

**BUDGET PROPOSAL CONTACT INFORMATION**

Department Name: UWT Giving Garden

Create Date: 04/21/2021

Due Date: 05/14/2021

Submitter Name: James Gawel

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Phone Number: 2536512573

Department Head Approval:

Department Head: James Gawel

Requested Amount: **\$26,493**

**Departmental Information**

**SPECIAL ALLOCATIONS - CRITERIA**

The Giving Garden is requesting funds for capital expenditures for the purchase and installation of a solar electric system to be installed on the SHED (Sustainable Hub for Education and Demonstration). The solar panels would expand the capabilities of the garden as there is currently no power source available on location. Tools used in the Giving Garden (cultivator, mower, trimmer, drill, etc.) all utilize rechargeable batteries, however the batteries must be charged in and transported to and from the Science Building. This requires additional time from the garden staff that could be used for work in the garden otherwise. Garden staff were recently requested and have agreed to put additional effort into maintaining the garden grounds with regular mowing and trimming, which would require even more trips back and forth across campus. As this proposal is for one-time funding and the additional need for a power source on-site was only recently recognized, it fits the criteria for the Special Allocation process.

With this funding, the garden will be able to move forward with the vital work of producing fresh produce for food-insecure students at UWT. Having solar power in the giving garden is essential for the productivity and usability of the Giving Garden for years to come. Outside funding for an irrigation system received by the Giving Garden will require power for the controller which is currently unavailable without this system. In addition, future addition of Wi-Fi to the garden will also require power. The cost for running electrical utilities to the Giving Garden would cost more than the solar power system requested here and require monthly utility payments, so this system is preferable and necessary for the Giving Garden to function at a high level.

**STUDENT UTILIZATION**

Solar power will be used to:

(1) Recharge tools right at the garden inside the SHED (Sustainable Hub for Education and Demonstration). This will enable increases in worker efficiency and watering efficiency, increasing the production of food for UWT students.

(2) Provide power for irrigation controls that reduce student visits for watering and monitor watering for optimal water use. This will further improve yields from the garden and increase food supplies for the UWT Pantry.

(3) Provide the first step to our goal of installing Wi-Fi access for students and staff in the garden space. We hope to provide UW Tacoma students with a safe greenspace where they can study and conduct research projects. With the addition of Wi-Fi access at the garden students and classes would be better equipped to conduct research on sight with the ability to use electronic devices. Wi-Fi hookup costs are not included in this proposal, but will be requested in a future funding request; solar power is required to make this possible.

(4) Increase the Giving Garden's potential use for classes and capstone projects requiring technology. Ex. A solar power demonstration project for students interested in sustainability, science, and engineering.

**SPECIAL ALLOCATIONS - STATEMENT OF ASSURANCES**

UWT Facilities Services has already expressed strong support for installing solar power in the Giving Garden. There are multiple installers and vendors (SolTerra, South Sound Solar, SunWize, SunsEye) in the Tacoma area, and we have already talked to them about our needs. If funded, we will schedule on-site visits with at least two vendors to get final quotes. The SHED roof is installation ready and the system can be installed quickly after UWT final approval of the specifications submitted. Once the solar panels and power storage system are installed we can begin utilizing them immediately.

**SERVICE BENEFITS TO STUDENTS**

The Giving Garden supports our students by fighting for food security on campus. Specifically, the Giving Garden can strengthen persistence to graduation for all student populations by addressing the issue of food insecurity and the challenges it presents to our

perseverance to graduation for an student population by addressing the issue of food insecurity and the challenges it presents to our students in their studies. Along with this, the Giving Garden provides a range and depth of opportunities for service learning and educational events around agriculture and sustainability.

In 2020 the Giving garden donated 172 lbs of produce to the UWT Pantry. We expect to see this number rise significantly with the addition of new garden beds, more fruit trees, and the newest addition of our greenhouse. This project will improve the amount of food production by increasing efficiency and allowing irrigation control.

On top of food production, the Giving Garden is a great space to educate the community about farming. Older projects include educational opportunities for middle schools, environmental classes, business classes, capstone projects, and marketing campaigns. With the addition of solar electricity to the SHED we envision many more projects and collaborations for the future.

## Staff Budget Requests

Category	Details	Amount Requested
	PERSONNEL TOTAL:	\$0

## Other Budget Requests

Category	Details	Amount Requested
Contracted Services	Purchase and installation of solar power and battery storage system for the UW Tacoma Giving Garden SHED. An initial estimate from Unbound Solar includes: 1.92 kW 6-Panel Heliene Off-Grid Solar System \$7,254.00 Discover Battery 220AH w/ Xanbus 5,600 Wh Lithium Battery Bank \$7,098.00 Flat Rate Shipping: \$299.00 for solar system Freight Delivery: \$343.44 for battery system Taxes: \$1498.94 Installation, permitting, and project management by UWT Facilities Services: \$10,000 S001	<b>\$26,493</b>
	SUPPLEMENTAL TOTAL:	\$26,493

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SUPPLEMENTAL TOTAL:	\$26,493
<b>COMPLETE PROPOSAL TOTAL:</b>	<b>\$26,493</b>

## Supplemental Documents



**SOLTERRA QUOTE**