# *From time to time unforeseen challenges or opportunities can affect the planned budget, timeline, or overall goals of a project funded by the Student Sustainability Committee. Past examples of these situations include projects coming in under budget but having additional opportunities available, or inclement weather delaying the planting of agriculture projects.*

# *Below please include a brief project summary and your requested changes. Attach additional documents as needed. If you have any questions, please contact the Student Sustainability Committee at sustainability-committee@illinois.edu.*

# General Information

**Project Name:** Enhancing Ecosystem Services in the Southern Arboretum Woodlands (SAW): Habitat Improvement and Reusing Lumber

**Total Amount Requested from SSC:** $00.00

**Date of Scope Change Submission: 3/20/2023**Month/Day/Year

# Contact Information

Project Lead Name: Kevin McSweeney

Scope Change Applicant Name (if different than Project Lead):

Unit/Department: Natural Resources & Environmental Sciences

Email Address: mcsween@illinois.edu

# Project Information

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

The goal of the project is to create a diverse mosaic of mesic woodland and savanna communities in the Southern Arboretum Woodlands (SAW) through targeted transformation of the current block-like arrangement of similar aged trees originally planted as a research plantation. A 12-acre tract in the SAW encompassing moderately well drained Catlin soil and suitable for mesic native species has been selected for this project. A detailed inventory of the trees within the tract will be undertaken to identify (i) trees are suitable for producing high quality lumber, (ii) trees to remain as ‘nurses’ to provide canopy protection for establishment of native trees and (iii) standing dead wood trees and logs to remain to promote habitat diversity for animals, plants, and microorganisms. A similar inventory will be conducted in the adjacent Illini Research Forest. We will use the SAW list of native trees and understory species developed by Iris Lee and reviewed by Emeritus Professors Ken Robertson and John Taft for selection of suitable species from the mesic category for planting. The understory selections include species specifically targeted for benefitting wildlife (cover, fruits for birds, flowers for pollinators etc.) Ongoing suppression of invasive species will continue as needed during site preparation and establishment of native flora. Trees selected for milling will cut by professionally certified foresters and stored on site. A contractor will be hired to cut the lumber to specified architecturally suitable dimensions. The lumber will then be dried and made available for sustainable campus building projects (e.g., Japan House Annex, Doris Kelly Christopher Extension Building, renovation of solar decathlon houses, planned shelters at the SAW and north Arboretum). Students will be hired to assist in all phases of the project and have the option of obtaining certifications in chain saw safety, pesticide application and restoration management.

Desired outcomes include:

* 1. Establishment of species rich mosaics of savanna and woodland communities with complex structure providing an array of habitats/niches for organisms (fungi,…..small mammals) that enhance ecosystem services.
  2. Aesthetic improvement of the existing plantation landscape by creating more diverse and architecturally complex structure through irregularly shaped woodland/savanna mosaics.
  3. Sustainable re-use of harvested wood for production of lumber for construction projects and reuse of woody debris for mulching projects.
  4. Opportunities for students to engage in the process of targeted landscape transformation and learn skills related to land management and production of lumber grade wood products.
  5. Establishment of an outdoor laboratory that is used by a broad cross-section of campus departments and other approved groups.

Please provide a brief summary of how students will be involved in the project’s changes:

Opportunities for student involvement remain unchanged from the original proposal. Briefly, six Student Hourlies were hired during Summer 2022 to assist with all aspects of field work including - logging, planting, invasive species management, mulching and monitoring of project objectives. Three of the students were funded using SSC funds and the other students were funded using other Arboretum funds. All of the students obtained State of Illinois pesticide applicator certification and four of them also obtained Illinois Arborists Association certification in chain saw safety. These certifications are considered as valuable ‘resume builders’ for students focused on natural resource management.

Mark the components for which you are applying to change. (Mark all that apply.)

[ ] Overall goals

[ ] Budget

[ x ] Timeline

* Original Timeline:
* New Timeline:

[ ] Other

Please provide a brief summary of your requested scope change. How is your request different from your original plan? Please explain the reason for the proposed changes.

All of the project desired outcomes are largely complete or underway except for #3:

Sustainable re-use of harvested wood for production of lumber for construction projects and reuse of woody debris for mulching projects.

We are requesting a no-cost extension to address the unexpected delay in scheduling milling of the harvested lumber. Professor Jay Hayak (Project Co-Investigator) resigned his university position in March 2023 to take a job elsewhere. Hayak was originally responsible for arranging the milling of the harvested lumber. The milling arrangements he had made for this Spring had to be cancelled owing to the retirement of the contractor.

Professors McSweeney and Ward (Faculty Advisor, Red Bison) are working with Mark Shupe (Shupe’s Woodworks & Sawmill, Toledo, IL) to establish a provisional arrangement for milling of the harvested lumber. However, the logistics involved in fulfilling this arrangement will take longer than the than the current, May 2023 termination date for the project. The logistics include transport to and from the sawmill in Toledo and milling and then drying the milled lumber on-site. If we can finalize the arrangement swiftly we are optimistic we can complete the project before December 2023. In summary, we respectfully request a no-cost extension until December 2023.

Additional comments (Optional)

Any additional comments/relevant information for the project proposal