



Tahoe Expedition Academy

Request for Raley's Funding
for TEA Eco-Club Greenhouse

2020/2021

Prepared By:

The Earth Warriors,
TEA Environmental Club

Prepared For:

Raley's Supermarkets

Our Story

When the Eco Club first thought of the idea of a greenhouse, we were imagining a permanent structure. We proposed this idea to our Program Director (Mara Jenkins) and she explained that this was not attainable, as it did not align with TEA's plans for the future. As a result, we went to a Starbucks and began working on a solution. After being close to giving up, we thought of a new idea: a mobile greenhouse built upon a trailer. Later in the week, we pitched the new concept to Mara and she passed it, excited that we hadn't given up on the idea of a greenhouse. A couple of days later we pitched it to our Facilities Manager (Brian) and he approved it as well. From there we began networking with TEA parents along with an array of experts specializing in everything from engineering to sustainable gardening.

Who the Greenhouse Will Support

We want the greenhouse to be open to the community. Food from the greenhouse will be served to students, but also donated to local charities. Both the upper and lower school will be able to utilize the greenhouse for learning purposes, and they will be able to plant any greenery they would like. During the summer, students from Tahoe Summer Camps will care for the plants, mastering gardening skills throughout their week at camp.

Finance

The general price estimate is \$9k for the build, based off of other mobile greenhouses. We have connected with multiple businesses and an engineer for expert help. We have a solid list of charities and a few parents interested in donating. We will be managing all of our own funds through TEA.

Design

So far, we have a concept design that proves to be cost efficient, snow-proof, road capable, easy to manage, and sustainable for plant life. To ensure our design is possible, we have met with a TEA parent and engineer. Furthermore, for student involvement, the 6th grade teacher (Alison) has had the kids sketch out some blueprint ideas to offer us inspiration. We are currently searching for a trailer for the base of the greenhouse. Our plans indicate a hydroponics system with self watering and solar power for heating in the winter.

Build

The build will take place on the TEA campus. Ideally, with around 6-10 people working on it we could get the initial project done in a day or two. The environmental club will be facilitating the build, but we will still have teacher/volunteer/expert help for some of the more complicated parts.

Maintenance

Maintenance is the last crucial step. During the school year, the environmental club and classes that might be working with the greenhouse will be caring for it. The general rule will be that if you are interacting with it, your job is to help take care of it. After all, this is a communiTEA project. Ideally, it can handle most snowfall, so the greenhouse will survive snow days, however, if we are expecting a big storm, we will be able to move it to an area that won't be hit as hard. Summertime is another issue. Our primary maintenance party would be Tahoe Summer Camps. Camps like Little Incredibles and Art and Adventure, who would be working with it once a week, would help to maintain it. During the periods of time where the summer camps will not be able to care for it, we will have volunteers from the Eco Club take over.

Our Progression

Once the proposal was passed, everyone was elated. The club began sending emails to everyone we could think of that would be of some help, including a post to all of the TEA parents. Since then, we have partnered with many experts. First, we found our teacher mentor, Alison Levin, who helped us frame an initial plan. Next, we met with Erin Broomhall, a TEA parent and engineer to help with the design aspects. We have had a post sent out by CATT, an association of contractors who help donate materials to causes, and from them, have already had email offers from companies hoping to send us wood and other supplies. TAP, which is the parent association at our school, is helping with fundraising through events and auctions they are holding. Finally, we plan to tour the greenhouse at Mountain View Montessori for any additional ideas we may need. Future plans include partnering with Urban Roots, a non-profit in Reno that encourages education on healthy eating and lifestyles. We have already talked with a few members from this group and they are very excited about our idea.

Outcomes and Benefits

The greenhouse will provide a source of local greens, vegetables and maybe even fruit and berries. With four or more planter boxes, plus hanging plants, the greenhouse will produce enough food for both students to enjoy and for us to donate. Earlier in the process, we reached out to Tahoe Food Hub, but they had too many projects going on in the moment to help us. However, they did say that once we have the initial build completed, they would be happy to help with the gardening process. Urban Roots is another group that has volunteered to help with education in the greenhouse. They have a summer camps curriculum about growing food in Tahoe and healthy lifestyles that they have offered to share with our group. We would also like to connect with project Mana for outreach and a resource to donate our produce through.

Timeline

- 11/22/19 // our idea for a mobile greenhouse comes about
- 12/11/19 // we propose the idea to Mara and Brain and they passed it
- 1/14/20 // we have a meeting with Alison Levin to discuss beginning stages
- 1/17/20 // we have a meeting with Erin Broomhall, a TEA parent and engineer
- 1/22/20 // we have a meeting with TAP (TEA Association of Parents) group
- 1/28/20 // we present at the public, all-school, TAP run parent's meeting
- 11/28/20 // we showcase our idea at the Highschool Film Festival night
- 2/11/20 // our concept design is finished by Eco-Club students
- 2/11/20 // CATT (Contractors Association of Tahoe-Truckee) sends our proposal out to numerous local construction companies for any material donations
- future plans (very broad) --
- 2/26/20 // greenhouse tour at Mountain View Montessori
- 2/28/20 // we choose and purchase the trailer
- 3/27/20 // we finalize any last materials needed
- 4/19/20 // the greenhouse build commences
- 5/9/20 // we began planting the greenery in our greenhouse

Concept Design

