



August 2, 2011

Sugar Pine Foundation
1458 Mt. Rainier Drive
South Lake Tahoe, CA 96150

Dear Truckee Airport Board of Directors,

The Sugar Pine Foundation is requesting \$4,000 to conduct a planting of 1,000 sugar pines at Waddle Ranch. The planting will enhance forest health in the area by restoring the forest composition in previously disturbed areas by logging and fire suppression. Moreover, the project will provide an opportunity to educate and involve local students and their parents in hands-on planting and forest stewardship.

Looking forward to your response,

Maria Mircheva
Executive Director
Sugar Pine Foundation
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Organizational Background

The Sugar Pine Foundation (SPF) was founded in 2004 to locate white pine blister rust resistant seed trees and propagate their seedlings to restore white pine populations in the Tahoe region. White pine blister rust (*Cronartium ribicola*) is a non-native, invasive fungus that kills over 95% of white pines that it infects. Sugar pines, western white pines and whitebark pine are currently threatened by this epidemic in the Tahoe region. Fortunately, approximately 3-5% of sugar pines possess a natural genetic resistance to the fungus. Restoration of these vital species entails planting trees that have a natural ability to tolerate the presence of the fungus.

In collaboration with the US Forest Service's Blister Rust Program, the SPF identifies resistant "seed trees," harvests their seed, and conducts community plantings to propagate their progeny throughout the Sierra Nevada. Indeed, planting resistant white pines is a way to ensure that Truckee's forests, wildlife, watershed health, and recreational and scenic benefits will remain intact for generations to come.

Justification of Project Need

The proposed planting would enhance forest health on about 20 acres of thinned forest in Waddle Ranch by reintroducing native sugar pines back into the area. The forest around Truckee formerly consisted of approximately 25% sugar pines. It was clear cut in the late 1800s and it was subsequently managed for grazing and logging. It grew back as an even-aged Ponderosa and Jeffrey pine forest with sugar pine only on rocky hilltops and other locations with difficult access. Fire suppression through the 20th century allowed an unnatural accumulation of forest fuels, but in 2010, a big part of the forest in Waddle Ranch was thinned. This treatment allowed some light on the forest floor and is the perfect condition to plant sugar pine seedlings. Planting is proposed near the existing stand of sugar pine in Treatment Unit 2, in order to allow pollen exchange between the existing and planted sugar pines. Pollen exchange will increase the genetic diversity of the future seedlings and increase the frequency of blister rust resistance among them. Adjacent plantings are recommended in future years all the way down to tree line to restore the sugar pine population at Waddle Ranch.

Planting resistant sugar pines that can tolerate the presence of white pine blister rust is critical to sugar pine survival, forest stand diversity, forest health and therefore wildlife habitat, and watershed health.



Project Description

The SPF proposes a planting with about 40 high school students from the Envirolution Club at Truckee High School. The SPF will work with Sierra Watershed Education Partnership (SWEPE) to organize and carry out the student activities. Besides planting, activities may include plant species identification, tree measurement and tree stump observations. The planting will likely take place in October or early November, depending on weather conditions and school schedules. The SPF will provide one-year-old blister rust-resistant sugar pine seedlings, tools, and planting instructions for volunteers. Some parents with higher clearance vehicles can help transport the students. The airport 12-passenger van may be needed to transport the rest of the participants.

Participants will learn about forest health, fire ecology, and the need for proactive forest management. Moreover, they will benefit from the joy of digging in the dirt to plant trees that will ensure the health of their local forests and benefit their community for generations to come.

Budget

1,000 Sugar Pine Seedlings	2,000
Project Management (50 hrs.)	1,500
Planting Materials and Tools	400
Staff Gas Mileage	100
Total	4,000

References

Bob Duffield, Chinquapin Property Manager, 530-400-3676 cell, eduffield@yahoo.com
Planting of 400 seedlings on Homeowners' Association land with the 6th graders at North Tahoe Middle School in October, 2010

Scott Conway, Vegetation Management Officer, Truckee Ranger District, (530) 277-3010 cell, sconway@fs.fed.us
Planting of 450 seedlings on Forest Service land near Alder Creek Rd. with the 6th graders at Alder Creek Middle School in June, 2011