Cal FRAME Partnership Group Meeting Brief

August 28, 2023 8:30 AM – 1:00 PM
Red Lion Hotel, 1830 Hilltop Dr., Redding, CA 96002
And by Zoom

Brief

- Christiana Darlington presented a review of the forest biomass management entity options.
- Clarke Stevenson presented the Pricing Mechanism
- Sharmie Stevenson summarized Resource Conservation District (RCD) input on concept of RCD-led Joint Powers Authority (JPA).
- Todd Sloat summarized industry, federal and state, and collaborator input on RCD JPA concept.
- The in-person participants worked in small groups to brainstorm the RCD mission and evaluate potential funding mechanisms.
- A recording of the meeting will be posted here: https://www.fallriverrcd.org/current-projects

Action Items

Actions	Responsible Parties
Email Clarke Stevenson at clarke@thewatershedcenter.com if you would like to participate in the price mechanism focus group.	All

Present Review of the Market Capacity Assessment (MCA) and the Joint Powers Authority (JPA) Paper

Summary of the MCA Outcomes. Clarke Stevenson provided an overview of the MCA. He stated that he evaluated the market mark capacity by two different metrics: by area and by volume.
Clarke presented the results of the capacity by area by different landownerships by year which showed an average of 44,364 acres within the study area are begin treated per year, with the majority on private lands. He further explained that slightly more 938,098 bone dry tons (BDT) of biomass are available per year on a reliable basis. "Reliable basis" is biomass that is available on an ongoing, consistent, year to year basis. It excludes opportunistic biomass, such as that resulting from utility line clearing, CALTRANS right-of-way clearing, and FEMA fire recovery efforts. The MCA separated the biomass contributing volumes by activity/source, namely those biomass volumes generated by harvest residue, pre-commercial harvests, fuels reduction/forest health, and standing dead as well as utility vegetation management and sawmill residues. Clarke stated that when one accounts for biomass consumed by existing facilities, the new available volume of unutilized biomass decreases to approximately 409,646 BDT of which 207,609 BDT are available on a reliable basis. Clarke noted that this figure is based on the current market capacity, and does not take into account future treatments or facilities. Clarke clarified that study area includes all of Shasta County, most of Modoc County, and parts of Siskiyou and Lassen Counties.

Overview of JPAs and Prospective RCD-led Model for the Northeast California Region. Christiana Darlington presented an overview of JPAs and prospective model options for the northeast California region. She explained that JPAs are formed when local governments decide to work together to solve a common and often complex problem. They can include state or federal agencies, and tribes; can be utilized to share skills and resources, and;

allow for agencies to operate within one another's jurisdictions. It is important to note that JPAs can utilize only the powers that the agencies share, and that they are limited to the authorities of the least powerful member.

Christiana reviewed the potential activities of a JPA that could be useful in the biomass supply chain related to management of feedstock supply contracts, services provided, and owning of infrastructure. A JPA could negotiate and manage feedstock contracts on behalf of parties using a public pricing mechanism, provide contract insurance by connecting parties to insurance companies that have a relationship with the JPA or by creating pooled insurance. Examples of services that a JPA could provide include third party environmental review, mapping that contributes to forest management plans, owning or leasing of equipment, establishment of insurance pool, or business services much like an economic development agency. A JPA could own infrastructure such as a mill, bioenergy facility, or wood products yard, and could enter into contracts itself to actually buy or own biomass.

After a year of exploring the different opportunities in this region and hearing from stakeholders, Christiana explained that the team reached the conclusion that a JPA of Resource Conservation Districts (RCDs) are the most effective model option for the northeast region. RCDs are public legal entities, flexible, and maintain engaged local board of directors that understand their communities they work with and within. They also have staff, are experienced in securing and administering grants and have a need for forest biomass generated as a result of their projects to be utilized. RCDs could increase their capacity by expanding the geographies within which they work, and could increase the USFS capacity through the Interpersonnel Act which is a federal law that allows federal agencies to essentially borrow staff, separate and apart from partner-led projects.

The Team has met with and presented the concept to four RCDs boards, including the Fall River, Pit, Western Shasta and Modoc RCDs , and conducted preliminary engagement with three others (Shasta Valley, Honey Lake and Lava Beds-Butte). RCD Boards are enthusiastic about sharing resources and working together.

Christiana reviewed the concept of a public pricing mechanism, specifically a formula rate contract with a price caller. Parties to a feedstock supply agreement could voluntarily agree to use a formula rate to determine the price of the biomass. The formula rate model that uses a set of subjective and objective factors to arrive at a regional biomass price, and would be publicly available so parties can understand how the price was arrived at. The mechanism would be updated typically on an annual basis or biannual basis by submitting changes for review and approval to a regulatory body; in the current case, this would be the JPA itself. A collar would be put into place which establishes the top and bottom for a range of values (e.g., the interest rates, market value adjustments, and risk levels); if the price extends outside of the collar, then an indemnification provision associated with an insurance product would kick in and make up the difference. The insurance product would protect against the risk of the lack of feedstock or disappearance of the biomass offtake business, and is critical to ensuring the price mechanism works. The price collar could bring confidence to those who are investing in a project that is relying on forest biomass waste which could improve the ability to obtain financing.

Christiana shared that two different firms can help the team better understand the insurance component. Willis Towers Watson (WTW) is under contract to determine where insurance products may help in the supply chain and to evaluate contract risk while another firm, Ecostrat, is in conversation with the Fall River RCD and may join to team to evaluate biomass development opportunity (BDO) zones, and explore underwriting and management of feedstock contracts by outside companies.

Christiana then reviewed the work that Economic Planning Systems (EPS) will perform to document the key objectives, strategies and preferred services and parameters of a potential RCD-led JPA and to evaluate the

merits and drawbacks of the different types of services a JPA could provide. EPS will also evaluate potential financing mechanisms that could be used to support a JPA (e.g., member contributions, tax increment financing, fees for service, grants and donated dollars).

Christiana finished her presentation by reviewing the team's next steps which include working with the RCDs to determine their shared goals, to determine the preferred funding pathways, to further engage industry leaders and local, State, and Federal Partners on the concept of a RCD-led JPA, and to eventually develop the JPA's foundational documents. She reviewed the expected timeline and stated that RCD members could take action as soon as May 2024 to create the JPA.

Christiana noted that dissolving a JPA has very clear steps which are outlined by the State and is not difficult to do.

Update on the Development of the Biomass Formula Rate Pricing Mechanism

Clarke Stevenson reviewed the preliminary work on the formula rate pricing mechanism, which is key component to feedstock contracts, as part of the broader work to explore establishment of a biomass aggregation entity. The mechanism would be a semi-public, transparent process that could help parties to understand expected biomass pricing which is a key factor when determining operation viability and entering into long-term contracts. A price mechanism could support guaranteed volumes for end users by establishing a limited range of feedstock price moderation within a long-term contract.

Clarke explained how the project intends to learn from wholesale energy markets, which have an extensive history of successful procurement of energy using formula rate contracts and price collars, as an example with the main difference being biomass feedstock is a physical asset. The formula rate contract is pre-approved and agreed upon formula, to which you add price collars, which limit the fluctuation.

The goal of his work is to develop long-term price commitments for buyers and sellers through a semi-transparent formula process, while the objectives are to: 1) validate the Forest Resource Renewable Energy Decision Support System (FRREDSS) model developed by UC Davis as a viable mechanism to establish long-term price forecasting, or adjust it or consider it in new ways, to facilitate long-term feedstock contracts, and; 2) to research best practices and designs for long-term feedstock contracts based on the wholesale energy, risk-hedging market designs. Through the formation of a focus group consisting of operators, foresters, and fuel procurement managers, we may find that the formula rate contract is not the best option.

The FRREDSS model provides preliminary economic benefit analysis: integrated optimization model to find break even costs for a facility using a number of elements in a harvesting cost model and transportation cost model. FRREDSS is the only publicly available model that exist to determine a 20 year cashflow for potential bioenergy facility sitings in terms of feedstock price sensitivities.

FRREDSS was developed by Professor Brian Jenkins and Dr. Boon-Ling Yeo at UC Davis. The model is intended to provide a preliminary feedstock availability assessment with economic environmental performance using an integrated optimization model to determine the break-even costs for the facility. The model integrates a forest biomass harvesting cost model, a transportation cost model, and Bioenergy Techno-Economic Assessment. The Fall River RCD team can use the FRREDSS model as a foundation to begin to explore a fixed price contract mechanism. He noted that the FRREDSS model currently covers a limited geography, with the northeast region

not yet fully completed. The UC Davis modeling team will be updating the model to include a larger portion of the state in addition to key recommendations from this focus group.

Clarke briefly reviewed the key inputs (facility location, forest treatment, harvest system, technology type and performance and financial factors), and stated that there are more than 50 possible inputs. He then demonstrated how to use the model; he input a facility location, assumed a 10 megawatt direct combustion facility, selected commercial thinning with chipping and whole tree harvest system, and updated the diesel and trucking prices to align with current regional costs. The model then projected the facility's 20-year cash flow including harvest and transportation costs based on feedstock inputs. Researchers have also generated sensitivity analyses of all of the forest treatment and harvest system combinations one could have and the biomass availability associated with each combination to show where a case study facility was not able to meet their feedstock demand. Clarke explained that the potential in a sensitivity analysis using the forest treatment and harvest system, the levelized cost of energy, and GHG emissions. Clarke stated that the FRREDSS model is not perfect and needs to be updated, but that it is promising and helps us to think about long term price contracting.

He then described how he plans to conduct a gap analysis to determine if the model is appropriate to validate the prices that are going to be generated by the model using a number of different sensitivity analyses. He compared the outputs with actual feedstock contracts and prices to see if the model is valid, or if it's missing key performance indicators. He plans to prioritize key inputs and outputs subject to contract negotiations and variables not subject to negotiation and consider which variables would trigger contract re-negotiation.

Following the sensitivity analyses, he will conduct focus group meetings to review and assess the model key performance indicators, then assess FRREDSS limitations and needs for improvement. Clarke briefly discussed the questions he plans to address, with the support of the focus group, including:

- What are the key characteristics of successful feedstock contracts?
- How should we be thinking of the impact of subsidies on price dynamics?
- How do we address the importance of timing of feedstock delivery versus guaranteed volume?
- How would an existing facility participate, given the parameters of the existing model?
- How to incorporate mixed feedstock intake (in-woods, sawmill, ag, etc.) or mixed product solutions?

He stated that key recommendations for the FRREDSS model update will be completed by the end of 2023, and that findings from the energy contract design research, interviews, focus group meetings and the FRREDSS sensitivity analyses by July 30th, 2024.

Clarke asked for participants to tell him why this model and pricing mechanism would or would not work. He is very interested in hearing your opinions on the beneficial or negative impact of this. Please email Clarke at clarke@thewatershedcenter.com if you would like to participate in the focus group.

- Elizabeth Betancourt: *Is this model setting the price or is it an information tool of what a fair price will be? Is this pilot going forward with the biomass analysis by Ecostrat and if so, would information from that analysis be informative for this tool?*
  Clarke: The model will help to inform what a fair price will be for the purpose of contract negotiation. Ecostrat is not yet involved; the RCD is in preliminary discussions with them. Ecostrat is developing biomass opportunity zones for biomass development across the nation based on a sophisticated model that which looks at how biomass supply can be at risk within a region and insurance credit.

- *Bob Hambrecht*: FRREDDS looks like it only models biomass electricity at this point. It will model other technologies, potentially allowing a developer to input their financial model into it?
  Clarke: Bioenergy is the only variable that can be used at the moment which brings up the question of how existing facilities can participate. Currently, one of the outputs is energy revenue required in order to fund a facility using the feedstock economics. One of my questions to the modeling team is, can we use energy revenue as a modelling constraint then feedstock prices sort themselves out?
- Chris Trott: *The delivered forest biomass costs in your example look about right. Can you explain why the projected costs go down over time? Historically they continue to increase in CA.*
  Clarke: I think that's due to the edge effect of the vegetation biomass extent. The model only assess vegetation for the Sierra Nevada, which stops approximately 20 miles outside of Old Station. The biomass raster layer that is being analyzed stops and prices took a significant plunge around 2025 but then after 2025, prices increase again.
- Lejohn Hamann: *Is the modelling for long-term feedstock price predicated on the guarantee on volume?*
  Clarke and Christiana: Clarke reiterated the question, what happens to the price if there is not a guaranteed volume? Then then the price collar and contract indemnification will kick in. Ecostrat has extensive experience with indemnification and may work on this in the future on this pilot.

Recap of Preliminary RCD Engagement

Sharmie Stevenson presented a summary of initial RCD outreach and engagement. She stated that originally the study team explored a JPA model consisting of counties, the City of Reading, and RCDs but the team discovered that model was not likely feasible so the team scaled back their approach to focus on RCDs. RCDs are non-regulatory special districts, made of local, residing volunteer directors.

The Fall River RCD is the grantee for the pilot project, however, that did not mean that the Fall River RCD automatically bought into the process. We presented the concept to the Fall River RCD Board who has since expressed support to pursue this.

We've met formally with the Fall River RCD board which consists of seven members, is based in McArthur and covers the Fall River Valley, with sections of Lassen, Modoc, Shasta and Siskiyou Counties within their boundary.

The team has also meet with the Pit RCD, Modoc RCD, and Western Shasta RCD. We've held an initial conversation with the Shasta Valley RCD, and also outreached to Honey Lake RCD and Lava Beds-Butte RCD. We hope to bring these RCDs into this process, if they are interested and operate within the Northeastern geography.

Sharmie went to review the potential benefits expressed by the RCDs.

- Mechanism to handle biomass waste on a larger scale
- JPA can utilize existing RCD resources and staff for a broader range of services to the public
- JPA can facilitate insurance to minimize risk for all parties
- JPA can pursue landscape scale funding for the entire region, which could improve competitiveness for larger grant funding opportunities
- JPA can own/lease equipment and infrastructure
- JPA will have all of the RCD authorities, which are many.
- JPA can provide workforce capacity to the USFS through the Intergovernmental Personnel Act

Sharmie explained that an RCD is not a non-profit but rather, a not-for-profit special district but has many of the same benefits. She went on to review the potential concerns expressed by the RCDs including:

- Who will be in charge of operating the JPA organization?
- How would the JPA structure be established to ensure that decisions made are fair for all?
- How does the JPA ensure that all RCDs contribute?
- What happens if the JPA fails completely?
- The JPA will compete with the RCDs
- JPA will regulate the biomass market
- How will the JPA attract employees when we the RCDs can't find them

Sharmie and Christiana further discuss concern regarding how to account for RCDs that are more active and that are already doing a lot of work versus those that are not. They explained that JPA the voting strata could be established to encompass this issue and can be amended over time to reflect changes in RCD capacity and work. The JPA enabling documents would outline all decisions related to control, voting, who contributes what. A RCD-led JPA could affect the market by contributing more biomass in a regular way, that does not compete.

Sharmie completed her presentation by identifying the next steps. She stated that the team will continue to outreach to determine the interest of RCDs who are just now engaging, they will work with RCDs to develop the goals and mission of the JPA, determine funding pathways, and develop draft foundational documents to form a JPA. Sharmie closed by stating that forest management is a collective responsibility.

Summary of Initial Feedback from Industry, State and Federal Partners, and Collaborators on a RCD-led JPA

Todd Sloat provided an overview of preliminary feedback received from other stakeholders on the concept of a RCD-led JPA. He highlighted the initial input from industry which included how the JPA could:

1) support existing facilities to secure the final volume of fuel supply required to operate (e.g., the 20%);
2) procure biomass in winter;
3) help to increase the pace and scale of biomass removal from federal lands;
4) offer long-term contracts that guarantee supply at a set price thereby reducing market volatility;
5) provide an opportunity to deliver a narrative to the public and policy makers make changes as the region sees fit, and;
6) provide deeper analysis into the development of a mixed product solutions. Right now, it's no surprise that projects are often times highly subsidized in order to remove biomass from the woods and to utilize it. The JPA could help to find more integrated product solutions.

Todd went on to review some of the concerns that were heard from industry including: 1) is the JPA even needed, given that the current market is working. Todd explained that the current market is working for most operational facilities, but for those trying to establish infrastructure the current market presents a challenge in that there is a significant hurdle to secure financing without long-term fuel supply agreements. Todd further explained that the reality is a project requires private financing to get off the ground, and; 2) the JPA may perpetuate facilities that continually require subsidies. This could negatively impact the current biomass market. He asked the group, if there is a product or a suite of products that that could be manufactured to help achieve financial independence.

The pilot project's federal and state partners have various degrees of involvement, depending upon location according to Todd. For example, he explained that the Modoc National Forest is working toward landscape level NEPA with its partners, with the expectation that the partner will implement the work and be responsible for moving large amounts of biomass over a long term. The partner could then use their procurement policy to establish a long term feedstock supply contract. Todd noted that federal and state partners have both invested an incredible amount of funding for fuel reduction projects and emerging technologies, and that the state is supportive to increase pace and scale.

Todd completed his presentation by reviewing feedback on a RCD-led JPA from other stakeholders including the Sierra Institute for Community and Environment, Golden State Natural Resources, Allotrope Partners, and the McConnell Foundation all of whom were supportive of the concept. Some entities, such as GSNR and Allotrope Partners, have been in project development and planning for several years and view this as an opportunity to potentially secure long term feedstock contracts. The McConnell Foundation has been a leader in this field, supporting numerous related projects.

Todd asked the group for any questions or comments on these general themes.

- Terrance Rodgers: *Is a RCD, as a subdivision of the state, limited in the financing it can procure or the amount of funding it can secure?*
  Christiana: RCDs are not limited at as a special district of the state as compared to a not for profit entity. The RCDs have quite a bit of flexibility in that regard.
  Elizabeth Betancourt: There was legislation last year that allows the state to contract directly with the RCDs which creates an opportunity for more robust contracting relationships and streamlines the process for RCDs to contract with the State.
- Terrance Rodgers: *Is it envisioned that there would be a small amount of the revenue off of the contracts that could go back to fund the JPA itself? Also, can RCDs issue debt?*
  Christiana: The revenue generated from contracts could be part of the financial package that would maintain and support the continuance of JPA. With regard to RCDs issuing debt, this is something we have to explore.
- Christ Trott: *Under Concerns, your first slide lists the potential of encouraging new businesses that perpetually need subsidies . But, a problem is that all the existing biomass energy plants need ongoing subsidies.*
  Christiana: Yes, comment noted and agreed.

Partner Activity: Consider JPA Mission, Goals and Objectives

Sharmie briefly reviewed the Mission Statements of the four RCDs who have expressed interest in exploring the possibility of a RCD-led JPA (the Modoc, Western Shasta, Pit and Fall River RCDs). She then listed the discussed possible activities the theoretical RCD-led JPA could perform including:

- Support the USFS to attain their forest management goals
- Own a mill, biochar or energy production facility
- Own or manage winter storage of biomass for existing and future businesses
- Lease equipment to small businesses
- Buy and sell biomass; enter into direct sales contracts
- Manage biomass supply contracts between third parties (avoid owning biomass)
- Support new small business with tools to avoid long term reliance on subsidies
- Bring in new grant dollars are larger scale, including serving as fiscal agents

- Advocate at state and federal level with consolidated regional voice
- Focus on community education, including for urban centers in California

Christiana explained RCDs cannot currently sell electricity, and that it would require legislative action in order to authorize RCDs to do so. RCDs can, however, own or manage biomass which, for instance, could help to address existing constraints related to moving product at certain times of the year.

The participants thereafter broke into six groups, with each group ranking the above-listed activities/goals and drafting their own mission statement for the JPA. The results are presented below.

The top identifiable goals, as listed below in order of priority were:

1. Support the USFS to attain their forest management goals
2. Bring in new grant dollars on a larger scale, including serving as fiscal
3. Advocate at state and federal level with consolidated regional voice
4. Focus on community education, including for urban centers in CA
5. Manage biomass supply contracts between third parties (avoid owning biomass)
6. Buy and sell biomass; enter into direct sales contracts

Stakeholder comments received with regard to, "**Support the USFS to attain their forest management goals**" included:

- This is a broad overlying objective because that is what everything else will support. This goal should be expanded to include other public and federal lands. If the primary goal is to protect communities and provide long-term forest management, we need to be talking about getting biomass off of public lands.
- We must focus most of the resources om the USFS because they have the least (resources). Treatment and biomass removal should be focused on USFS lands.
- The USFS has the greatest need. It is the best place to spend the money for the most benefit.

Christiana briefly discussed a recent study that evaluated job titles, classifications and how to best utilize local government and special districts to support the USFS. She asked the group what are the USFS jobs that could be filled to make a difference in how the USFS conducts NEPA or implements projects? Stakeholders responded:

- The USFS could use personnel support across the board for fire, fuels, and NEPA planning include resource specific jobs especially at remote locations. Small mountain communities are not a big draw for youth to come to work. More outreach is needed to local colleges could help to promote these types of jobs. As for "what"positions could make a difference, NEPA Coordinators and implementation positions are a high priority. Previously, the USFS fire personnel fought fire, then in offseason supported project implementation. There is conversation within the USFS currently surrounding developing and dedicating a portion of the fuels workforce to implementation. The USFS Region 5 has become a training ground for personnel, after which they move onto CALFIRE.
  Sharmie summarize this comment by saying the USFS needs higher paying jobs, work force housing, and more viable local communities including community amenities.
- The BLM field office encompasses five counties from Siskiyou County south to Butte County, which is covered by one forester who works with RCDs specifically to administer projects. The BLM NEPA team has programmatic environmental documents that allow projects to be readd to be contracted. When it

comes to staffing, BLM cannot geographically be present in all locations to lay out and administer projects so they rely on their partners (RCDs) to do so.
Christiana: The USFS may be able to replicate the BLM's processes.

Stakeholder comments received with regard to, "**Focus on community education, including for urban centers in CA**"

- It all goes back to funding. If voters do not know about the biomass issue, why should they care? It's all about marketing. It's hard to explain the biomass issue to an average citizen because it is very complicated. People care about reducing fire risk; we need to focus on biomass in terms of fire risk reduction.
  Christiana: Californians were asked a number of years ago to give $10 per year to maintain State parks which was not supported. People often disassociate from their natural resources. Recent wildfires have led to better recognition air and water resources.

Stakeholder comments received with regard to, "**Manage biomass supply contracts between third parties (avoid owning biomass)"**

- Biomass supply contracts are the foundation for new project development, and without them projects will not happen.
  Christiana: Third party contract management became a thing because of the Loyalton facility. The facility had over 30 fuel supply contracts whose management became untenable. Contract management could support an emerging or restarting business. Contract implementation and enforcement can be difficult.

Stakeholder comments received with regard to, "**Buy and sell biomass; enter into direct sales contracts**"

- This option seems like an impediment for new businesses entering the biomass utilization marketplace, from financial to operational.
  Christiana: The option could empower the JPA to do more, and increase its responsibility even if contracts were with existing businesses seeking just 10 to 15% of their biomass demands from the JPA.

Christiana asked each of the groups to read their mission statements or share key words they felt are pivotal to their draft mission statement. Responses included:

- **Support and promote existing infrastructure.** If infrastructure is viable and doing well, facilities will expand if there is an opportunity to do so.
- **To promote management of our natural resources to prevent catastrophic wildfires.** Key words identified were "management", "meaningful impacts" and "prevent catastrophic wildfires."
- No mission statement but key words/thoughts identified included the mission should be:
  - Based on **supporting public lands**
  - Expand and develop **more collaborative efforts, including with tribal councils**
  - **Support better coordination** between partners. Clearly define partner roles and responsibilities, and establish realistic expectations and timelines.
  - Expand the **capacity of public agencies**
  - Develop **public buy-in** and trust
  - Promote development of **third-party NEPA program**
  - **Promote the product** (biomass) to wide number of parties

- **Fix the forests. Don't burn up. Make more resilience communities.**
- **Support and foster biomass utilization. Be an advocate for biomass projects. Pursue grants in a consolidated way for the region as well as for individual partners.**
- **Implement forest and fire resilience in the northeastern region and rural communities, prioritizing fuel reduction efforts, biomass utilization, and transparent communication by the JPA.**

Christiana concluded the discussion by reiterating what she heard from the group, namely that the JPA could help people to better understand forest health and resilience and also wildfire, and that the JPA could support existing infrastructure in the region as well as look at opportunities for growth. The next steps are for the team to discuss these ideas with the potential JPA Board.

Partner Activity: Evaluate Potential JPA Funding Mechanisms

Christiana reviewed potential funding mechanisms that could support the JPA including:

- Seed money for implementation could come from any number of State agencies.
- We expect for there to be fees for services built into the model
- Higher value products, could help to fund the JPA as we see more demand.
- Public finance tools could be available to a JPA, can issue bonds or local govt. JPA can issue bonds even if it's member CANNOT issue bonds, this is the one specific power that is given to JPA.
- Dues is just showing skin in the game, but could be other mechanism that the RCDs put in to place. RCDs do not have a lot of funds to be able to contribute.
- JPA costs will have to be built into it.

Participants broke into small groups to address the following questions

What does the group think about a JPA earning money through owning infrastructure?

- Stay out of private industry's backyard. Potential situation where infrastructure (sort yard) is appropriate or needed. JPA could provide support to RCDs to own and operate sort yards.
- The JPA should not own infrastructure.
- The JPA could own infrastructure as a last resort. It should instead focus on priorities (supporting industry), then allow for the market forces resolve ownership portion.

What does the group think about parcel or sales fees through local voting measures?

- There should not be local tax but instead a statewide tax/initiative because forest management activities have statewide benefit for air and water resources. Rural communities struggle with local taxes just to keep the pool open or ambulance services available.
- Increased taxation for fire districts did not pass. This funding mechanism has, in essence, been tried and did not work.

What does the group think about nonprofit and foundation monies to support the JPA, such as a long term endowment?

- This is the best approach to try to get private sector funding. The JPA would possibly need to create a non-profit arm to be able to accept private foundation funds.
- Nonprofit or foundation funding would be flexible which is critical because typically the RCDs are involved in a variety of things in the supply chain and flexibility would be needed at times to support

work. Voluntary carbon market will be providing funding in the near term which can be significant amount of funding but he is not sure how long these will persist.

- Nonprofit or foundation funding has less pushback than the other options. If a foundation wanted to fund it, there may be more interest in supporting a collaborative of RCDs or the RCDs themselves directly which then brought into question the mission of the JPA. The JPA needs to first establish a mission, then identify funding mechanisms.

Christiana clarified that collaboratives are not legal entities, cannot enter into contracts, accept funds, or own property or infrastructure. The JPA would be a legal entity than can enter into contracts, accept funding, take out loans, etc. If the project study area is too big of a geography to fund, then foundations could fund specific activities or aspects of the JPA. She stated it is difficult to secure long term funding from the state or federal agencies because they cannot promise funds for an extended period of time. They can however commit to plans to support certain activities over time. The need to support existing infrastructure is not lost on the team while working on the pilot.

There was additional group discussion including:

- Alex Carter: *Out of the funding mechanisms, is there anything that only a JPA of RCDs can do that a RCD cannot do?*
  Christiana: They do the same things but the benefits of a JPA are the sharing of resources, larger scale grants and projects, working in one another's geography, having dedicated staff person, and the ability to take loans or issue bonds. The activities of the JPA would be separate and apart from that of the individual RCDs, which provides enhanced legal protection and risk management.
- Elizabeth Betancourt: *North Coast Resource Partnership was exploring formation of a climate resilience district. Is that moving forward?*
  Clarke: The Sonoma County Climate Action Coordination group is looking into forming a climate resilience district. They are a coordinating body to align climate action plans throughout the County, but have not expressed interest in working on forest health or wood utilization.
  Christiana: CLERE will reach out to them as part of the Central Sierra Cal FRAME pilot. A link to the group's webinar through The League of Cities is available here: https://civicwell.org/civic-resources/climate-resilience-district/ . This team opted not to pursue that model in this region because creating new districts tends to work more efficiently in more populated regions. The district would have to create new board which seems resource intensive in this region especially when we already have RCDs and Boards.
- Maureen Teubert: *RCDs are very different from one another culturally. Recent experience related to the forming of a collaborative of RCDs has shown to be hard. The pilot team will see the differences quickly which may inform the structure and function of the JPA.*
- Bill Buckman: *Can a JPA provide services for RCDs that they themselves cannot supply (e.g., grant writing)?*
  Christiana: Yes. The RCDs can also trade resources between themselves. JPA can achieve funding, then direct funding or resources to the individual RCDs and vice versa. A JPA is very flexible, a "legal Leatherman"
- Alex Carter: *It's easier to fund one entity, than three. If it can work, a JPA comprised of RCDs can be a viable option.*

Meeting Participants

Person	Affiliation
Alan Jacobson	Sustainable Resources Management
Alex Carter	McConnell Foundation
Andrew Mueller	Bureau of Land Management – online
Bill Buckman	Fall River RCD
Bob Hambrecht	Allotrope Partners/Anderson Biomass Depot
Boon-ling Yeo	UC Davis - online
Chris Katopothis	TBD – online
Chris Trott	CT Bioenergy - online
Christiana Darlington	CLERE Inc.
Clarke Stevenson	The Watershed Research and Training Center
Dan Blessing	Shasta Valley RCD
Doug Lindgren	Tubit Enterprises
Elizabeth Betancourt	Department of Conservation
Elliott Vander Kolk	SNC – online
Evan Watson	TBD - online
Frank Heide	Lassen NF
Galen Smith	Collins Pine - online
James Pitcher	Modoc Fire Safe Council
Jeff Manterach	Red Rock Biofuels - online
Jeff Oldson	Burney Forest Power
Jess Paoli	Bureau of Land Management
John Romena	Romena Consulting
Julie Allen	Fall River RCD
Laurence Crabtree	Golden State Natural Resources
Lejohn Hamann	USFS
Lorissa Soriano	Modoc RCD
Mark Rychlik	Allotrope Partners
Maureen Teubert	Western Shasta RCD
Michael Maguire	OPR – online
Mila Hadley	Modoc FSC - online
Reese Soriano	Modoc RCD
Regine Miller	Headwaters Environmental
Reuban Martinez	Modoc RCD
Sarah Bolnik	Golden State Natural Resources - online
Sarah Oldson	Cascade Resource Consultants- online
Sarah Seiler	Western Shasta RCD - online
Sharmie Stevenson	Fall River and Pit RCDs
Stacy Hafen	Modoc RCD - online
Stephanie Cox	Lassen NF partnership coordinator - online
Terrance Rodgers	Golden State Natural Resources – online
Tim Bailey	Watershed Research and Training Center - online
Todd Sloat	Forest Creek Restoration
Tuli Potts	Sierra Nevada Conservancy