

Campus Sustainability Fund Spring 2022 Mini Grant Proposal Application

Thank you for your interest in the new Campus Sustainability Fund! This application form may be used to apply for Spring 2022 Mini Grant funding in amounts of up to \$5,000 through March 31st, 2022. Only applications that include thorough and thoughtful responses will be considered. Incomplete proposals will not be reviewed.

Please review our Spring 2022 grant information, including our eligibility and evaluation criteria here: sustainability.arizona.edu/csf

Please have a completed Mini Grant budget ready to submit before starting this application. The template can be found here: <https://arizona.box.com/s/5wmduso6tz27pyskc822tknf6pxr002v>

After opening the link, click "Download" at the top right corner and it will download as an Excel Sheet.

All character limitations within this proposal include spaces.

For approved projects to receive funding, the project's department must have a STDFEE account as CSF funding can only be transferred to another STDFEE account. If your project's department does not have a STDFEE account set up, we recommend that it be a 265XXXX account. Although not required, we encourage you to use the same range to match the Sustainability Fee account: 2657605. Approved proposals will also be required to complete the Campus Sustainability Fund's Letter of Agreement before funding is dispersed where more details on this will be provided.

All funding must be used by Thursday, June 30, 2022. Unused funding as of this date will be returned to the Fund for reallocation for future funding opportunities.

** Please contact emilyhaworth@arizona.edu for questions, help in completing the budget template, or any other issues. **

Email *

tlbyland@email.arizona.edu

Contact Information

Each project proposal requires a primary and secondary project manager as well as a fiscal officer. If the primary project manager is a student who graduates in May 2022, the secondary project manager must be a staff or faculty member OR a student who graduates AFTER May 2022.

Projects where the primary and secondary project manager are both students require the involvement of a staff or faculty member within the applicable department.

Primary Project Manager Name *

The primary project manager is responsible for completing this application, answering questions posed by the Campus Sustainability Fund's Committee, and completing all required reporting on project progress and outcomes.

Tyler Byland

Primary Project Manager Status *

Student

Staff

Faculty

Other: _____

Primary Project Manager Email *

tlbyland@email.arizona.edu

Primary Project Manager Department Name *

Associated Students of the University of Arizona

Secondary Project Manager Name *

The secondary project manager is the back-up for the primary project manager if they are unable to complete any of the requirements of the Campus Sustainability Fund, particularly completing required reporting on project outcomes.

Kiara EARley

Secondary Project Manager Status *

Student

Staff

Faculty

Other:

Secondary Project Manager Email *

kiararoseearley@email.arizona.edu

Secondary Project Manager Department Name *

Associated Students of the University of Arizona

Departmental Employee Contact Name *

Projects where the primary and secondary project manager are both students require the involvement of a staff or faculty member within the applicable department. The departmental employee contact must be a staff or faculty member within your department who is responsible for monitoring the project's budget and reporting if both project managers are unavailable. If this does not apply to you, type N/A for these responses.

Carol Barnette

Departmental Employee Contact Email *

carolb5@arizona.edu

Departmental Employee Contact Department Name *

Associated Students of the University of Arizona

Fiscal Officer *

The fiscal officer is a staff member within your department who is responsible for financial transactions and who will support reporting by pulling requested expenses against awarded funding and ensuring that funding is spent within awarded categories.

Estella Trevers

Fiscal Officer Email *

etrevers@arizona.edu

Fiscal Officer Department Name *

Associated Students of the University of Arizona

Tell Us About Your Project

Official Project Name *

Please be specific but concise as this name will appear on reports and our website. Creativity is encouraged!

Campus Vegetation - Native Plants

Requested Funding Amount *

Please enter this amount after completing the budget sheet and populate the total amount here.

2700

Primary Project Category *

Please select one category that best encompasses the nature of your project.

- Water
- Energy
- Waste
- Transportation
- Food
- Social Sustainability (including Social/ Environmental Justice)
- Natural Environment
- Campus Life (Health & Wellbeing, Behavior Change)
- Research and Academics
- Carbon Reduction
- Art
- Built Environment
- Policy

Secondary Project Category *

Please select a secondary project category. If not applicable, select the same category again.

- Water
- Energy
- Waste
- Transportation
- Food
- Social Sustainability (including Social/ Environmental Justice)
- Natural Environment
- Campus Life (Health & Wellbeing, Behavior Change)
- Research and Academics
- Carbon Reduction
- Art
- Built Environment
- Policy

Background & Context *

Please provide any relevant background about your organization/team including your mission and/or expertise. Please also lay out the rationale for the proposed project such as context on the issue that your project would address. This section is meant to give us more information about you, while also giving you more space below to talk toward your proposed project. Responses are limited to 3,000 characters including spaces.

This project was initiated and designed by the Energy and Climate sub-committee under Students for Sustainability (SFS). SFS is an organization apart of the Associated Students of the University of Arizona (ASUA) that pursues sustainable solutions on the University of Arizona campus and the surrounding area. As apart of Energy and Climate, we have divided into projects that are aimed to find solutions for energy issues at the University of Arizona. Our project, Campus Vegetation, is a project that originated in the Fall of 2021 and will continue to be in fruition as a part SFS. The year before (fall 2020-spring 2021), we were able to plant seven mesquite trees in front of the Santa – Cruz dormitory on Highland Avenue.

This year, we have been pursuing our native plants project where we aim to incorporate more plants native to the Arizona Upland. With this goal, we hope to reduce water runoff and irrigation costs as native plants are more hydrologically efficient compared to non-native plants. We decided to utilize the dirt patch plot by South Campus Drive near the South side of Centennial Hall for our new plants. We hope to improve soil retention and stability, while also providing a habitat for valuable pollinators. With the assistance of numerous faculty members from Facilities Management and the Office of Sustainability, we were able to formulate a detailed plan for our project that will benefit our environment, our campus, and our commitment to sustainable practices.

Project Description *

Please provide a description of your project. Please include information on the need your project fills and how it does so. Include objectives, an anticipated timeline, and expected impact(s). Responses are limited to 3,000 characters including spaces.

In the Energy and Climate Committee of Students for Sustainability, our primary focus is to make the UA campus more energy efficient and resolve environmental issues. With our latest project, we aim to incorporate more native plants to our campus' arboretum. The purpose of this project is to elevate campus landscape in a sustainable way. This will not only improve the physical appearance of campus through sustainable landscape practices, but will also provide our campus with a variety of long term social and ecological benefits, while also requiring minimal upkeep compared to current landscaping practices.

In the dirt area on South Campus Drive, directly South of Centennial Hall, we will be planting small to medium sized shrubs (anywhere from 3ft to 8ft in size). We have selected a variety of native plants based on their ecological and sustainable benefits for our campus including: Chocolate Flower, Chuparosa, Creosote, Hybrid Red Aloe, Pink Fairy Duster, Sharkskin Agave, and Yellow Bird of Paradise.

The use of native plants is a great eco-friendly way to beautify any space. With less upkeep than non-native plants, labor and maintenance concerns decrease dramatically; "less water, little or no fertilizer, less pruning, less of your time" (Mahannah 2021) and also require the use of little to no pesticides. This means less time, money, and resources put toward landscaping. Furthermore, because these plants are native to Tucson and its arid climate, these plants require much less water than typical greenery; "Generally, most plants need about 30 mm of water each week to be healthy. Natives often need less though, more like 30 mm every two weeks" (Living Water Smart 2021). While all plants sequester CO2 from the atmosphere native vegetation has an advantage; "Because of their deep root systems, native plants store much more carbon than non-native species." (MARC Environment Programs 2018).

The integration of native plants into these ecosystems also provides a variety of ecological benefits like promoting biodiversity, encouraging the growth of other native plants, and improving soil conditions. They also provide food and shelter to various native animal species as well as attracting various insects and pollinators, which also will benefit any nearby plants and further contribute to biodiversity on campus. Additionally, native plants' root systems improve soil infiltration rates which reduces run-off, erosion, and flooding which helps replenish and store groundwater. This would be especially important for flood control during the monsoon season.

This project will also benefit campus-goers socially. An increase in greenery has been shown to be beneficial to mental health. A study found green space "strongly protects against mood disorders, depression, neurotic behavior, and stress-related issues" (NASA 2019). Adding green space on campus has the potential to boost student morale and reduce the stress that students face daily.

Project Summary Snapshot *

Please provide a short summary of your project. This summary will be used on our new website and other Office of Sustainability materials, if approved. Think of this as a hyper-concentrated summary limited to just a few sentences. Responses are limited to 800 characters (~60-100 words).

The Native Plants project attempts to diversify vegetation on campus while limiting resource use. Of course, these plants will require water and other resources, but the added benefits of lessened soil runoff and an increased number of pollinators will offset the low water use. These plants will not only boost campus aesthetics, but also support campus ecology and promote biodiversity.

Project Feasibility & Logistics *

Please provide a description of the work that has been completed so far to make this project feasible. Have all relevant partners been contacted/coordinated with? Please identify them in your response. Have you received reasonable quotes for supplies? What research has been completed to lay the foundation for this project? Proposals that have not thoroughly pre-planned may be rejected outright. Responses are limited to 3,000 characters including spaces.

Our committee collaborated with admins such as Mike Hoffman and Trevor Ledbetter through email and Zoom to get an idea of the plants, locations, and contacts we should utilize for our project. We met with Mark Novak in November to examine our work and give us insight into the landscaping process. He directed us to Sandra Obenour-Dowd who we met on campus to search out areas devoid of plants and with irrigation materials already in place. We agreed on a plot on the south side of Centennial Hall. We followed up with Sandra to get an official cost quota from Facilities Management, which totaled to be \$2,357. This money will be used to purchase native plants such as Chocolate Flower, Chuparosa, Creosote, Hybrid Red Aloe, Pink Fairy Duster, Sharkskin Agave, and Yellow Bird of Paradise for their longevity, pollination, and irrigation efficiency. These plants will be purchased and transported by Facilities Management. The project is set to be implemented in the summer after approval.

Environmental Sustainability Outcomes *

Please provide a brief description of how you expect your project to advance environmental sustainability on campus. Responses are limited to 3,000 characters including spaces. A definition of environmental sustainability is provided in our Spring 2022 Information.

Campus vegetation will improve the vacant area's appearance and attract core wildlife. Bees, hummingbirds, and other pollinators will flock to campus for plants such as Chuparosas and Fairy Dusters. Native plants are four times more likely to attract pollinators than non-native plants (Penn State, Dpt. of Entomology). Native plants to the Arizona desert are also more effective in mitigating water runoff as their roots are adapted to stabilize loose soil. This will be especially beneficial during monsoon season where flooding is often imminent. Furthermore, they are suited to withstand intense storms. Since native desert plants require less irrigation than non-native plants, water consumption and irrigation costs are comparatively lower. In addition, the use of native plants requires less growth supplements such as pesticides and fertilizers, which can be damaging to ecosystems and marine environments.

Social Sustainability Outcomes *

Please provide a brief description of how you expect your project to advance social sustainability on campus. Responses are limited to 3,000 characters including spaces. A definition of social sustainability is provided in our Spring 2022 Information.

Having more native plants on campus would advance social sustainability by both increasing mood and productivity levels. In fact, The Texas A&M AgriLife Extension asserts that greenery and plants can help increase memory retention and concentration by helping to create a positive work environment. Vegetation is important for mental health. A sustainable culture on campus will add to reduced anxiety in students and provide a positive and beautiful environment. This is important on a college campus where students are constantly under pressure from school, work, and other pressures young adults often experience. Additionally, the Native Plants Project intends to be ongoing and continually growing years after implementation. This project will encourage future students to advocate for sustainability by passing on a guideline for project execution, contact lists, and notes for improvement to future Energy & Climate members and those who access the Students for Sustainability (SFS) website.

Student Leadership & Involvement *

Please provide a brief description of how you expect your project to benefit students on campus regarding the creation of leadership opportunities or student engagement. What leadership opportunities exist within your proposal? If you plan to hire/ or involve students, please describe in what capacity. For example, if you plan to hire students, create an internship, or seek student involvement, please describe relevant details thoroughly (wages, responsibilities, duration of job, extent of involvement, how you will solicit/ market these opportunities etc.). Responses are limited to 3,000 characters including spaces.

Students will benefit by learning about plants native to Tucson by engaging with the campus arboretum. Students will further benefit from positive mental and emotional health effects. Among other benefits, Affinity Health states that plants can help ease stress and anxiety. Additionally, we hope that students who see projects like this on campus will be motivated to engage in sustainability projects or programs, like SFS.

Starting in September 2021, six students met twice a week for two hours to plan the Native Plants Project. These students gained experience on communicating effectively as a group, professionally contacting University Administration, and grant writing. With 2 project leads, the Campus Veg sub-committee is well organized and encourages non-leader members to actively participate in and experience leadership. Every student received equal and various opportunities in the project, ensuring equal collaboration.

Education, Outreach, & Behavior Change *

Please provide a brief description of how you expect your project will communicate its impacts to the campus community. How will your project educate the campus community and/or incorporate outreach and behavior change? How are you reaching beyond the "sustainability choir?". Responses are limited to 3,000 characters including spaces.

The project will communicate its impacts, information on the type of plants, and water usage through the SFS website. For example, we will mention that Creosote bushes can go up to two years without water, and that Chuparosa specifically attracts hummingbirds. The website is available to all and will be promoted across outlets such as listservs, meeting announcements, and social media platforms. To reach more people, we began discussion with the Arizona Ambassadors Director of Membership about adding information on native vegetation to tours to prospective students. By requesting other non-environmental organizations, advisors, and UArizona media pages to cover news on this project, they will disseminate this information to those who do not know the benefits of native vegetation. This not only spreads awareness about strides toward sustainable landscaping practices but also shows that the University takes pride in its biodiversity efforts.

Timeline

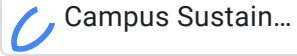
We understand that for some Mini Grant projects, having a deadline of June 30th, 2022 is not enough time. Should you feel that your project cannot be completed and closed out by this date, please provide a thorough explanation as to why your project requires a project timeline extension. Timeline extensions will be granted on a case-by-case and limited basis. Responses are limited to 3,000 characters including spaces. This questions is optional, please omit if not relevant to you.

Project Budget *

Please provide a completed project budget using our Budget Template. The template can be found here:

<https://arizona.box.com/s/5wmduso6tz27pyskc822tknf6pxr002v>

Using the link, click "Download" at the top right corner and it will download as an Excel Sheet. You will need to sign into Box if you haven't used it prior. Please save your Excel sheet as: Project Name_Budget Template



This form was created inside of University of Arizona.

Google Forms