



PROJECT SUMMARY

DESCRIPTION

Golden State Natural Resources (GSNR) is a forest resiliency program with a mission to enhance the quality of life, public safety, economic development, and the environment in California— creating fire resilient landscapes and fire-adapted communities. GSNR’s main directive is to reduce excess natural materials in California forested areas using best practices as part of an overarching strategy to build wildfire and forest resilience in the state and spur economic opportunities in rural communities. Forest materials will be sourced from forest thinning projects and sawmills, processed into a pelletized fuel product at revitalized facilities in rural California, and exported to international markets. Over time, GSNR intends to produce additional high-value products as markets and commercially deployable technologies mature.

GSNR provides a unique opportunity to restore forest health, revitalize the wood products market, and reinvest in rural communities. GSNR will bring local economic and ecological benefits while also supporting broader state and global carbon emissions and climate resilience goals.

BACKGROUND

Golden State Finance Authority (GSFA) is a governmental entity that has led numerous project financing efforts within California since its creation in 1993. GSFA established GSNR, a California public benefit corporation and IRS Section 501(c)(3) nonprofit organization, as a forest resiliency and economic development program. Through this program, GSNR will remove excess fire fuels from overgrown stands and provide an outlet for material removed by other forest management entities. In addition to strategically treating forestland, this program will utilize excess from orchards and sawmills, preventing it from going to waste or being burned. Employing this wood utilization strategy contributes to conservation efforts that provide California with clean air and water.

California’s forests are facing new and catastrophic threats, such as longer fire seasons, drought, invasive species, tree mortality, climate change, and the consequences of a century of unnatural fire suppression. Conditions are changing more rapidly than nature can self-correct. The result is overgrown and under-managed forests that have led to an excessive amount of fuel to burn when a fire ignites. This accumulated fire fuel presents a growing danger to life and property, and our state’s natural resources.

In response to this issue, GSNR’s program will remove excess woody biomass from California forests and then transport the woody biomass to pellet processing facilities. The finished wood pellet product would be transported to contracted offtake markets, mainly targeting the international power market due to large and increasing demand for industrial wood pellets, in the place of coal, to meet climate change carbon reduction goals.

California is uniquely positioned for this program. The state has among the highest resource concentration of low- to no-value forest vegetation in the Western U.S. Additionally, California has a significant geographic advantage for overseas transport to international markets since most U.S. wood pellet manufacturers are in the southeast portion of the country.

In October 2019, GSFA executed a 20-year Master Stewardship Agreement with the US Forest Service for the purpose of achieving resilient forests within US Forest Service Region 5, which includes all the eighteen national forests located in California. As part of the proposed project, GSFA and GSNR will implement a public-private partnership allowing GSNR to undertake forest thinning and fuel reduction activities in accordance with the Master Stewardship Agreement, utilizing the resulting materials for pellet production.

OBJECTIVES

GSNR's forest resiliency program is designed to be consistent with the following objectives:

- Reduction of accumulated fire fuels as a source for wildfires, resulting in enhanced forest resiliency to drought and other natural destructive forces, reduced fire risk and improved air quality.
- Restoration of natural watersheds and healthy forests resulting in enhanced water quality.
- Wildlife habitat improvement.
- Climate benefit from enhanced carbon sequestration and reduction of CO₂ and black carbon emissions as well as massive amounts of criteria pollutants resulting from catastrophic wildfires.
- Revitalization of wood product industry and wood product innovation in rural California resulting in jobs, infrastructure improvements, investment, and stronger local economies.
- Enhanced public safety for residents, visitors, communities, and infrastructure.

BENEFITS

Forest Resiliency and Community Health and Safety

Removal of accumulated fire fuels reduces the potential for catastrophic wildfires in California. This protects rural communities, property, and the health of watersheds and wildlife habitats that surround them. Reducing fire fuels also benefits all Californians by eliminating smoke-related air quality issues that impact residents throughout the state.

GSNR's program aligns with the state's goals for forest and wildfire resilience. California and the USFS are working to increase the pace and scale of its forest treatment efforts to 1 million acres. The State aims to reach this target through a set of goals outlined with the Governor's Wildfire and Forest Resilience Action Plan that was released in January 2020. The GSNR initiative was launched prior to the State's action plan and treated acre's goal. It provides an innovative solution that aligns with the State's key actions by directly investing in rural communities, protecting public safety, creating recreational opportunities, improving wildlife habitat and watersheds and increasing carbon sequestration.

Environment

The California Air Resources Board (CARB) is in the process of quantifying impacts for wildfire smoke often referred to as black emissions. The emissions, while still not fully understood, are the second-highest carbon emission source behind cars. And more specifically, forests and woodlands represent the largest contributors to annual wildfire CO₂ emissions as these landscapes exhibit higher fuel loads than lands dominated by shrubs or grasses. GSNR's program focuses on how to reduce wildfire risk, which in turn will reduce wildfire emissions that put reaching California carbon emission goals at risk.

Rural Infrastructure and Economic Development

GSNR aims to contribute to the revitalization of the wood products industry and promote innovation in rural California, resulting in jobs, investment, and improved economies. GSNR is a long-term scalable program that will provide local economic and ecological benefits that will have state and global impacts.

Each of GSNR's pellet processing facilities will support approximately 55 stable, skilled jobs in rural counties. GSNR intends to partner and contract with trade organizations and industry businesses to perform pre-planned, best practice forest treatments and to transport the woody biomass to the processing facility, providing for additional jobs and economic development. Additionally, GSNR plans to partner with community colleges to train or upskill local students to perform in forestry and transportation jobs and will promote the expansion of broadband infrastructure to nearby rural communities.

PROGRAM OVERVIEW

GSNR's program can be broken down into three primary phases:

1. **Utilize excess fire fuels:** GSNR will help make California forests safer and healthier by removing excess fire fuels from overgrown stands and providing an outlet for material removed by other forest management entities. In addition to strategically treating forestland, this program will utilize excess from orchards and sawmills, preventing it from going to waste or being burned. Employing this wood utilization strategy contributes to conservation efforts that provide California with clean air and water. The excess fire fuel is then transported by truck to the wood pellet processing facility or an aggregation, distribution and/or sales yard for utilization by another wood processing facility.
2. **Produce industrial wood pellets:** GSNR will create much-needed stable, skilled occupations in California rural communities in the supply chain and at rehabilitated facilities that will convert excess fire fuels into wood pellets to be used as an alternative energy source to coal. The fire fuels will be received at two GSNR-owned wood pellet production facilities to be in the Northern California (Lassen County) and Central Sierra (Tuolumne County) regions. These two sites have been obtained by GSNR with development plans underway.

3. **Market pellets:** GSNR will help stimulate California's rural economies and fund its own operation by selling industrial wood pellets to international markets for renewable energy generation in replacement of coal. The finished pellets will be loaded onto rail cars for transport to a dedicated purpose-built terminal at the port of export. At the terminal, the pellets are unloaded and stored in large domes, where they are continuously monitored before being loaded into dedicated cargo ships for delivery to international energy markets.

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