee and officers, employees, and agents of the loan committee, the administrative agent, contractors and similar agencies (HCD, SNC and US Forest Service)) in connection with the planning and implementation of the BUF program shall directly or indirectly be eligible for this program. RCAC will require all applicants to sign a conflict of interest certification. Any questions regarding possible conflict of interest will be submitted to HCD from the RCAC's legal council for final determination.

- Required DUNs number, federal debarred verification and demographic data: RCAC will require all BUF program applicants to obtain a DUN's number, if they do not already have one. The DUN's number is free and can be obtained online. In addition, prior to loan approval, RCAC will document that the business being assisted, and all owners and affiliated business be verified as NOT on the federal debarred contractors list. HUD also requires that HCD and RCAC collect certain income and demographic data from the business and any new hires resulting from the investment of CDBG funds.

- Public Benefit Requirement: Every BUF project must be located in the County of Tuolumne. Each funded project must provide documentation of job creation. Specifically, project business plan must show that new jobs will be created and identify new full and part time positions. Project financials must show job creation cash flows to document project will achieve the proposed number of new jobs after BUF funding is expended. Jobs must be created by the funded entity, be permanent (exist for at least a year), can't be related to only project development process (interim construction jobs are not considered permanent).and must primarily be provided to county residents.

- Required Benefit to Low- and Moderate-Income Individuals: BUF projects must provide a benefit to low- and moderate-income individuals. With very limited exception, BUF projects will meet this requirement through the creation of permanent jobs that are filled by low- and moderate-income individuals. At least 51% of the jobs created must be filled by low- or moderate-income persons. Low-and moderate-income jobs are permanent jobs that provide on the job training for any special skills or do not require special skills that an on by acquired with substantial training; and do not require education beyond high school. Construction jobs are not considered permanent and therefore do not qualify. These jobs must primarily be provided to Tuolumne County residents.

- Required Prohibition of Duplication of Benefit (DOB): Part of the financial review is to ensure that CDBG funds are not duplicating or substituting for other federal assistance. RCAC will conduct an initial DOB analysis prior to HCD programmatic approval. RCAC will complete a final DOB analysis upon completion of the project.

1.5 DETERMINATION OF LOAN INTEREST RATE

Loan interest rates are three percent (3%). Borrowers will be required to use non-BUF funding if the BUF loan causes the business to have an excessive profit or high rate of return on investment (ROI). If the financial analysis determines that the borrower cannot afford to repay the proposed BUF loan amount at three percent interest, the lender may write down the interest and defer principal as necessary to achieve financing that makes the business feasible. (as further described in the examples in Attachment C.)

1.6 LOAN FEES

The BUF program provides administration funds to pay for all loan processing and servicing costs. No direct loan fees will be charged to the borrower on the BUF portion of any loan package. Also, there is no pre-payment penalty on the loans under this Program.,

1.7 PUBLIC BENEFIT AND NATIONAL OBJECTIVE

BUF funding will only be provided to borrowers who show public benefit by creating new jobs in Tuolumne County and utilizing biomass from the forests. In addition to be eligible for BUF funding the borrower must hire low- and moderate-income individuals to work in the new or expanded business. Failure to meet either of these requirements will result in BUF funds not being disbursed to the borrower, or the issuance of a demand for repayment of all funds previously disbursed.

Attachment C: BUF Loan Priorities and Processing

Applicants will be required to bring equity and their own conventional financing or apply for financing from RCAC through its small business loan products before qualifying for BUF assistance. Applicants will not be required to have leveraged financing, but all applicants will first be evaluated for the feasibility of financing a portion of their request with non-BUF funding. CDBG regulations require that federal funds not supplant conventional or other non-traditional financing. If the applicant has secured financing sources that will finance 100% of a project, then there is no need for BUF assistance, but to the extent that those other sources will not provide all necessary financing, BUF can fill the gap.

Once the BUF loan amount is approved, the applicant is free to use those funds during development of their business or venture. BUF funds used during development will bear interest at 3%, regardless of any subsidies which may be recommended for the long-term BUF loan.

RCAC will qualify the applicant for a maximum loan through its small business loan products before considering any BUF financing. An applicant who brings their own conventional or other financing will be considered to have met this requirement, unless the financial modeling shows that the applicant’s proposal can support additional debt.

Only once it is determined that all of the applicant’s financing needs cannot be met by other sources will RCAC provide financing through the BUF. All loans under the BUF will bear interest at 3% and have a maximum term of 30 years.

If the applicant cannot afford these rates and terms, based on a 1.15 debt service coverage (dsc) ratio, then the applicant may be eligible for either principal deferral or interest rate concessions or both.

Interest rate reductions will be the first concession, and the interest rate can be lowered to as low as 1% interest. If additional subsidy is needed, then some or all of the annual principal that would be due based on a 30 year amortization schedule can be deferred.

Annually, the borrower (applicant) will be required to provide certified financial statements that show the cash flow for the business, and the payments will be adjusted upward so that the minimum dsc of 1.15 is maintained, first increasing the principal payments to full amortization, and then increasing the interest rate to 3% annually.

The year that the borrower reaches a 3% interest payment, the remaining balance on the loan will be amortized for the remaining period of the loan, and the payments will be constant for the balance of the term.
Applicants/borrowers are required to show how their businesses will be able to achieve this fully amortized, 3% interest loan within ten (10) years from the original loan closing date. Applicants that cannot demonstrate an ability to meet this fully amortized loan requirement may be given a low priority for processing. If there are funds remaining in the BUF, after all higher priority projects have been processed, low-priority applicants will be reconsidered for additional subsidy, in the order in which applications were received.

Loan acceptance, review and award process
Applications are being accepted now and all applications received by June 12, 2020 will be given the same consideration. Applications received after June 12 will be evaluated based on the availability of funds. Recipients of Biomass Utilization Fund loans must document job creation and expend all funds by **April 30, 2022**

Incomplete applications will be accepted, as long as missing information is submitted in a timely manner. If the information is not submitted timely, review of the application may be delayed and given a lower priority.

There are 4 steps in the loan review process:

Biomass Utilization Fund Workflow Diagram

Staff from RCAC, SNC, the United States Forest Service (USFS), and HCD will review all applications to assess whether they meet the threshold requirements and intent of the program, maximizing job development for low- and moderate-income people per dollar of CDBG funds requested, utilizing a proportionate share of the available biomass and a clear and defensible plan for completing the development process by 4/30/2022. As long as applications demonstrate how they meet all of these objectives the application will move forward to the next level of review, and RCAC will initiate the environmental review process.

The second review is meeting with National Development Council (NDC) to evaluate the proposed financial structure, ensure that the CDBG prohibitions on private inurement are met, and recommend a financial structure that ensures the deployment of all of the funds. NDC will also review the application to assess compliance with the six underwriting standards of CDBG.

The third review will assess the feasibility of the business plan and the financial modeling in the application. This review will look at the technology proposal for the business, the feasibility of other aspects of the business plan, and the permitting constraints associated with the business.

The fourth step in the review process is the finalization of loan underwriting.

There are two steps in the loan approval process:

Once a final credit memorandum is created and tentative agreement is reached between applicant and RCAC on terms, RCAC will submit a project summary to the CDBG-NDR Core Team to review. The Core Team provides strategic direction for California's CDBG-NDR program and consists of representatives from: HCD, SNC, USFS, the Strategic Growth Council, Tuolumne County, and the California Department of Forestry and Fire Protection.

All Core Team members are encouraged to participate in the programmatic review, with HCD and SNC participating at a minimum. The summary will include detailed information on the project and applicant as well as a summary of financial terms of the loan/grant. This will be a programmatic review to provide an opportunity for the Core Team to provide feedback on the final project to RCAC and ensure that the project will meet the goals and requirements of the NDRC grant. This review will not be a substitute for financial underwriting, which is RCAC's responsibility.

SNC and HCD will facilitate the Core Team review and summarize Core Team comments to deliver to RCAC. Feedback and questions on the project summary will be provided to RCAC.

Following completion of the Core Team review, the loan will be submitted to the RCAC Loan Committee for final approval.

Loan Awards

The CDBG-NDR Core Team will first conduct a programmatic review, then the formal loan approval is done by RCAC loan committee. Disbursement of loan funds are subject to completion of all loan conditions required by the Core Team and RCAC loan committee. Some of these include environmental compliance to be procured and paid for by RCAC using CDBG-NDR funds, securing leveraged resources and equity, and certifying to job creation and employment opportunities for low- and moderate-income workers. (RCAC has a sub-recipient relationship with Motherlode Job Training to assist documenting LMI job compliance.). RCAC is required to complete a General Conditions Checklist for each project and submit the Checklist with compliance source documents for CDBG-NDR to HCD for release of funding by HCD. The General Conditions Checklist will document the project's compliance with federal requirements listed in Section 1.4 of Attachment B, above. RCAC loan committee may have additional loan conditions that must be met prior to release of BUF project funding and any other funding RCAC may approve.

Funding Examples
RCAC will leverage the available HUD funding to the extent that the project is feasible and the borrower can support more traditional sources of financing. The financing decisions will proceed as follows:

RCAC will first look at the cash flow of the proposed business to determine the debt that can be supported with a 1.15 debt service coverage (dsc) ratio. In other words, if a proposed business generates net cash of $350,000 per year, we will assume that $297,500 can be used for debt service.

RCAC will first underwrite the business based on our typical loan standards. If the business needs to borrow $5 million, RCAC will look to see what portion of that amount the borrower can borrow using RCAC's typical business loan products without HUD funds. Today, typical USDA B&I guarantee business loan terms would be 30 years at 6% interest, and the payments on a $5 Million loan would be $363,244. Obviously, the business cannot support all of the debt. However, if RCAC made a $3 million loan at 6% interest and a $2 million HUD loan at 3% interest, the total debt service would be reduced to $319,000, comprised of $218,000 on the conventional loan, and 101,000 on the $2 million HUD portion. RCAC would then write down the interest on the HUD loan, so that the total package would work with a 1.15 dsc. If the interest rate was 1% on the HUD loan, the amortized payment would be $77,500, which gets the financing package very close to the $297,500 that can be supported by the business, without any deferral of principal payments.

RCAC will sell the guarantee portion of the loan to a third party, but RCAC is required to keep 20-30% on B&I guarantee loans. RCAC will use HUD funds to fund our portion of the guarantee loan, so the total HUD investment in this example would be $2.6 million and the leverage would be $2.4 million.

The goal is to lend the HUD money at 3% interest fully amortized with interest write-downs and principal deferral to make the financing package affordable. The minimum CDBG loan interest rate will be 1%. If this interest write-down is not sufficient to meet the dsc, then RCAC will consider principal deferral. It is expected that each business will achieve the standard rates and terms within 10 years (i.e., 3% interest, 30-year amortization). If cash flow increased $10,000 annually, in three years this business would be paying the full interest rate.

The minimum cash flow required to support this loan structure, $3 million in conventional and $2 million in CDBG is $274,000. With a dsc of 1.15, the maximum debt service is $238,000, which would be comprised of $218,000 on the conventional debt and $20,000 on the CDBG debt. The CDBG loan payment would only cover 1% interest and no principal. The fully amortizing CDBG loan payments are $101,000. If this borrower is to achieve the full payment amount in 10 years, the loan payment needs to increase $8,100 per year, and cash flow would have to increase by $9300. The first 8 years of increases would be attributed to principal payments, after which the interest rate would increase to the full 3% interest.

If this borrower only had cash flow of $100,000, the debt service they could afford would only be $85000. Using the process above to determine the conventional debt, would yield a conventional loan of just $500,000, and a HUD loan of $4.5 million. The HUD payment would start at $45000, 1% interest principal deferred, and would cap at $225,000 when fully amortizing. But this means that the business would have to show an ability to increase debt service by $18-20,000 per year to get to fully amortizing by year 10. If the borrower cannot achieve these increases, then the loan application will be set aside for a period of time while RCAC process loans that can meet this requirement. If after priority projects have been evaluated there are CDBG funds remaining RCAC will look at other schemes that could make the loan perform, including a longer loan term and a longer write down period. These considerations will only be made on projects that have a substantial benefit in terms of creating employment and biomass utilization.

Alternatively, if 100% of the $5,000,000 loan comes from CDBG, then the project can support a $50,000 interest payment, at 1% interest, then $35,000 would go to principle. The fully amortized loan at 3% interest for 30 years is $255,000, so over 10 years payments would be expected to increase $170,000, or $17,000 per year.

Borrowers will be expected to pay normal RCAC loan origination fees of 1% on the leverage (non-BUF) funds, including funds used as RCAC's share of the B&I guarantee loan will have the same rates and terms as the B&I guarantee portion.

If the business needs construction financing before putting their project in service, RCAC will offer that financing at normal rates and terms, currently 5.5% interest, and loan fees of 1.25% including the fee to make progress payments and monitor construction. If the borrower wants to use CDBG funds for development purposes, the borrower will be required to pay prevailing wages on the project, but the CDBG construction loan will be 3% interest with no loan fee.

Attachment D: RCAC Loan Fund Policies Adapted for the BUF Program

These modified loan fund policies are a simplified version of RCAC's full policies, presenting products that are relevant to the BUF program and can be used in conjunction with BUF funds. They are presented here to show how the RCAC business loan process works and how it will work in conjunction with the BUF loan program. When the BUF program is mentioned in these policies it is intended to clarify the difference between BUF funds and other RCAC funds. These policies will guide the relationship between loan applicants/recipients and RCAC. Situations may arise which are not anticipated in these documents, in which case these policies will inform the decisions of RCAC, which it will make in its sole discretion.

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I. Programs

Two of RCAC's loan programs may be used to support projects proposed under the BUF program. The other loan programs have no relevance.

A. Community Facility (CF) Program—nonprofit and public entity applicants may be eligible for matching loans under RCAC's community facility programs. Generally, CF loans have better rates and terms than small business loans, so it is in the interest of these applicants to consider funding under this program.

B. Small Business Loan Program
RCAC funds may be used for the following purposes
(1) Working Capital Loans
(2) Business Lines of Credit
(3) Term Loans (real estate/equipment)

II. Products

Under both programs, Community Facilities and Small Business the following types of products are available:

A. Short-term loans (three years or less)

(1) Land acquisition
(2) Predevelopment
(3) Site development
(4) Construction
(5) Acquisition and/or renovation
(6) Lines of Credit
(7) Working Capital loans

B. Long-term loans (greater than 3 years)

(1) Community facilities loans guaranteed by USDA

(2) USDA Community Facilities Re-Lending program
(3) Business loans guaranteed by USDA, BIA or other acceptable Federal or State Government guarantee programs
(4) Business loans not greater than $250,000, without a government guarantee (term up to ten years).
(5) Long-term loan that repays a RCAC short term loan because the original source of repayment did not materialize

III. Borrower Eligibility

A. Type of Entity

(1) Nonprofit organizations
(2) Public entities
(3) Federally recognized Tribes and tribal entities such as Tribally Designated Housing Entities (TDHE's) and Indian Housing Authorities (IHA's). Note: the term "Native American" as used in these Policies also includes Alaska Natives and Native Hawaiians, except as to provisions/requirements that are specific to Native American Tribes/Entities
(4) Partnerships or Limited Liability Corporations in which one of the above types of entities has significant control
(5) For profit entities or sole proprietorships

IV. Project Eligibility

A. RCAC service area of 13 western states and certain Pacific domestic and international areas. Rural areas (populations of 50,000 or less), or urban locations if the loan predominately benefits rural populations or target populations such as agricultural workers (Note: Some guarantee programs may have requirements that are more stringent.)

B. RCAC loans finance projects that serve the population that is 80% or less of the area median household income, i.e., low and moderate income.

C. BUF loans (CDBG-NDR) must provide new, permanent employment opportunities for low- and moderate-income people and use or supply biomass from surrounding forests. Ventures must be located in, or locating to, Tuolumne County.

V. Loan Approval Authority

A. Loan Committee: 1) all loan actions, including new loan and guarantee approvals, extensions, and modifications, 2) new loans or guarantees to or on behalf of borrowers with current existing Criticized Assets, 3) all other actions including those actions delegated to the CEO and the Director, Lending and Housing, and 4) any exceptions to Loan Fund policies, the basis for which shall be documented.

B. CEO: may approve: 1) any loan or loan increase to qualified borrowers not to exceed $500,000, 2) loan modifications within loan fund policy, 3) commitment extensions of a previously approved loan commitment, 4) loan extensions for loans that are performing as agreed and not on the Criticized Assets Report.

C. Loan Fund Director: The Loan Fund Director may approve: 1) any loan or loan increase to qualified borrowers not to exceed $100,000, 2) loan modifications within Loan Fund Policy, 3) commitment extensions of a previously approved loan commitment, 4) loan extensions for loans performing as agreed and not on the Criticized Asset Report.

D. The Loan Committee will be informed as soon as possible after internal approval actions via submission of all internally approved reports in the next ensuing Loan Committee packet with the exception of individual water well and septic system loans/grants.

E. The CEO can delegate to the Chief Financial Officer (CFO) per the RCAC management plan.

VI. Loan Commitment Term

A. Both short term and long term loan commitments are for a period not to exceed six months from the time of RCAC loan committee approval.

B. Long-term loan commitments that take out RCAC short-term loans may have commitment periods that commence upon a future event, such as the future closing of the short-term loan. Such long-term commitments would be contingent on the closing of the short-term loan.

VII. Loan Committee Meetings

A. The Loan Committee meets, if there are items to consider, on the second and fourth Fridays of every month or as otherwise scheduled. When board meetings occur during the week of a scheduled Loan Committee meeting, the Loan Committee meeting may be rescheduled.

B. For BUF funding, Core Team will provide programmatic review and approval prior to submittal to RCAC loan committee.

VIII. Interest Rates

A. At least annually, the interest rates to be charged to borrowers are to be reviewed by the Board of Directors. In setting interest rates, the following factors are to be considered:

(1) Funder or investor requirements for interest rates for loans made with their capital
(2) Average cost of borrowed lending capital
(3) Loan fees structure. If fees cannot be charged for certain loans, then related interest rates should be set higher for that class of loans.
(4) Market interest rates

(5) Interest rate and cost of funds information will be presented to the Loan Committee at least annually with a recommendation to continue or modify short term interest rates. The Loan Committee may approve a change in short term interest rates at any Loan Committee meeting and must in turn report any change in interest rates to the Board at the next quarterly Board meeting. Long-term rates should be within 100 basis points over the Secondary Market rate (or other applicable index) for a corresponding term of the loan in effect at the time of the loan closing.

(6) Long-term loans shall have payments via Electronic Funds Transfer (EFT). If a borrower elects not to have payments via EFT, the interest rate increase will be 25 basis points, however, if the entity is precluded from providing EFT due to the type of entity or method that funds are handled there will be no interest rate increase.

B. Effective with the approval of these Loan Fund policies and effective until modified, interest rates will be as follows:

(1) Loans funded with CDBG-NDR funds under the BUF program will have an interest rate of 3%.

(2) Business loans for working capital or lines of credit will be from 6.25% to 10.25% (6.25% for nonprofit or public entities). The applicable rate, within the range indicated, will be determined based on the loan term, business credit history, available collateral, cash flow, the strength of the business and business entity and the availability and strength of personal and/or corporate guarantees. Business loan rates may be reduced if required by a federal or state guarantee program.

(3) All other short-term loan interest rates will be:

(a) 5.250% for a term of up to 24 months; 5.5% for a term greater than 24 months but not exceeding 36 months including extension of performing loans. The interest rate applicable at extension for loans that are experiencing problems will be based on the risks involved with the particular loan.

(b) The committed interest rate is applicable for up to a six month commitment period and may be changed to the current rate (if the rate has changed) if the commitment is extended beyond the initial commitment period

(c) If a loan is extended beyond the three year short term loan period (other than a loan restructure) the interest rate will be set utilizing the applicable Farmer Mac II secondary market rate (or other applicable index) plus 1% as a guideline for the period of the loan, however, the rate will not be less than the short term 36 month rate for the type of loan product.

(d) Short term rates may be reduced by up to 1% per annum based on specific funding/investor requirements. Golden State Acquisition Fund program, for example, requires a 50-75 bps reduction from standard interest rates.

(4) Long-term interest rates for real estate purchase/secured business loans, and CF Re-Lending loans are to be set on a loan-by-loan basis not to exceed 100 basis points above the Secondary Market rate (or other applicable index) for a corresponding term

loan in effect at the time of closing. The CF Re-Lending program rate is 5% (to be reduced to 4% for the first three years of the loan).

(5) Interest will be calculated based on a 360-day year and actual days elapsed for interest only loans and on the basis of 30 days per month and 360 days per year for amortized loans.

IX. Fees

A. There is no application fee for any RCAC loans, including BUF loans.

B. Loan Origination Fees for non-BUF funding:

(1) There will be no fee for the CDBG-NDR portion of any loan funded under the BUF program in Tuolumne County.
(2) All loans, except revolving lines of credit, construction loans will be charged a loan origination fee of 1% of the loan amount to be collected at the time of loan closing (exceptions - long term guaranteed loans or CF Re-Lending loans converting from a short term RCAC loan will be charged a 0.5% loan fee on the long term loan); household water well program loans will be charged a fee of $100. Individual septic system loans (Idaho program) will be charged a fee of $500.
(3) Revolving lines of credit will be charged a loan origination fee of 1.5% of the loan amount, to be collected at the time of loan closing (no other fees, except a document fee, if applicable, will apply).
(4) If an approved line of credit is modified to a revolving line of credit either by a Loan Commitment Modification or Loan Modification the revolving line fee of 1.5% will be charged (the loan fee will be increased from 1% to 1.5%) on the face amount of the loan.
(5) Construction loans will be charged a loan fee of 1.125%
(6) Loans originated to assist applicants with obtaining other funding with limited expectation of closing will be charged a 1% (or 1.125%) commitment fee in lieu of an origination fee to be paid by the applicant at the time of commitment. If the loan subsequently closes there will be no additional origination fee.

C. Document Fee - $300 for real estate secured loans and business loans; $100 for other than real estate secured loans. This fee is not applicable to Environmental Infrastructure loans, regardless of type or security. To be paid at the time of closing.

D. Real Estate Tax Monitoring Fee - Cost of service will be a pass through to borrower to be paid at time of loan closing by borrower or included in the loan.

E. Loan Commitment Extension Fee: $250 for each six month, or shorter period commitment extension. This fee must be paid by the applicant at the time of extension (exception – if an extension of a long-term loan commitment is incidental to and being made simultaneously with a short-term loan extension only one loan extension fee will be assessed).

F. All costs directly associated with a non-BUF loan request are a pass through to the loan applicant.

G. Loan Extension Fee:
   (1) Loans repaid within 30 days of original maturity will be considered as performing and no extension fee is required.
   (2) Loan extension fees will be charged in accordance with the following table, for each six month loan maturity extension period (prorated for shorter periods), however, in no case will the extension fee exceed the applicable loan origination fee. The fee charged for loans fully disbursed but paid down will be based on the reduced principal balance. Exceptions may be made by the Loan Committee, CEO or Loan Fund Director, within approval authority. All exceptions shall be noted in the Loan Extension Staff Report.

   Loan Extension Schedule:

Loan Amount	Fee
Up to$49,999	$250*
$50,000 to $325,000	$500
$325,000 and greater	0.15% of loan amount not to exceed $2,500

   *Not applicable to household water well or septic system loan programs.

H. Loan Restructure Fee: A loan restructure is defined as a modification of a loan that recasts the original terms or conditions of the loan, other than just an extension (and any resulting change in interest rate based on current policy) of the loan. Loan Restructures are most typically in connection with workout agreements but may also be due to other reasons, e.g., a reduction in interest rate, provide for a new repayment source or amount and/or new repayment period. The fee for a loan restructure will be the fee commensurate with the above loan extension fee table (irrespective of restructure term) based on the principal balance at the time of restructure with the exception that the $2,500 extension fee limitation will not apply.

I. Late Payment Penalty: A late payment charge equal to five (5.0%) percent of the total payment due under the Promissory Note will be charged to the Borrower in the event that a payment is not received within fifteen (15) days of its due date.

X. Security

A. The risks to the unrestricted net assets of RCAC are to be mitigated by obtaining secured interest in the assets of the borrower and/or obtaining loan guarantees. The following are required:

   (1) Unsecured Loans for Predevelopment or other costs, supported by a Rural Development (RD) Letter of Conditions are subject to a $350,000 maximum.
   (2) (2) Secured loans are subject to 100% LTV when RCAC debt is in superior position. For site acquisition/predevelopment/site development loans for single family housing lots, the security value will be considered the finished lot sales value. For single

family unit construction loans, the security will be considered the value of the finished homes.

(3) Secured loans are subject to 95% LTV which includes senior debt and the RCAC loan, where RCAC debt is subordinate to senior debt.

(4) Lines or revolving lines of credit to acquire foreclosed homes, for which the value is not known at the time of acquisition, will be subject to pledge of additional collateral in a minimum amount of 25% of the loan amount. The additional collateral amount required may be increased based on the housing market of the community in which the housing is located.

(5) Business loans may be secured by tangible collateral, cash flow of the business, personal and/or corporate guarantees, or a combination thereof, and are not subject to other limitations or definitions contained in this section.

(6) Long-term guaranteed loans are not limited by the above LTV requirements but are instead limited by the requirements of the Conditional Commitment to Guarantee.

(7) Loans made to a subsidiary or affiliate of an entity will require a Corporate Guarantee from the parent entity (does not apply to loans to Tribal entities, see Native American Lending Policies (page 26) for Tribal Guarantee requirements)

(8) The Loan Committee may consider applications with higher LTV percentages or other security on a case-by-case basis.

(9) LTV is one of various criteria used to evaluate the security of a loan. Other consideration may result in a loan having a lower or higher LTV.

(10) All loans are considered recourse loans unless specifically waived as non-recourse in the loan approval, in which case, specific non-recourse language will be included in the Loan Documents.

XI. Maximum Loan or Guarantee Amount (exclusive of participated amounts).

A. Loans that have a USDA Rural Development CF, RUS, or B&I Guarantee - $8,000,000

B. Non-government guaranteed Business Loans - $250,000

C. CF Re-Lending Program - $8,000,000

D. All other loans - $3,000,000

E. Construction loans where the source of repayment is clearly committed - $8,000,000 or up to 10% of the assets of the loan fund.

F. Maximum Concurrent Loans to a Borrower**--**Eight percent of Lending Capital (Lending capital is defined as all Loan Fund lending capital less lines of credit and USDA CF Re-lending funds). The government guaranteed portion of loans and loans in which the applying entity is not the borrower of record, but may have an interest (e.g., Limited Partnerships, LLC's, etc.), are not included in the concurrent loans calculation, however, will be noted in the Credit Memo for Loan Committee or CEO information/consideration.

G. Business loans funded with CDBG-NDR funds under the BUF program--$15,000,000.

XII. Construction Interest Collection and Retention

A. For all new short-term loans, including BUF loans, there is to be a prepaid interest account or interest reserve account in an amount sufficient to cover the anticipated interest charges over the life of the loan, unless the required interest payment is otherwise addressed as part of the Credit Memorandum. In the BUF program, short term interest may be included in the loan.

B. If a loan maturity date is extended and there is an insufficient amount of prepaid interest or interest reserve to cover the interest due during the extension period, the borrower must increase the prepaid interest reserve to a level adequate to cover interest for the extension period, elect Electronic Fund Transfer (EFT) payment, or otherwise make arrangements satisfactory to RCAC to pay monthly interest accrual.

C. If a loan maturity is extended and the borrower cannot pay interest current, extension fees and/or late charges, the loan will be placed on the Criticized Assets Report.

D. For construction projects, except for 100% payment and performance bonded contracts, a minimum retention of 5% of the construction contract amount is to be retained by RCAC until after the filing of a notice of completion and expiration of the statutory lien period (as prescribed by State Statute for the State in which the project is located), or the issuance of a lien-free endorsement by the title company. The Loan Fund Director or Credit Officer may approve lower retention levels when justified.

XIII. Borrower Capacity

A borrower's experience, as well as technical and financial capacity to complete a project, is critical in the review of all applications to the Loan Fund. A thorough analysis of organizational experience and capacity is critical to loan underwriting and is a key component of consideration in loan recommendation and loan approval. This analysis will be based on the Loan Fund Underwriting Guidelines and will address any deficiencies in capacity or experience indicated by substantial deviation from the Guidelines. Material weaknesses in capacity must be mitigated by appropriate measures such as technical assistance from competent sources, including RCAC, or entering into partnerships to bring the necessary capacity and/or guarantees to the transaction.

XIV. Financial Capacity

A table will be included in each Credit Memo (except Environmental Infrastructure loans with the exception of Intermediate Term Enviro loans) providing for a comparison of financial Guidelines for the type of loan being underwritten (noted below) to the current financial condition of the loan applicant with Notes regarding the variance when a Guideline is not met or for other explanation. Any deviation from the underwriting financial Guidelines, together with appropriate mitigations, will be discussed in detail in the Financial Capacity section of the Credit Memo.

Financial Underwriting Guidelines for all loans, except Business Loans:

Current Ratio – Minimum of 1
Debt to Net – Maximum of 4:1
Debt-Coverage Ratio – Minimum of 1.10
Positive Net Assets
Days' Cash – Minimum of 90 days

Financial Underwriting Guidelines for Business Loans:

Current Ratio – Working Capital Loans and Lines of Credit – 2:1 (considering loan being made)
Current Ratio – Term loans Minimum of 1:1
Debt to Net (businesses with operating history) – Maximum of 8:1 or minimum of 10% tangible net equity (maximum of 4:1 for term debt unless applicant operates in an industry where the average is higher than 4:1).
Debt to Net Worth (Start-up businesses) - Maximum of 4:1 or 20% tangible net worth
Debt Service Coverage (amortized loans) - Minimum 1.15
Positive Net Assets
Days Cash – Working Capital and Lines of Credit - 90 days (considering loan being made)
Days Cash – Term Loans – Minimum of 60 days

Loan Repayment Source:

All loans will have a clearly documented repayment source. Amortized loans will meet a minimum of a 1.15 Debt Service Coverage Ratio. Business loans will document sustainable debt repayment from business historical and/or projected cash flow.

XV. Loan Payments and Servicing

A. A loan is considered "Past Due" if the loan payments are one day but not more than 30 days late or the loan has matured for not more than 30 days.

B. A loan is considered "Delinquent" if the loan payment is more than 30 days, but less than 90 days late or the loan has matured for more than 30 days, but less than 90 days or other significant failures to meet the requirements of the Loan Agreement.

C. At Risk of Liquidation (At Risk): A loan is considered "At Risk" if the loan payment, is more than 90 days late or that the loan has matured for more than 90 days. Loan Committee is to be informed.

D. Unpaid late fees and/or a past due amount not exceeding $50.00 will not result in a loan being classified as delinquent.

   Note: For D, reasonable collection efforts (inclusion in subsequent billings, etc.) will be made to collect the amount due, however, a one-time credit adjustment to the account may be made, per determination of the Loan Fund Director if such efforts are not cost effective.

Non-accrual loans

Whenever a loan payment of interest or principal is more than 90 days past due, the Loan Fund Director will notify the Chief Financial Officer and they will determine if the loan will be classified as "non-accrual". A loan should be classified as "non-accrual" whenever it is doubtful the interest receivable will ever be collected from the borrower or through liquidation of loan security.

When a loan is classified as non-accrual, loan administration will maintain two set of records on the loan, (1) per the loan documentation, (2) principal only.

The financial accounting of RCAC will be based on the principal only basis with interest revenue no longer accrued and interest revenue previously recognized, but not collected, reversed.

Loans in default

Loans in default are defined as loans with a loan payment, or loan repayment, more than 30 days past due and/or have not met, considering any grace period, any covenant of the loan document(s). Such loans will be assigned a loan status (classification) and risk rating based on their inherent weakness and possibility of debt collection. The loan may be subsequently changed to a different classification based on the approval of a workout plan or other facts that would change the loan status.

XVI. Native American Lending Policies

General Criteria for Tribal Lending:

1. Federally recognized Tribe or Tribal entity
2. Limited Waiver of Sovereign Immunity as relates to the loan transactions on trust lands
3. Defining dispute resolution as part of Limited Waiver of Sovereign Immunity
4. Federal loan guarantee for loans to Tribes on trust lands
5. Tribal guarantee (assignment of income) for loans to Tribes on trust lands
6. Leasehold Deed of Trust for loans to entities who have a leasehold interest on tribal lands

Limited Waiver of Sovereign Immunity - Required as relates to the loan transaction. The Limited Waiver would be enacted by Tribal Resolution and include the venue for resolution of disputes. Preference is to use mediation before binding arbitration; however, RCAC will consider other venues, including Tribal Courts, on a case by case basis. For loans other than to the Tribe involving Tribal lands (leaseholds), the need for a Limited Waiver of Sovereign Immunity will be made on a case by case basis after review of the lease and the Tribe's adopted lending and foreclosure ordinances.

Loan Guarantee - Required for long-term loans to Tribes on trust lands. RCAC must be an approved guaranteed lender under a federal program that will permit the use of funds for the type of project proposed and will meet the federal guarantors' requirements. For example, RCAC is currently approved for USDA loan guarantees for Community Facilities, Business and Industry, Multifamily Housing, Water and Waste Disposal systems/facilities and for HUD Section 184 rental housing and Title VI loan guarantees. Short-term loans require an assured take out which would normally be a guaranteed loan from RCAC or another lender.

Tribal Guarantee – Tribal Resolution that provides for assignment of income from the project being financed and assignment of unrestricted tribal funds, if necessary, to meet debt service requirements. Tribes may designate certain unrestricted income sources if sufficient to provide adequate assurance of repayment ability.

Leasehold Deed of Trust - For loans to entities who hold a leasehold interest from the Tribe as approved by BIA. Leasehold criteria are: 1) Lessor's consent to allow the mortgage, 2) the right of the Lender to foreclose on the leasehold interest, 3) the right of the Lender to bid at a foreclosure sale or to accept voluntary conveyance of the property in lieu of foreclosure, 4) the right of the Lender to occupy, sublet, or sell the property should the leasehold be acquired through foreclosure, voluntary conveyance or abandonment, 5) advance written notice of at least 90 days to the Lender of the lessor's intention to cancel or terminate the lease, 6) the lease term must be at a minimum as long as the term of the loan. A BIA Title Report is required.

Alternative Sources of Collateral – Tribes or tribal entities may secure a loan by offering alternative sources of collateral which may include asset accounts or fee simple real estate.

XVII. Annual Review of Policies

Board approved Loan Fund policies are to be reviewed by the Loan Committee for reaffirmation or modification, not less than once a year. All policy changes (except for Loan Committee changes to the short term interest rate) are to be approved by the Board of Directors.

Attachment E. BUF Loan Application Threshold / Feasibility Evaluation Criteria

Failing to meet the overall project threshold criteria below may result in an application being denied. All other factors give the application a priority for consideration and moving through the funding process. For applications received in the first application period, the highest-ranking project moves first, and will be considered for funding ahead of other applicants.
Review of each project and underwriting of each loan application will continue until all CDBG funds have been committed. RCAC will continue underwriting as long as the applicant is responding to information requests in a timely manner. **No application is guaranteed funding until it has received final RCAC loan committee approval and satisfied all loan conditions.** In the processing of applications, projects that score exceptionally well on the criteria below may receive more staff attention but only as long as the applicant is providing material in a timely manner.

Overall project CDBG-NDR Threshold/Feasibility

Projects that do not meet both of the two threshold criteria may be denied:
(1) Demonstration that the project can be completed before 4/30/22
(2) Demonstration that at least 51% of the jobs created will be filled by low- or moderate-income persons.

- Low-and moderate-income jobs are permanent jobs that:
    - provide on the job training for any special skills, or do not require special skills that can only be acquired with substantial training;
    - do not require education beyond high school.
- Construction jobs are not considered permanent and therefore do not qualify.

- Applicants may appeal a denial and/or provide supplemental information as to why the initial determination is inappropriate. It is not the intent of the BUF program to deny applications, but if the applicant fails to meet either of these two threshold criteria, they will not be eligible for funding under the BUF program, and if any funds have been advanced RCAC will pursue payment in full on all obligations.

Expected Biomass usage – 20 points

A primary goal of the BUF program is to create alternatives to pile burning forest based woody biomass and promote forest health treatments. Thus, priority will be given to projects that will utilize or supply a large amount of woody biomass, while demonstrating that the **expected quantity of biomass** can be reasonably obtained, and that the ratio of tonnage of biomass to CDBG loan requested would allow the program to meet its goals.

Evaluation Criteria:

- Ratio between biomass usage and CDBG funds requested up to 10 points
    - Less than 1,000 tons per million CDBG funds, up to 3 points
    - 1,000 tons—10,000 tons per million CDBG funds, up to 6 points
    - More than 10,000 tons per million CDBG funds, up to 10 points
- Access to biomass supply up to 10 points
    - Signed contracts for biomass needed, 10 points
    - Well defined procurement plan, up to 7 points
    - Experience working in forest product industry, especially in Tuolumne County, up to 4 points

Job Creation Potential – 25 points

The BUF loan program is required to meet the CDBG national objective of creating employment for low- and moderate-income individuals. Projects will be evaluated by the number of jobs an applicant can demonstrate will be created by the project. Applicants should show that at over half of expected jobs will be reasonably accessible for LMI individuals (i.e. do not require degrees or advanced training). The timing for hiring employees and the plans for long-term employment are also important program considerations.

Evaluation Criteria:

- Ratio of **jobs to CDBG funding** requested, up to 10 points
  - >$1,000,000/job, up to 3 points
  - $200,000 - $1,000,000/job, up to 6 points
  - <$200,000/job, up to 10 points
- The highest number of total LMI jobs compared to other applications, 5 points
- Highest number of LMI jobs hired within first 6 months of operations, 5 points
- Strongest plan for long-term employment, 5 points

<u>Forest and Community Resiliency and Replicability – 10 points</u>

Additional consideration will be given to projects that will make a demonstrated impact on forest and community resilience through:

- Ability to pay a higher price for feedstock to offset costs of forest health treatments, rather than focused on waste disposal only
- Demonstrated partnership with state, local and federal partners to target material from fuel reduction and forest health projects
- Ability for the facility to accept community green waste drop off to reduce waste disposal costs for county residents/create an alternative to small landowner and homeowners pile burning material from maintaining defensible space
- Ability for the facility to provide backup power generation during emergencies or public safety power shut off events
- Demonstrated plans to expand project to include co-located wood product businesses or other types of biomass processing equipment beyond the grant period (e.g. this first project is an “anchor” facility as part of larger planed wood processing campus)

Two points will be awarded for each criterion met.