Comment delivered during Grass Valley City Council meeting on February 25, 2025.

Good evening, my name is Jonathan Keene. I'm reading a comment from David Brownstein because he couldn't make this meeting.

Tonight, I'd like to discuss biomass burning and how biochar production is related. There are a few different ways of processing biomass fuels:

1. Pile burning. This is the simplest, easiest technique. Used to remove flammable materials, it doesn't require transporting material either to or from the site. This technique unfortunately produces the most smoke, the greatest amount of particulate matter, and typically releases the most greenhouse gases.
2. Air curtain combustion is a more sophisticated way of burning large amounts of biomass. The processing unit can combust fuels in a cleaner fashion, reducing particulate matter, and can capture some of the carbon in the final product, thus releasing less greenhouse gases than pile burning. Biomass is typically transported to the site of the production unit, and the resulting carbon product must be removed from the site.
3. Biomass energy production uses a variety of methods to generate power or heat, and many of them are also used to produce biochar and bio-fuel products.
4. Biomass conversion to biochar typically uses pyrolysis rather than combustion to produce biochar. Pyrolysis is heating of the biomass without oxygen being present, whereas combustion requires oxygen. Biochar production primarily utilizes pyrolysis and can typically convert about 65% of the biomass carbon into biochar.

When any form of biomass processing project is adopted, we the public want to know that the city has worked with the Northern Sierra Air Quality Management District to completely realize the air quality impacts. These impacts include:

1. the quantity and properties of particulate matter emitted,
2. the amount of greenhouse gases that will be released,
3. the quantity and impact of thermal emissions, and
4. the impact of transporting material both to and from the site.

We want this information to be publicly shared. To be clear, we're advocating for a public, transparent process.

We believe that fuel reduction in our forests can be done sensitively to improve the health of our forests and reduce the risks of wildfires. We also believe that biochar production can be used beneficially to sequester carbon. There are a lot of details that need to be executed correctly for these goals to be met. We look forward to working with the City and County to ensure our shared goals reach fruition.

Thank you for your time and consideration.