



GREEN FUND

Sustainability Through Student Innovation

Proposal to Aid the Indoor Recycling Improvement Project

Green Fund Mission Statement: “The NAU Green Fund promotes student participation in and provides funding for projects that reduce NAU’s negative impact on the environment and create a culture of sustainability on-campus.”

Requirements for Funding:

- The project must be implemented on campus.
- The person submitting the project must be a NAU student, faculty, or staff member.
- Projects must provide all necessary documents, letters of support, and authorizations prior to submission.
- The Green Fund distributes funding on a **reimbursement basis**. Project teams should partner with an administrative office to provide upfront funding for the project. Once the project has been successfully completed, the Green Fund will reimburse the administrative partner.
- All project applications should be submitted to greenfund@nau.edu for review.

Disclaimer: All applications will go through a comprehensive vetting process. We highly recommend meeting with a Green Fund Committee member prior to submitting the application. The Green Fund Committee member will assist you with every step of writing your project application. If your project is approved, you may be asked to provide more detailed information regarding specific deliverables. The Green Fund is not responsible for acquiring the necessary permits, permissions, or approvals for a project, although we are happy to assist with this process if needed. Additionally, the Green Fund does not provide any ongoing maintenance costs. A sponsoring department must take responsibility for operations and management.

Review Process: Upon project application submission, the Green Fund will review your project within two weeks. At this time, the Green Fund will provide comments on the project. Incomplete applications will not be reviewed until all components are submitted. **Note:** The Green Fund Committee only meets during the academic year. All projects submitted outside of the regular academic year will be reviewed at the start of the next academic session.

Contact Information

Project Leader Name: Natalie Pierson Phone: 253-514-1045 E-mail: nrp76@nau.edu

Expected Graduation Date: 5/2023

*Sophia Swainson and Taryn Bell did all of the preliminary work for this project. I am simply submitting a proposal for Green Fund to pay for part of it.

Project Advisor Name: Abraham Henn Phone: 928-525-4503 E-mail: Abraham.henn@nau.edu

Sponsoring Department: Facility Services

Project name: Proposal to Aid the Indoor Recycling Improvement Project

NAU Department/Unit for funding reimbursements (Attach letter of commitment from departmental representative): NAU Administration

Project Overview

Executive Summary

Please provide a brief overview of your proposal. Please address how this project will support the goals of the Green Fund (student involvement, creating a culture of sustainability, and lessening NAU's impact):

As our environment continues to degrade from harmful human activity and climate change, it is essential that higher education institutions like NAU take the initiative to embrace sustainability across all facets of their operations. One important part of this sustainability effort is waste reduction. For a long time, there has been a lack of structure in NAU's recycling bin system, especially indoors. Without a consistent bin system, students, faculty, and staff can't be properly educated on how to recycle, let alone encouraged to, because bins are placed randomly and have no consistent color scheme. Many studies have shown that increasing the convenience of recycling can significantly improve recycling rates. Establishing a consistent, convenient, and simple recycling system across campus will not only divert a significant amount of waste from the landfill but also display NAU's commitment to Sustainability.

This project has already been approved by NAU Administration and they have offered to fund the entire project. However, given the value and importance of this project, we believe that it is essential that NAU Green Fund contributes to the funding effort by offering to cover at least 1/3 of the cost. In doing so, the NAU Green fund can establish a stronger sense of collaboration between the NAU Office of Sustainability and the NAU Administration to implement large sustainability projects like this one. Ideally, by sharing the cost of this large project with NAU administration, they will be more likely to support and help fund similar projects in the future, thus advancing sustainability at NAU.

Please answer the following questions detailing the components of your project:

1. Does your project require space or construction on campus? If so, where? Please review the “Space Committee Document” located on our webpage and follow the steps to begin requesting a location.

Yes? The bins will simply be placed in carefully selected indoor spaces across campus.

2. Have you obtained all necessary approvals for this project? Please attach all letters of support to this application. Letters of support should include confirmation from the sponsoring department that the sponsoring department will cover all upfront expenses and work with the Green Fund Business Manager to acquire reimbursement after project completion. If any ongoing operations and maintenance is required of your project, provide a letter of support from the entity that will be covering those costs and/or services.

Yes

3. Will this project provide funding for student wages?

No, it will not provide funding for student wages

4. Please list all additional sources of funding you have pursued. Include departments, grants, ASNAU, Graduate Student Government, etc.

NAU administration is currently fronting the entire cost. We will be helping them pay for this project by reimbursing them for at least 1/3 of the cost.

5. Have any of the Green Fund Committee members been involved in this project?
 - a. If Yes, please identify all committee members:

Sophia Swainson completed all the analysis and auditing to determine the exact number of bins we needed and where they should be placed. Sophia developed this proposal and completed all the necessary research to get this proposal approved!

Taryn, the conservation manager for the Office of Sustainability, also contributed significant amounts of effort to this project.

Project Specifics

Please address the following questions. One or more of these questions may not apply to your particular application. Answer as many questions as are applicable to your project.

Relationship to NAU Climate Action Plan (CAP)

1. How does your project align with one of the seven CAP categories (Energy, Water, Transportation, Waste Minimization, Sustainable Landscaping, Environmental Justice, Communication)?

Waste minimization

Community

2. Is there a public outreach plan? How will faculty, staff, and students learn about this?

A big and in-depth public outreach plan was developed over the summer of 2022 to ensure the proper use of the recycling bins, reduce contamination rates, and improve recycling rates in general through intersectional recycling & general waste minimization education.

3. Are you working with other groups on or off-campus? If so, describe your partnership.

The NAU Office of Sustainability is working on an RFP process to obtain the best possible deal for the bins. We also plan to collaborate with the City of Flagstaff Sustainability Office to educate the NAU community about proper recycling techniques.

Project Parameters

4. What are the environmental costs and benefits associated with your project?

Unfortunately, the shipping and transportation of such a large sum of containers will certainly result in a lot of greenhouse gas emissions. Depending on the vendor selected through the RFP process, the bins will be built with eco-friendly processes. They also will easily make up for the emissions that brought them to the university by significantly reducing our greenhouse gas emissions from the disposal process of NAU's landfill waste.

5. Provide an economic cost/benefit analysis for your project. Focus on identifying specific cost savings.

This project will provide significant economic savings by reducing the cost of landfill waste disposal.

6. Is this a one-time expense or will you require future funding?

This is a one-time expense.

7. When your project members no longer attend NAU, who will be responsible for running the project?

This project will be managed within the NAU Office of Sustainability with the main point of contact being the Sustainability Manager, Avi Henn, and assisted by the student waste minimization coordinator or a full-time waste minimization staff position if present.

8. How will you monitor the impact of your project after implementation?

A comprehensive plan has been developed to monitor the effectiveness of the new recycling bin system through the use of Sensoneo waste sensors (paid for by Green Fund), recycling audits, and any other data collection techniques for monitoring our waste stream as NAU works to reduce its waste as part of the CAP.

Project Budget

Please include a thorough breakdown of all project costs, as well as a 5% line item for contingency.

OPTION 1: Budget for the Proposed Green Fund Contribution to the Indoor Recycling Improvement Project			
Item	Price	Quantity	Total
2 stream recycling container with standard NAU graphics, stream names, and colors	\$1,388.09	77 of 232 bins total (1/3 of bins)	\$106,882.93
5% contingency	N/A	N/A	\$5,344.15
Total Contribution Cost			\$112,227.08

OPTION 2: Budget for the Proposed Green Fund Contribution to the Indoor Recycling Improvement Project			
Item	Price	Quantity	Total
2 stream recycling container with standard NAU graphics, stream names, and colors	\$1,388.09	116 of 232 bins total (1/2 of bins)	\$161,018.44
5% contingency	N/A	N/A	\$8,050.92
Total Contribution Cost			\$169,069.36

***Green Fund should discuss how much we can and want to contribute and choose between option one, option two, or an alternative**

Project Timeline

The timeline should include significant implementation dates for your project. Please add information such as shipping time and consider any holidays or breaks.

Timeline for the Indoor Recycling Improvement Project		
Action	Parties Involved	Month/Year
Order bins from Clean River Recycling Solutions	Clean River Recycling Solutions, Sustainability Manager, NAU Administration, NAU Purchasing	September 2022
Installation of bins	NAU Facility services, custodial services, NAU Office of Sustainability	September/October 2022
Outreach & education campaign	NAU Office of Sustainability	October 2022 - May 2023
Evaluate the effectiveness of new recycling infrastructure	NAU Office of Sustainability, (student help from ENV 490C classes in Fall 2022?)	May 2023- November 2023
Re-assess and determine the next steps for recycling education and general waste minimization efforts	NAU Office of Sustainability	November/December 2023

Project Checklist

Please ensure you have completed all of the following items before submitting your application:

- ✓ Meet with a Green Fund Committee member
- Obtain all necessary letters of support (sponsoring department, ongoing maintenance, etc.)
- ✓ Project Overview
- ✓ Project Specifics
- ✓ Project Budget
- ✓ Project Timeline
- ✓ Complete Project Checklist

Thank you for your submission. We deeply appreciate your commitment to sustainability at NAU, and we look forward to working with you.