



STUDENT SUSTAINABILITY COMMITTEE

Funding Application – Step II

Funding Criteria

A. General Rules

1. Students, faculty, and staff are encouraged to submit requests for funding. Student-led projects require a faculty or staff sponsor in order to have funds awarded.
2. Funding can only go to university-affiliated projects from students, faculty, staff, and departments.
3. All SSC projects must make a substantial impact on students. This may be a direct impact or an impact through education and engagement. All SSC funding is 100% from student green fees, so the projects funded by the students must benefit them.
4. SSC encourages innovation and new technologies – creative projects are encouraged to apply.
5. Unless a type of expense is specifically listed below as having restrictions, SSC can generally fund it. The items referenced below should not be taken as comprehensive list.

B. Things SSC Can Fund, On A Case-By-Case Basis

1. SSC can fund feasibility studies and design work; however, it must work toward ultimately addressing a sustainability need on campus.
2. SSC can fund staff positions that are related to improving campus sustainability. Strong preference will be given to proposals receiving matching funding from departments and/or plans for maintaining continuity of the position after the end of the initial grant.
3. SSC can fund outreach events with a central theme of sustainability, provided their primary audience is the general campus community.
4. SSC discourages funding requests for food and prizes but will consider proposals on a case by case basis that prove significant reasoning.
5. SSC can fund repairs and improvements to existing building systems as long as it works toward the goal of improving campus sustainability; however, a preference is shown to projects utilizing new or innovative ideas.
6. SSC can provide departments with loans for projects with a distinct payback on a case by case base. Loans will require a separate memorandum of understanding between SSC and departmental leadership pledging to repay the award in full and detailing the payback plan.

C. Things SSC Will Not Fund:

1. SSC will not fund projects with a primary end goal of generating revenue for non-University entities.
2. SSC will not fund personal lodging, food, beverage, and other travel expenses.
3. SSC will not fund any travel expenses.
4. SSC will not fund tuition or other forms of personal financial assistance for students beyond standard student employee wages.

Your Step 2 funding application should include this application, the supplemental budget form, and any letters of support.

Please submit this completed application and any relevant supporting documentation to Sustainability-Committee@illinois.edu. The Working Group Chairs will be in contact with you regarding any questions about the application. If you have any questions about the application process, please contact the Student Sustainability Committee at sustainability-committee@illinois.edu.

General & Contact Information

Project Name: Rainwater Management Plan

Total Amount Requested from SSC: \$200,000

Project Topic Areas: Land & Water Education Energy
 Transportation Food & Waste

Applicant Name: Betsy Richardson

Campus Affiliation (Unit/Department or RSO/Organization): Safety & Compliance, Facilities & Services

Email Address: bliggett@illinois.edu

Check one:

This project is solely my own **OR**

This project is proposed on behalf of (name of student org., campus dept., etc.): Facilities & Services

Project Team Members

Name	Department	Email
Jeremy Neighbors	Facilities & Services, Safety & Compliance	jneighbo@illinois.edu
Brent Lewis	Facilities & Services, Capital Planning	bcl@illinois.edu
Colleen Ruhter	Facilities & Services, Safety & Compliance	cruhter@illinois.edu
Frank Colacicco	Facilities & Services, Utilities	frankc10@illinois.edu
Robbie Bauer	Facilities & Services, Utilities	robbauer@illinois.edu

Student-Led Projects (Mandatory):

Name of Faculty or Staff Project Advisor: NA

Advisor’s Email Address: NA

Financial Contact (Must be a full-time University of Illinois staff member)

Contact Name: Brent Lewis

Unit/Department: Capital/Facilities & Services

Email Address: bcl@illinois.edu

Project Information

Please review the proposal materials and online content carefully. It is highly recommended you visit a working group meeting sometime during the proposal submission process.

Please provide a brief background of the project, its goals, and the desired outcomes:

You may copy and paste your Step 1 application answer if nothing has changed.

This project will develop a comprehensive Rainwater Management Plan for UIUC. The Plan will include recommendations to protect the existing stormwater system, mitigate or fully resolve known problems on campus (such as areas that flood frequently), and create new rainwater management system improvements. Rainwater reuse and green infrastructure technologies, for both planned construction projects and as stand-alone campus improvement projects, will help solve flooding issues while enhancing the overall ecology and aesthetics on campus. This Plan will help the University transition into the emerging paradigm that focuses on treating rainwater as an asset rather than a nuisance.

A comprehensive Rainwater Management Plan with projects evaluated and recommended based on a stormwater system base-line analysis, will make these construction design projects easier to implement in the future. This campus-wide plan will guide rainwater management projects for years and the entire campus community will benefit from sustainable rainwater projects being developed.

Facilities & Services will hire a Professional Services Consultant (PSC) to develop this campus Rainwater Management Plan that will recommend a sustainable path toward achieving the university's strategic stormwater objectives and goals.

The PSC will:

- Review current and historical university and municipal stormwater management documents, studies, and plans, including the 2013 Foth Watershed analysis and the current 2022 University GIS plans.
- Use current topography, building footprints and sewer data to verify stormwater runoff quantities and discharge locations across campus watersheds.
- Summarize analyses and findings for a sustainable path toward achieving stormwater compliance and campus goals.
- Include field reconnaissance, surveying, engineering, and planning for the Rainwater Management Plan development to guide the campus towards enhanced rainwater management, green stormwater infrastructure installations, and improved water quality.
- Identify campus problematic areas, calculate rainwater volumes that the campus is currently discharging, and rainwater volume updates based on the proposed enhancements.
- Include recommendations on rainwater solutions, cost opinions, and phasing for green stormwater infrastructure facilities to address existing pipe size and flow issues, and proactively reduce campus stormwater flooding and runoff.
- Meet with the University and staff from surrounding municipalities (Champaign, Savoy, Urbana and the sanitary district) to develop a plan that takes into consideration campus and surrounding community stormwater goals.
- Provide a Rainwater Management Plan that considers current land use and proposed improvements from the 2018 Campus Master Plan and the 2022 Campus Landscape Master Plan.
- Provide a public forum presentation on the final Rainwater Management Plan.

Where will the project be located? Are special permissions required for this project site?

If special permission is required for this location, please explain and submit any relevant letters of support with the application.

This project will take place over the entire University of Illinois Urbana-Champaign campus.

Other than the project team, who will have a stake in the project? Please list other individuals, groups, or departments affiliated directly or indirectly by the project. This includes any entity providing funding (immediate, future, ongoing, matching, in-kind, etc.) and any entities that benefit from this project.

Please attach letters of commitment or support at the end of the application.

The Rainwater Management Plan project team includes engineers, landscape architects, and environmental specialists from various Facilities & Services divisions who will be working together with the PSC to develop a robust plan that will benefit the entire campus community. The team includes the Safety & Compliance, Capital, and Utilities Divisions.

Facilities & Services will also request that the hired PSC meet with the University Facilities & Services Department for project goals/scope/updates/required GIS plans, other applicable departments on campus where stormwater issues may be present, and staff from surrounding municipalities (Champaign, Savoy, Urbana and the sanitary district) to develop a plan that takes into consideration surrounding community stormwater issues and goals.

Once the PSC writes the Rainwater Management Plan, it will provide a roadmap for Facilities & Services and other departments to develop construction projects to implement the proposed rainwater management facilities. Project management for these future projects will most likely be implemented by Facilities & Services. Construction funding will be budgeted separately, either as stand-alone projects, or as part of larger construction projects.

How will this project involve and/or benefit students?

This includes both direct and indirect impact.

Improved campus stormwater management will decrease the number of areas prone to flooding on campus and increase green space that can be used by students for recreation and educational purposes. Reduced flooding will also improve the overall campus walkability.

Enhanced rainwater management can include a variety of green infrastructure practices that can potentially be designed, studied and/or used by students (green roofs, blue roofs, rain gardens, porous pavement, tree boxes, living walls). Future project designs and installations can be used by various engineering, landscape architecture and sustainability classes.

Where traditional stormwater management usually captures water in drains and pipes it away quickly, retrofitting campus targeted areas and converting them into more engaging designs will draw students to these locations. The aesthetically pleasing rainwater management installations will increase student engagement with their environment and campus community.

Students may also see enhanced mental health through time spent in nature, as research shows that:

- Spending time in nature is linked to both cognitive benefits and improvements in mood, mental health and emotional well-being.
- Feeling connected to nature can produce similar benefits to well-being, regardless of how much time one spends outdoors. (<https://www.apa.org/monitor/2020/04/nurtured-nature>)

How will you bring awareness and publicize the project on campus? In addition to SSC, where will information about this project be reported?

Facilities & Services will request that the hired PSC meet with University Facilities & Services, other applicable departments on campus, and staff from surrounding municipalities (Champaign, Savoy, Urbana and the sanitary district) to develop a plan that takes into consideration campus and surrounding community stormwater issues and goals.

Facilities & Services will also request that the PSC provide a public forum presentation to the community on the final Rainwater Management Plan. Facilities & Services, Customer Relations and Communications will publicize this event on the Facilities & Services website and in electronic communications including but not limited to digital signage, Dispatch, eWeek, E-Update, iNews, GradLinks and the Insider. Information about the project will also be provided at relevant environmental educational events.

Once the PSC finalizes the Rainwater Management Plan, it could also be shared with departments that want to study or implement the proposed campus enhancements, and with Facilities & Services design engineers who are working on proposed construction projects.

Financial Information

In addition to the below questions, please submit the supplemental budget spreadsheet available on the Student Sustainability Committee [website](#). Submission of both documents by the submission deadline is required for consideration of your project.

Have you applied for funding from SSC before? If so, for what project?

F&S has applied for, and received funding for, many successful projects in the past.

If this project is implemented, will you require any ongoing funding required? What is the strategy for supporting the project in order to cover replacement, operation, or renewal costs?

Please note that SSC provides funding on a case by case basis annually and should not be considered as an ongoing source of funding.

This project is a master plan document and will be self-contained. Further funding for this project is not anticipated.

Please include any other obtained sources of funding. Have you applied for funding elsewhere?

Please attach any relevant letters of support as needed in a separate document.

No, funding has not been sought from other sources at this time.

Environmental, Economic, and Awareness Impacts

How will the project improve environmental sustainability at the Urbana-Champaign campus? If applicable, how does this project fit within any of the [Illinois Climate Action Plan](#) (iCAP) goals?

A campus Rainwater Management Plan will increase environmental sustainability, awareness and stewardship by:

- Redefining stormwater as rainwater, an asset.

- Recommending green infrastructure installations that will reduce stormwater runoff and decrease stream bank erosion, flooding and pollution in local waterways.
- Recommending aesthetically pleasing green infrastructure installments and “artful rainwater” features, both which will draw students and the public into the sites, enhancing engagement between students and the campus ecological environment.
- Providing plans for educational signage at select proposed green infrastructure installments, outlining the installation’s environmental benefits.
- Providing knowledge that will create a sense of ownership in campus rainwater and a responsibility to protect local waterways.

This project supports the University iCAP 2020 by:

- Recommending green stormwater installations to help manage rainwater – this aligns with the Land & Water goal 4.2.3 to double green infrastructure installations on campus from 24 to 48 by FY24.
- Initiating a campus Rainwater Management Plan – this supports the Resilience goal 8.2 to coordinate rainwater management plans for the Champaign, Urbana, Savoy, and the university urbanized areas.

How will you monitor and evaluate the project’s progress and environmental outcomes? What short-term and long-term environmental impacts do you expect?

Some examples include carbon emissions, water conservation, green behavior, and reduced landfill waste.

Facilities & Services will monitor the project’s progress by requesting that the PSC have biweekly project coordination meetings with the University to ensure that a plan is developed that takes into consideration campus and surrounding community stormwater issues and goals. The project team members are also familiar with the 2018 Campus Master Plan and the 2022 Campus Landscape Master Plan to ensure the PSC is considering current land use and proposed improvements. The PSC will provide a public forum presentation on the final Rainwater Management Plan.

Short term environmental impacts will include obtaining knowledge that can support a comprehensive plan for future sustainable stormwater design and construction on the UIUC campus. Information will also be obtained on existing stormwater systems which require maintenance or enhancements to alleviate current flooding and erosion issues.

Long term impacts for the Rainwater Management Plan will include fixing storm sewer systems that are at or beyond capacity to help contain campus stormwater runoff and encouraging green behavior by redefining stormwater as a rainwater asset. Green stormwater infrastructure and artful rainwater design installations can be used to decrease stormwater flow which leads to decreased bank erosion, pollution, and flooding. These sustainable designs will attract students and the public, creating an opportunity for education and engagement between the community and the campus environment.

What are your specific outreach goals? How will this project inspire change at UIUC?

After the PSC develops the Rainwater Management Plan, there will be various sustainable design and educational outreach opportunities. Once areas of concern are identified, along with soil infiltration data, and green infrastructure recommendations, innovative design goals can be researched and applied in future projects.

Green infrastructure innovative designs will inspire change. Not only is there potential to engage professors and students in classrooms to assist with designs, but aesthetically pleasing construction will provide

educational outreach opportunities and encourage creativity, sustainability and a sense of ownership in the community.

If applicable, how does this project impact environmental injustice or social injustice?

UIUC has faculty, staff and students from a variety of cultural and socio-economic backgrounds, including many who come from environmental injustice areas. UIUC may not be an individual's native region or anyone's permanent home but is a temporary home. The campus Rainwater Management Plan development and eventual implementation will not directly change environmental injustices experienced prior to UIUC, however it will offer the opportunity for all individuals to experience environments with sustainable learning opportunities and a sense of environmental stewardship that they will take with them wherever they go.