



# NAU COMPOST

School of Hotel and Restaurant Management

Created by Andrew Nettels, Green Fund Treasurer

Mentored by Dr. Frederick De Micco, HRM Executive Director

Prof. Mark Molinaro, Interim Associate Executive Director

Prof. Julene Boger, HRM Cafe Director

Contributor Brody Chafe, Mechanical Engineering Student

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# PROPOSED COMPOST PROJECT

A collaboration between the Green Fund & HRM Program

**PURPOSE** The School of Hotel & Restaurant Management will be the first program on campus to facilitate 100% student-led composting.

**REACH** The project will benefit all who visit the HRM campus; students, faculty members, culinary courses, the HRM Cafe & its customers, the campus community



School of Hotel and Restaurant Management

**LOCATION** A bin will be placed on the by the South door of the building, within the HRM Garden.

**INFORMATION** Signage will be affixed above the composting bin. The purpose of the signage is to display graphics that educate users of the composting bin, and to inform these users of acceptable materials to compost

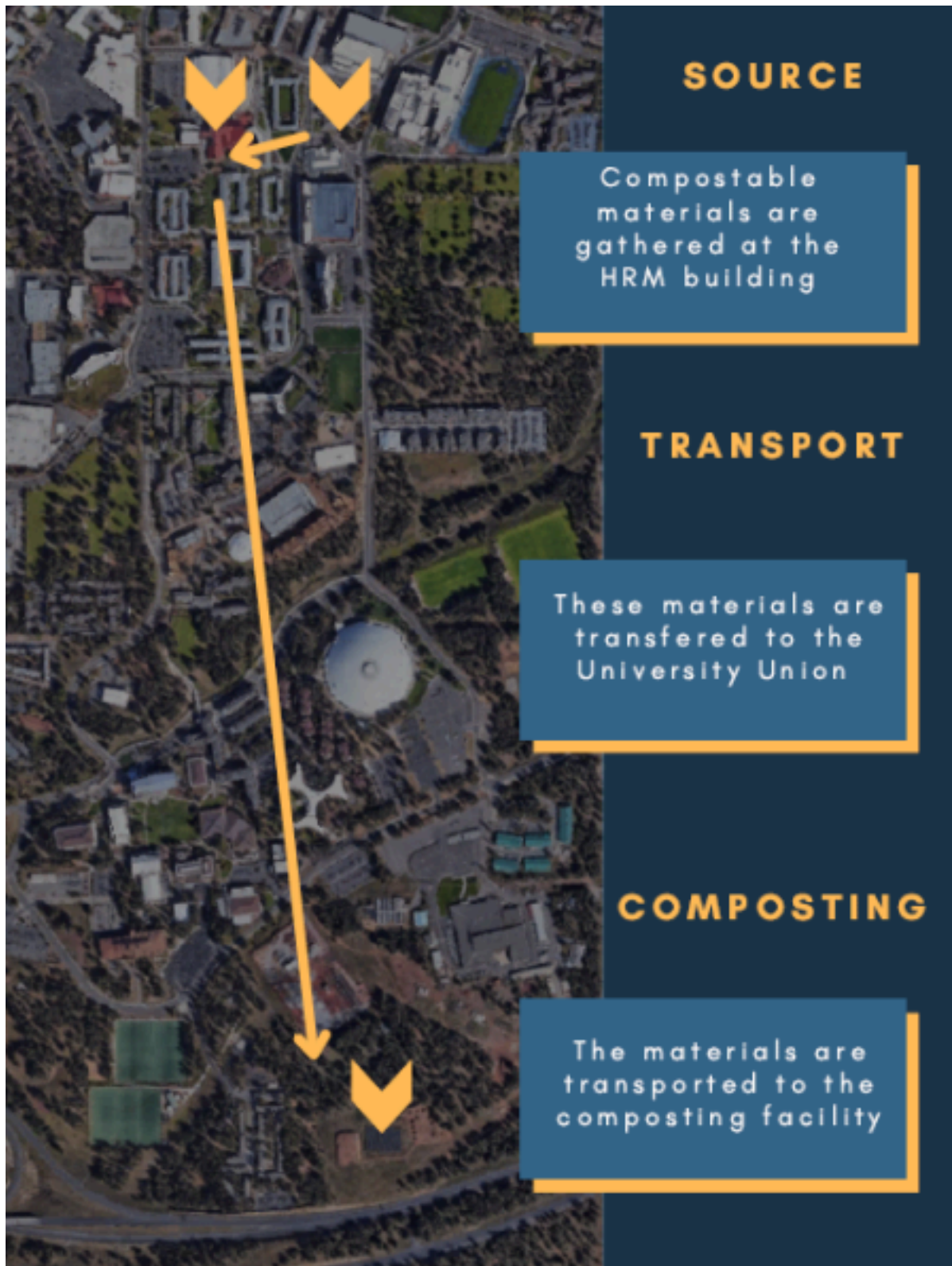
**TRANSPORT** A student worker from the HRM Cafe will transport the easy-to-move bin to the Union loading/receiving dock. This will be done every other Wednesday at any time convenient to the Cafe staff. Composting Services will receive the bin, and transport the materials to the Composting Processing Plant

**AUDIT** A separate lot at the Composting Processing Plant will be reserved exclusively for composting materials received by the HRM program. This enables audits to be conducted on an as-needed basis.

Project Coordinator: Andrew Nettels  
Project Mentor: Dr. De Micco



**GREEN FUND**  
Sustainability Through Student Innovation



*HRM Community Compost Nettels, Chafe, 5 Project Overview*

Project Leader: Andrew Nettels | [acn76@nau.edu](mailto:acn76@nau.edu) | (818) 388 7828

Project Mentor: Dr. Frederick De Micco | [Frederick.DeMicco@nau.edu](mailto:Frederick.DeMicco@nau.edu) | (928) 523 0644

Proposal Contributor: Brody Chafe, *Mechanical Engineering Student at NAU*

Sponsoring Department: School of Hotel & Restaurant Management

Project Name: HRM Community Compost

## *Funding Requirements & Review Process*

**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](mailto: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.

*HRM Community Compost Nettels, Chafe, 6*

## **Executive Summary**

The HRM Community Compost Project will establish the School of Hotel & Restaurant Management as the first departmental unit at the university to provide student-led composting. Through a public outreach campaign, the project will inspire student, faculty, and administrative members from all corners of the educational community.. In accomplishing this, the project will specifically uphold the mission statement of the Green Fund by involving the entirety of the student population in its implementation, while further contributing to the established culture of sustainability at Northern Arizona University. The proposed project endeavours to accomplish this at little cost to the Green Fund.

## **Project Components**

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

The project will utilize a small plot of land to process compostable materials. The use of this plot has been approved by Facility Services.

2. Have you obtained all necessary approvals for this project? Please attach letters of support to the proposal document. If any outgoing 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.

All necessary approval documents are included within the appendix of this proposal. The proposed project received five letters of approval/support. These five individuals, and their purpose for authoring their approvals are outlined.

(1) Dr. Frederick De Micco, *Executive Director - School of Hotel & Restaurant Management*

In writing a letter of support, Dr. De Micco confirms that the School of Hotel & Restaurant Management will serve as the supporting department for this initiative.

(2) Thomas Charles Eberly, *Associate Vice President - Campus Services and Activities*

In writing a letter of approval, Mr. Eberly authorizes the project’s use of the University Composting Transport.

(3) Ralph Padilla, *Manager - Grounds and Landscaping*  
*HRM Community Compost Nettels, Chafe, 7*

In writing a letter of approval, Mr. Padilla approves the project’s use of the Facility Services fields to offload and process raw compostable materials.

(4) Chef. Mark Molinaro, *Senior Lecturer and Associate Executive Director - School of Hotel & Restaurant Management*

In writing a letter of support, Chef. Molinaro confirms his intent to dispose of raw compostable materials from his culinary courses into the project’s exterior bin.

(5) Prof. Julene Boger, *Lecturer and Director of the Cult Learning Cafe - School of Hotel & Restaurant Management*

In writing a letter of support, Professor Boger confirms her intent to dispose of raw compostable materials from his culinary courses into the project’s exterior bin. Professor Boger also confirms the Cafe’s involvement with the project.

### 3. Will this project provide funding for student wages?

The project is not requesting funds for student wages. Those affiliated with the project work on a volunteer basis.

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

No additional sources of funding are required for this project. The low amount the project seeks to encumber does not warrant any additional funding sources.

### 5. Have any of the Green Fund Committee members been involved in the project? If yes, please identify all committee members?

The project was created and implemented by Andrew Nettels, who is the Treasurer of the Green Fund Committee at Northern Arizona University.

Brody Chafe was a contributor to both the project and its proposal. He is a mechanical engineering major at Northern Arizona University, with a passion for sustainable initiatives like this project.

*HRM Community Compost* Nettels, Chafe, 8

### 6. When your project members no longer attend Northern Arizona University, who will be responsible for running the project?

The School of Hotel and Restaurant Management will continue to operate this composting program.

## AASHE Star Compliance

The Association for the Advancement of Sustainability in Higher Education (AASHE) maintains the “AASHE Stars” program, which provides a framework for higher education institutions to monitor their sustainability compliance in various categories. As of September 28th, 2020 Northern Arizona University has a “Gold Star” rating. The *HRM Community Compost Project* will add value to categories (EN-3) Student Life, (EN-5) Outreach Campaign, (OP-8) Sustainable Dining, (OP-9) Landscape Management, (EN-10) Community Partnerships, and (EN-11) Inter-Campus Collaboration.

## Environmental Costs & Benefits

Minimal environmental costs will result from the HRM Community Compost Project. In analysis of these costs, only one emerges: vehicle emissions. These emissions are caused by University fleet vehicles that transport the raw compost materials. However, these inevitable costs are offset by the various benefits of the proposed project. Within the scope of environmental benefits, the proposed project will immediately contribute to the University's

composting program. From a strict environmental context, the advantages the institution will receive are not necessarily limited to this project. Being the first "student-led" composting effort, this initiative ought to be considered a "pilot project". The creation of this project should inspire other departmental entities to establish similar programs.

The primary benefits associated with this project are the reduction of potential compostable materials going to waste in the HRM building. Given the amount of students, faculty, and events that take place in the HRM, the amount of potential compost generated by the HRM building alone would prove to be more than beneficial.

*HRM Community Compost* Nettels, Chafe, 9

## Relationship to Climate Action Plan (CAP)

The *HRM Community Compost Project* meets the Waste Minimization and Communication goals of the Climate Action Plan. The project will reduce the overall amount of potential compost that goes to waste in the HRM building in the long run. As the HRM composts more of its compostable items, there will be less food waste and there will be an increase in the amount of potential compost that goes to the Flagstaff Compositing plant. During the development of the proposal, there was heavy collaboration with HRM faculty regarding whether or not this plan would be able to be implemented into the HRM building. This project will increase student participation, teach students about composting, and encourage students to be involved with the Green Fund in the future

## Community Outreach

The Public outreach plan for the *HRM Community Compost Project* is listed below in this section. The project will be considered successful if it inspires students from all corners of campus life to become involved with the office of sustainability, and its initiatives. The community outreach plan will ensure this success.

## Paper & Virtual Fliers in the HRM Building

Andrew Nettels will be reaching out to Suzanne Taylor in regards to having virtual fliers, as well as paper fliers, posted around the HRM building. The flyers will contain QR codes, that when scanned, will direct users to virtual resources provided by the Green Fund Committee.

## Class Presentations

Andrew Nettels will be reaching out to professionals from the faculty directory, as well as enlisting the aid of students to assist in targeting all HRM classes. Currently, our goal is to have presentations in every class at the HRM building. Class presentations will cover the goals of this project, its benefits, and educate HRM students on what they can do to help us with our goal. The more HRM students that know about our plan, the greater the likelihood that they will contribute

to composting and help us reach our goal. During these presentations, we will also be handing out paper fliers to all students wishing to know more about our plan. Our hope is that these presentations will recruit and inspire HRM students to create green fund projects.

*HRM Community Compost* Nettels, Chafe, 10

## Collaboration with Media Outlets

Andrew Nettels will be collaborating with various media outlets in order to further spread awareness about the importance of composting. We have worked with many of these media outlets in past projects. For this project, we are aiming to work with at least 4 different outlets.

- (1) *NAU News* (<https://news.nau.edu>): NAU News is Northern Arizona University's official source for all University news.
- (2) *The Lumberjack* (<http://www.jackcentral.org>): The Lumberjack is Northern Arizona University's student-run newspaper. The Lumberjack has both a website and print version. Their goal is to bring the news that is important to you through an expanding variety of different media, including broadcast, web and print. Their website is produced and maintained by staff of The Lumberjack newspaper and the Media Innovation Center in the School of Communication at Northern Arizona University.
- (3) *NAZ Today* (<https://www.naztoday.com/>): NAZ Today is a production of students, faculty, and staff working in the Media Innovation Center at Northern Arizona University's School of Communication.
- (4) *Hospitality Net* (<https://www.hospitalitynet.org/>): Hospitality Net is the online resource for the Hospitality Industry. Featuring hospitality and hotel news, market reports, columns, staff movements, industry events, jobs, suppliers and industry links.

## Project Parameters

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

The environmental costs associated with this project are miniscule. The only significant environmental cost associated with this project are the emissions from the campus composting delivery trucks. Specifically, these vehicles deliver compost from the North Dining Hall to the composting plant. The main environmental benefit associated with this project comes from reducing the amount of potential compost that would be going to waste in the HRM building.

*HRM Community Compost* Nettels, Chafe, 11

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

Due to the low cost of this project and its projected impact on the HRM community and sustainability, there is a positive benefit-cost ratio. Composted materials will eventually be used in the future HRM kitchen garden being built next semester. Dr. De Micco expressed interest in having HRM composted materials being recycled into the HRM kitchen garden. Next semester there will be a vegetable garden that will provide vegetables and raw ingredients to the culinary courses. This will reduce fertilizer costs in the future for the HRM department.

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

This project is a one-time expense.

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

The HRM program will maintain the project in the future.

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

We are going to conduct audits of the HRM composting lot on a quarterly basis. This will ensure that no plastic enters into the compost pile. On a biannual basis, we assess the progress of the compost in tandem with facility services to ensure the integrity of the composting product

*HRM Community Compost Nettels, Chafe, 12*

## Budget: HRM Community Compost

Item	Price	Quantity	Total
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	\$64.97	1	\$64.97
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Brute 44GAL Wheeled Trash Can Gray			
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23GAL Vented Trash Can	\$55.97	1	\$55.97
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	\$8.98	1	\$8.98
	\$9.97	1	\$9.97

Long Cuff PVC Coated Gloves			
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1 GAL Simple Green All-Purpose Cleaner Concentrate			
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56 oz HDX Handheld Sprayer \$7.97 1 \$7.97 Oil-Based Bold Paint Pen \$3.47 1 \$3.47

60" poster display stand \$51.00 1 \$51.00

[Estimates with contingency] Exterior Signage	Interior Signage \$250.00 1 \$250.00
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Amount (before contingency) \$452.33 (add): 5% contingency \$22.62 **Total Requested**

**Funds \$474.95**

## Timeline: HRM Community Compost

### Action Parties Involved Month/Year

Purchasing of Project Materials Andrew Nettels, Shawna Multine	Community Engagement All those affiliated with the project October, 2021 October, 2021 October, 2021
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Implementation All those affiliated with the project

*HRM Community Compost* Nettels, Chafe, 13

October 7, 2021

To: NAU Green Fund Committee

From: Dr. Frederick De Micco, *Professor and Executive Director at the School of Hotel & Restaurant Management*

Dear Green Fund Committee,

I am submitting this letter of support on behalf of the School of Hotel and Restaurant Management to confirm my full commitment and support for the proposed *HRM Community Compost Project* by Andrew Nettels, Treasurer of the Green Fund Committee. In partnering with this proposed project, the HRM program has agreed to serve as the sponsoring department for the project. This project proposes a composting program for the School of Hotel & Restaurant Management. Upon completion, the HRM program will be the first academic unit at Northern Arizona University to implement student-led composting.

In partnering with this initiative, the HRM department will serve as the sponsoring department. The program will cover the upfront fixed costs. Upon completion of the project, the Green Fund Committee will reimburse the department for the actual amount spent on the project. The project's request for reimbursement shall not exceed its encumbered amount. The department understands that the Green Fund is only responsible for the initial purchase of the materials and/or salaries as approved within the proposal, and will not fund continued maintenance of the program.

Sincerely,

*Frederick De Micco*

*Frederick J. DeMicco, Ph.D., RDN.*

Executive Director & Professor, School of Hotel and Restaurant Management

Frederick.DeMicco@NAU.edu

928.523.0644

## Campus Services and Activities

October 4th, 2021

To: NAU Green Fund Committee, HRM Faculty, & all affiliated with the proposed project  
From: TC Eberly - *Associate Vice President, Campus Operations*

To Whom it may concern,

I am writing this letter to formalize my support for the proposed HRM Composting project. This letter is to verify the logistical possibility of the proposed project, specifically, the transportation of the HRM composting materials from the Union loading/receiving dock to the composting facility on South Campus. This letter is not for the purpose of making a funding commitment to the project, but rather, to attest to the feasibility of the proposed project.

On weekdays through the semester, Campus Services transports raw composting materials from dining services at the University Union to the South Campus composting fields, also referred to as "Howard's Mesa". In speaking with the coordinator of the proposed project, Andrew Nettels, we discussed a variety of topics, ranging from student involvement with composting to University Marketing approval of appropriate signage.

For this project, I recommended that Andrew look into purchasing two (small sized) bins. The bins will need handles and wheels so the student volunteers may easily transport the raw composting materials to the Union Loading Dock. Andrew mentioned that he will contact Professor Boger at the School of Hotel & Restaurant Management for the purpose of sourcing HRM cafe volunteers to transport the bins to the Union loading dock every other week.

I approve of the project's intent to leave HRM composting bins at the Union Loading Dock, so long as Student Volunteers will transport the bins to and from the HRM building & the loading dock. My department will not assume responsibility for transport of the composting materials from the HRM building to the Union loading dock or return of empty bins back to the HRM facility.

For concerns regarding this project, please contact Andrew Nettels ([acn76@nau.edu](mailto:acn76@nau.edu)).

Regards,



Thomas Charles Eberly  
*Associate Vice President, Campus Operations*

October 11th, 2021

To: NAU Green Fund Committee, HRM Faculty, & all affiliated with the proposed project  
From: Ralph Padilla - *Manager, Grounds*

To Whom it may concern,

I am writing this letter to formalize my support of the HRM Community Compost Project. This letter is not for the purpose of making a funding commitment to the project, but rather, to state my department's intent to assist the proposed initiative.

This letter is to verify the logistical possibility of the proposed project, specifically, the receiving of the HRM composting materials at the composting plant. Landscaping and Grounds will not be responsible for the transport of the compostable materials from the HRM building to the Union loading/receiving dock, for which approval was obtained by T.C. Eberly. Landscaping and Grounds will work alongside the composting delivery drivers to receive the HRM compostable materials at the NAU Compost Plant, also referred to as Howard's Mesa.

Once received, the composting crew will place the HRM biodegradable bag within the HRM composting plot; a small plot within Howard's Mesa for the School of Hotel and Restaurant Management. This plot was set aside when Andrew Nettels toured the composting facility. As a part of his project, Andrew's first task will be to create weather resistant outdoor signage (i.e., a stake with a laminated sign), that will label the HRM composting plot. Andrew will do the same with the HRM composting bin. These measures will ensure that the integrity of our composting process is maintained.

This letter is not for the purpose of making a funding commitment to the project, but rather, to state my department's intent to assist the proposed initiative.

Sincerely,

*Ralph S Padilla*

Facility Services, Manager - Grounds & Landscaping

October 14, 2021

To: NAU Green Fund Committee

From: Mark Molinaro, *Interim Associate Director & Senior Chef Lecturer, School of Hotel & Restaurant Management*

Dear Green Fund Committee,

I am submitting this letter of support on behalf of the School of Hotel and Restaurant Management to confirm my full commitment and support for the proposed *HRM Community Compost Project* by Andrew Nettels, Treasurer of the Green Fund Committee. In partnering with this proposed project, the HRM program has agreed to serve as the sponsoring department for the project. This project proposes a composting program for the School of Hotel & Restaurant Management. Upon completion, the HRM program will be the first academic unit at Northern Arizona University to implement student-led composting.

The proposed project will utilize compostable materials from various sources. One source is the Marriott Demonstration Kitchen that is located within the School of Hotel & Restaurant Management. The benefit of this project is that all compostable food waste materials from the kitchen and its culinary courses will be composted. I look forward to witnessing the impact of this project and its results.

Sincerely,



**Mark Molinaro**, M.Ed., CEC '18  
Interim Associate Executive Director  
Senior Chef Lecturer, Isbell Hospitality Ethics Professor

October 14, 2021

To: NAU Green Fund Committee  
From: Prof. Julene Boger, *Lecturer*

Dear Green Fund Committee,

I am submitting this letter of support on behalf of the School of Hotel and Restaurant Management to confirm my full commitment and support for the proposed *HRM Community Compost Project* by Andrew Nettels, Treasurer of the Green Fund Committee. In partnering with this proposed project, the HRM program has agreed to serve as the sponsoring department for the project. This project proposes a composting program for the School of Hotel & Restaurant Management. Upon completion, the HRM program will be the first academic unit at Northern Arizona University to implement student-led composting.

The proposed project will utilize compostable materials from various sources. One source is the Cult Artisan Beverage Learning Cafe. The benefit of this project is that all compostable food waste materials from both the Cafe and the culinary courses I teach, will be composted.

As a faculty member, I oversee the student-run interest Cult Artisan Beverage Learning Cafe. In collaborating with Andrew Nettels and the Cafe's General Manager, Joanie Heard, I believe that this project has the potential to further substantiate the department's commitment to sustainability.

I look forward to witnessing the impact of this project and its results.

Sincerely,



**Julene Boger**  
Lecturer, NAU School of Hotel & Restaurant Management