

January 13, 2023

Tim Lahey, District Ranger
Butte Ranger District
1820 Meadowlark
Butte, MT 59701

Dear Tim,

On behalf of the National Center for Appropriate Technology (NCAT), I'm pleased to submit comments in support of the proposed Basin Creek – Butte Watershed Project.

NCAT has been helping people build resilient communities through local and sustainable solutions that reduce poverty, strengthen self-reliance, and protect natural resources since 1976. NCAT is a trusted, practical connector for individuals and businesses who are working to leave our world better than we found it. Based in Butte, Montana, NCAT has staff across the country in 11 states.

As an actively engaged member of the Butte community, we share the project goal of protecting our municipal water supply from pollution and the risk of catastrophic fire. We appreciate that you are planning to conduct this project without new road construction. We fully embrace the goal of reducing intensity of wildfires and increasing fire suppression effectiveness to improve protection measures for the surrounding communities and key municipal watershed infrastructure.

Butte is fortunate to have excellent quality water due to investments in infrastructure and the careful management of the three watersheds that supply our water. We also recognize that these watersheds are vulnerable to the impacts of the climate crisis, including hotter, drier summers, increasing drought conditions, and the risk of catastrophic wildfire, all of which will increasingly be punctuated by more intense precipitation events and extreme weather driven by a warmer atmosphere. This project will help our community and USFS adapt to changing climatic conditions.

We ask you to evaluate the potential to utilize treated materials for merchantable use. For example, some of the dead standing lodgepole might have value as house logs. Forest contracts could specify that merchantable logs should be decked and available for sale through a roadside auction. However, the focus of the forest contract should be stewardship and fuel treatment, and any sale of merchantable timber should be conducted separately. No one is under the illusion that this project could pay for itself.

We also ask you to seriously explore the feasibility of producing biochar from excess biomass as an alternative in some places to pile burning. From a climate perspective, we would prefer to see the enormous amount of carbon in these excess fuels to be converted to recalcitrant carbon in the form of biochar rather than carbon dioxide released into the atmosphere. Biochar production options could include mobile units and scattering of biochar on the forest floor. We also ask you to explore transferring green and dead biomass to the Basin Creek Water Treatment Plant to generate power for the treatment plant and produce residual biochar for application to agricultural lands or toxic metal

abatement. One technology for this latter option is the Air Burner PGFireBox 100KW - <https://airburners.com/products/pg-firebox/pgf-100/>.

As part of your evaluation of biochar feasibility, please consider that biochar production technologies will allow for a longer window of burning/pyrolysis than you often experience for open slash pile burning. We are aware that some years there may be only a few days in which it is safe and healthy for open burning in an environment such as Basin Creek. Biochar production might provide longer periods in which biomass may be removed as a fire hazard.

We appreciate that USFS is taking on this project, in cooperation with Butte Silver Bow, and we are pleased to support the purpose, need and proposed treatments.

Best regards,

A handwritten signature in blue ink that reads "Steve Thompson". The signature is fluid and cursive, with the first name "Steve" and last name "Thompson" clearly distinguishable.

Steve Thompson
Executive Director