

UW Campus Sustainability Fund

Full Proposal

Projects - Cycle 1

Project Title: SER-UW Native Plant Nursery - Cultivating Careers with Supportive Funding

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Executive Summary

500 Words Maximum

Please include a brief project description (in 1-2 sentences), location on campus, proposed cost, environmental / social problem the project is seeking to solve (1 sentence), any statistics/metrics, website or background info, and people or departments involved.

The SER-UW Native Plant Nursery seeks **\$80,198** in supportive funding to enhance our basic infrastructure and expand our keystone programs. Our nursery provides high-quality, local, sustainably grown native plants to the UW community, contributing thousands of plants annually for restoration projects on and around campus. The SER-UW Native Plant Nursery also provides invaluable experiences to students' academic journey through programs such as our for-credit undergraduate internship. Our nursery is focused on expanding our ecological and educational impacts while providing affordable native plants for student restoration efforts and thus leans on a variety of grant funding sources to allow us to continue serving our community. To maintain our nursery's operations and outreach, we are seeking support for an hourly summer nursery manager and an hourly undergraduate student assistant. Further, we are seeking to improve our sustainability through infrastructure improvements including the installation of solar panels and our ecological education through internship project funding and navigational/educational signage. The requested funding would be administered over 3 years and stewarded by Jon Bakker's Terrestrial Restoration Ecology Lab, ensuring the SER-UW Native Plant Nursery can maintain and expand these flagship programs. More information about our nursery is at <https://sites.uw.edu/seruwnursery>.

Student Involvement

1,000 Words Maximum

Describe how many student jobs and/or volunteer opportunities your project involves and their responsibilities.

Our nursery provides high-quality, local, sustainably grown native plants to the UW community. Our nursery grows and procures native plants for groups like the SER-UW RSO and the UW-Restoration Ecology Network (REN) Capstone program, contributing thousands of plants annually for restoration projects on and around campus. The SER-UW Native Plant Nursery also provides invaluable experiences to students' academic journey through programs such as our for-credit undergraduate internship, our partnerships with the Community Engagement &

Leadership Education (CELE) Center, and by hosting tours and providing resources for UW classes (such as ESRM/ENVIR 362 and ESRM 412). In the 2022-23 school year, we hosted nearly 600 students and recorded over 1,800 volunteer hours.

Student involvement is fundamental to nursery operations and provides opportunities for engagement on all levels. Our internship program, which takes on a cohort of four to eight interns per quarter, provides a combination of education and hands-on experience. Interns receive training through a curriculum developed by the nursery manager and student assistant on horticultural topics and native plant identification. This training is directly applied to nursery work, providing robust professional development in the field of horticulture. Interns are able to further apply training through an individual project, which allows interns to tailor their internship to their own professional goals. Projects result in high-impact deliverables that are incorporated into nursery operations, including, but not limited to, infrastructure design, experimental design and execution resulting in original research, and recommendations for future growth and direction. Project funding would result in increased project impact that would maximize student initiative and creativity, as costs of materials limit the scope of projects. Also, funding for infrastructure improvements would create additional structured avenues for interns to take on and execute high-impact projects.

Our student assistant position is critical to the regular operation of the nursery. This position offers a unique opportunity for students to guide an organization at a high level, through tasks including, but not limited to, long-term project management for research and contract-grows, training and management of interns and volunteers, ideating and executing improvements to nursery workflow, steering future growth of the nursery, and fundraising. Continued funding of this position would foster student leadership at the nursery, as well as provide administrative support to sustain and expand keystone programs like the internship. Additionally, as candidates for this position are routinely drawn from former interns, this role provides a professional development ladder that is a valuable stepping stone to a full-time career in a related field upon graduation.

The nursery offers a variety of volunteer opportunities. Through our partnership with the CELE Center, we regularly host two to three CELE volunteers per quarter, who participate in nursery activities under the guidance of the nursery manager and/or student assistant. This service learning experience through the CELE Center is a requirement for many introductory courses at UW, and provides an entry way for volunteers into the fields of horticulture and restoration. The nursery also holds biweekly work parties, facilitated and advertised by the nursery manager, student assistant, and intern team, where we engage with volunteers by demonstrating and applying basic nursery tasks.

The requested funding in this proposal would support critical staff members that run these programs as well as provide an opportunity to enhance program quality.

Education & Outreach

1,000 Words Maximum

Education & Outreach: Explain how your project will be publicized to the campus and your specific outreach and education goals.

The SER-UW Native Plant Nursery engages in a variety of education and outreach initiatives. In the 2022-23 academic year, we hosted nearly 600 students and recorded over 1,800 volunteer hours by hosting volunteer work parties, online native plant classes, class tours, and more. Of these programs, our for-credit undergraduate internship denominates our focus. In the 2022-23 academic year, we awarded 40 credits (ESRM/BIOL 399) to 13 undergraduate students for a total of 1,200 hours of horticultural education. Currently, our nursery utilizes an AmeriCorps service member to oversee our nursery, including education and outreach, for a 10.5 month term from September through June. Although this system works well for the school year, we are left with a gap in managerial support during the summer. Our nursery is seeking administrative support for an hourly summer nursery manager so we can maintain operations through the summer by, for example, hosting our for-credit internship during the summer quarter. Further, our requested internship project funding would enhance the quality of our intern's experience. Internship project funding allows interns to expand the scope of projects they take on during their time at the nursery, making their experience even more meaningful. Specific examples on project items we've needed in the past include specific plants and seeds, mycorrhizal inoculant, gibberellic acid, or building materials such as lumber and fencing.

The SER-UW Native Plant Nursery seeks to engage with the UW community through a variety of in-person and digital outreach events. Firstly, our nursery maintains both a social media presence (instagram: @sernursery) and a website (<https://sites.uw.edu/seruwnursery/>). Due to our location at the Center for Urban Horticulture (CUH), we must actively work to bring students to our facilities. Our request for navigational/educational signage funding is part of our campaign to make the CUH more navigable to UW students and increase awareness of our nursery as a resource to students. Further, our nursery makes efforts to attend on campus tabling events, such as the RSO fairs or the UW Sustainability Fair. We also host at least one on-campus plant sale each year in addition to our two public plant sales that take place at the CUH.

Sustainability Challenge

500 words maximum

Explain the sustainability challenge in 1-3 sentences, and how your project will mitigate this challenge.

The United Nations has named 2021-2030 as the “Decade of Ecosystem Restoration.” There is global recognition of the role of ecological restoration in combating climate change and empowering environmental justice. The fuel for ecological restoration is plant material, especially plants native to a region. However, restoration agencies and landscape designers routinely identify a lack of native plant availability as a significant barrier to their restoration initiatives (<https://nap.nationalacademies.org/read/26618/chapter/1>). The SER-UW Native Plant Nursery meets this immediate issue by annually providing thousands of plants of about 100 different native species at affordable rates to restoration efforts at and around UW. Our nursery also provides a unique and hands-on horticultural education experience that allows UW students to gain knowledge and skill in native plant production. Equipped with this experience, our interns and volunteers bring native plant expertise into their careers, advancing restoration efforts wherever they land. The quality and reach of both our educational programming and our native plant production are reliant on stable funding for our staff and adequate infrastructure.

As we look to expand our operation and its impacts, the implementation of sustainably minded infrastructure improvements are at the top of our list. In this proposal, we are seeking funding for solar panels and associated equipment to electrify our hoophouse. Our outdoor facilities currently lack any electricity. By bringing solar power to our hoophouse, we not only mitigate this barrier, but provide a learning opportunity for our staff and students.

Explain how the impacts will be measured

500 Words Maximum

Explain how the impacts will be measured: i.e. kWh of electricity saved, gallons water saved, tons of carbon emissions avoided, specific area of land preserved financial savings, students involved, educational outcomes, etc.

The impact of these initiatives will be measured through a combination of metrics including plant material output, education hours and credits awarded, students reached, and volunteers hours recorded. Each metric is recorded quarterly and compiled annually. Successful implementation of these initiatives would mean these metrics increase annually.

Project Longevity

300 words maximum

Project Longevity: How will the long term management and maintenance of your project be conducted, and, if applicable, funded? Please be as specific as possible. For programs, please discuss strategy for continued oversight & management.

The SER-UW Native Plant Nursery’s success and longevity is stewarded by SEFS professor Jon Bakker and is supported by the UW Botanic Gardens. Project management is the responsibility of the Nursery Manager and is supported by the student assistant. The nursery can seek further technical knowledge and necessary approvals through existing communication channels at the Center for Urban Horticulture, including the UW Farm, or within the School of Environmental and Forest Sciences. We intend to seek technical support for UW Solar as well. Our nursery has successfully completed three large CSF projects in the past and our key stakeholders are familiar with the process via other CSF funded projects. The SER-UW Native Plant Nursery plans to continue operations beyond the life of this project. Nursery activities are also supported by activities such as retail plant sales, contracts to produce plants, and research grants.

Itemized Budget		
Nursery Manager (Full Time, Summer Coverage) - Staff. Full-time for 1.5 months/year @ \$25/hour plus benefits at current UW rate for Classified Staff (38.1%)	1.5 months/year for 3 years	\$28,572
Student Assistant (Part Time, year round) - Hourly undergraduate academic student employee. 10 hours/week @ \$21.50/hour plus benefits at current UW rate for Hourly Staff (21.2%)	3 years	\$35,875
Internship Project Funding (5 interns/quarter @ \$100 each)	\$500 x 9 quarters	\$4,500
Intern Project Travel Mileage (visit other nursery, etc.)		\$150
Hoophouse Lighting (Solar Panels, Batteries, Lights) - Infrastructure Improvement		\$9,000
Navigational/Educational Signage - Infrastructure Improvement		\$750
Hoophouse Polycover + Shade Cloth - Infrastructure Repair		\$1,350
TOTAL		\$80,198

Non-CSF Sources

Please list all Non-CSF sources you are pursuing for funding, in-kind donations, etc. using the table. The first row will appear as the table header.

Non-CSF Sources	
SCC Riparian Native Plants Contract Grow (complete in Fall	\$29,075

2025)	
WSDA Nursery Research Funding Grant FY25 - <i>Pending Review</i>	\$10,926
AmeriCorps CLEC 300 hour Host Site Award (2 @ \$500/year)	\$3,000
AmeriCorps CLEC 450 hour Host Site Award (\$500/year)	\$1,500
Annual Plant Sales (~\$10,000/year)	\$30,000
TOTAL	\$74,501

Timeline for Project Completion [July 2024 through June 2027]	
AY 2024/25	<ul style="list-style-type: none"> ● Fund 5 Nursery Intern projects/quarter (\$1,500) ● Hire Summer Nursery Manager (\$9,244) ● Hire Student Assistant (\$11,380) ● Replace hoophouse shade cloth (\$450) ● Research hoophouse lighting (ask UW Solar & UW Farm) ● Begin drafting Navigational/Educational Signage
AY 2025/26	<ul style="list-style-type: none"> ● Fund 5 Nursery Intern projects/quarter (\$1,500) ● Hire Summer Nursery Manager (\$9,521) ● Hire Student Assistant (\$11,949) ● Print + Install Navigational/Educational Signage (\$750) ● Continue researching hoophouse lighting
AY 2026/27	<ul style="list-style-type: none"> ● Fund 5 Nursery Intern projects/quarter (\$1,500) ● Hire Summer Nursery Manager (\$9,807) ● Hire Student Assistant (\$12,546) ● Replace hoophouse polycover (\$450) ● Install Hoophouse Lighting Infrastructure Improvement (\$9,000)

Potential Funding Reductions

500 words maximum

Potential Funding Reductions: The CSF receives a number of proposals each year and may be required to fund projects at a reduced amount from that requested. With this in mind, please outline how your project would change given 10%, 20% and 50% cuts to your total funding request.

The ability to fulfill our initiatives with reduced funding depends on the specific line item. With reduced funding (of any percent) for our AmeriCorps Member or Student Assistant, we would

seek funding from other sources but would attempt to continue to operate at current levels. Similarly, a reduction in funding for Internship Project Funding would not impact the current levels of operations, but would restrict us from increasing the quality of this program unless we were able to find other funding. We would not be able to pursue the Infrastructure Improvements if they were not funded.