A SNAPSHOT OF LEGAL TOOLS FOR GOVERNMENT ENTITIES TO INCENTIVIZE UTILIZATION OF FOREST BIOMASS IN CALIFORNIA

California's forests are fraught with an abundance of dead trees, brush, and small wood materials that require removal to reduce fire risk and improve forest health. However, efforts to utilize this woody waste for wood products and bioenergy have been hindered by the difficulty in securing long-term access to these materials. The uncertainty of continuous supply makes it challenging for projects to attract necessary funding, as lenders and investors often look for assurances of at least a ten-year feedstock supply before committing to such ventures.

In 2021, the OPR received $3 million from wildfire resilience funds, allocating $2.5 million for Cal FRAME to fund 5 long-term wood feedstock pilots across the state. The goal of these projects is to enhance feedstock logistics and market opportunities for biomass availability through structured, resource-backed contracts. In an innovative attempt to address these challenges, the concept of the California Forest Residual Aggregation for Market Enhancement (CAL FRAME) aims to establish biomass supply management entities that would manage and streamline the biomass supply chain. These entities are designed to facilitate the interaction between landowners, suppliers, and buyers, ensuring a steady and reliable flow of biomass materials. The Tahoe Central Sierra CAL FRAME Pilot Project, spearheaded by the Placer County Water Agency, has been exploring the viability of such an entity in the Tahoe Central Sierra region, encompassing Placer, Nevada, and El Dorado Counties.

The proposed solution involves creating a structured system that can negotiate and maintain long-term contracts between biomass suppliers and those who wish to utilize these materials, thereby satisfying the financial and operational prerequisites of lenders and investors. By doing so, these biomass supply management entities could play a crucial role in advancing forest resilience projects, supporting both the economic and environmental sustainability of the region. The establishment of these entities represents a hopeful stride toward overcoming the financial barriers that have previously impeded the development of infrastructure to manage and utilize forest biomass more effectively.

Could a JPA improve Forest Biomass Feedstock Supply Chains?

The proposal to use Joint Powers Authorities (JPAs) to enhance forest biomass feedstock supply chains targets creating a more efficient and financially viable system for managing forest residues, particularly in high wildfire risk areas. The effectiveness of JPAs in this context relies on aligning incentives, hedging long-term risks, and securing robust participation from key stakeholders, including federal land managers. The non-profit nature of JPAs, coupled with voluntary participation and the aim not to displace existing businesses, offers a unique advantage in fostering government partnerships for forest management.

One of the persistent challenges in biomass utilization is that new businesses cannot get financing because they do not have the ability to obtain long term feedstock contracts. A new contract management system that includes insurance or bonding for contract failure would go a long way in making new businesses bankable. A Publicly Managed Price Mechanisms and Contract Management could be provided by a JPA, which could play a critical role in bridging the gap between supply and demand for forest biomass. By managing negotiations and contracts, JPAs could facilitate longer agreements and ensure price stability through mechanisms like formula rate contracts and price collars. This approach would mitigate risks for both suppliers and buyers, encouraging more sustainable forest management practices. The potential for JPAs to provide indemnification and innovative insurance solutions could address significant barriers to long-term contracts, enhancing business confidence and financial viability. Insurance pooling and other innovative techniques could offer a way forward, reducing risks associated with supply contracts and enabling broader participation in biomass markets.

Additionally, JPAs could offer a range of services to support forest health programs, including environmental review, business support, and equipment leasing. These services could address many of the challenges faced by landowners, forestry professionals, and wood product businesses, facilitating more effective biomass removal and utilization. This comprehensive approach, integrating financial, contractual, and support services, outlines a promising pathway for improving forest biomass feedstock supply chains and advancing forest health and resilience.

Draft Model Entity Approaches for the TCS Region

The exploration of Joint Powers Authorities (JPAs) in the Tahoe Central Sierra (TCS) Region identifies four main approaches for establishing a new JPA focused on biomass aggregation. These models are evaluated based on their potential funding sources, advantages, and disadvantages.

Watershed Authority JPA involves counties, cities, and water agencies, drawing inspiration from the Upper Mokelumne River Watershed Authority (UMRWA). It is funded through state grants or local contributions, leveraging the existing relationships and expertise of water agencies in forest health projects. Despite the potential hesitancy and capacity issues among water agencies, this model promises dedicated management for planning and implementing forest health and wildfire risk reduction projects.

State Agency JPA proposes collaboration among state conservancies, local agencies, and possibly creating a new entity to support biomass utilization through a fee-for-service model and subgrant programs. It aims to align with the state's interest in resilience hubs, offering a structured approach with dedicated staff. However, concerns include potential bureaucratic challenges and community buy-in for a state-run entity.

State Agency Joint Powers Agreement (without entity creation) suggests amending existing agreements to include more members and services for biomass aggregation. This approach could expedite the process by utilizing existing frameworks and shared financial resources, albeit without dedicated staffing for the goals and maintaining the risks and liabilities for the agencies involved.

Three County JPA with Select City or Special District Partners focuses on regional service provision, mimicking successful models from other sectors. It could streamline local control and lead to innovative solutions like municipal green waste disposal systems. Challenges include securing participation from cities or special districts and coordinating existing programs across counties.

Wildfire Prevention Authority JPA would focus on fuel treatment activities and biomass utilization, potentially funded through taxes or grants. While promising for vegetation management and home hardening, adapting this model to the TCS region requires careful consideration of funding mechanisms and the role of local fire agencies.

Relevance and Sociopolitical Considerations of Each Proposed JPA Approach to the TCS Region

Approach A suggests creating a Watershed Authority JPA for the TCS Region, focusing on feedstock aggregation from forest health treatments in federal forests and higher elevation areas, leveraging the experience of local water agencies in JPAs. However, this approach risks duplicating existing efforts by various groups already working on forest health in the region and could introduce additional bureaucracy, potentially delaying responses to regional needs. Despite these concerns, the model has sociopolitical appeal due to the region's familiarity and past successes with UMRWA in accomplishing forest restoration in nearby counties.

Approach B considers a State Conservancy JPA or Joint Powers Agreement, leveraging the Sierra Nevada Conservancy (SNC) and Tahoe Conservancy (CTC), which are already engaged in the TCS region through initiatives like the Tahoe Central Sierra Initiative. This approach would utilize existing relationships and the conservancies' roles in leadership and resource distribution to serve the region effectively. However, there are concerns about the acceptance of a state-run JPA by TCS residents, potential inefficiencies in delivering localized services, and the bureaucratic complexities involved. Additionally, implementing this approach necessitates persuading state agencies and their boards to adopt this role.

Approach C advocates for a County-City JPA, aiming for a region-specific solution to feedstock aggregation and forest restoration, promoting public-private partnerships with a focus on transparency and functionality. This model is highlighted as potentially the most suitable for offering municipal green waste services and could include support for insurance tools, addressing a known barrier to biomass utilization. Despite its advantages, there might be skepticism from local residents regarding the trustworthiness and effectiveness of local government in managing these environmental challenges.

Approach D proposes establishing a Wildfire Prevention Authority JPA, likely comprising fire districts and potentially CAL FIRE, to focus on fuel reduction in high-risk foothill areas. Funding challenges include the need for sales or parcel tax approval by voters, with lessons from Nevada County's failed Measure V highlighting the importance of clear, legally bound funding for wildfire mitigation and the risks of general sales tax increases. In contrast, Truckee's successful Measure T, a special tax for fire prevention, indicates voter support for well-defined, directly beneficial wildfire prevention measures. Implementing a Wildfire Prevention Authority in the TCS Region would require careful tax strategy, voter communication, and strong involvement from local fire agencies to ensure success.