# Atlas Zero Waste Program

**USF SGEF Fast-Track Grant Proposal** 

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### The Problem

Based on ongoing student observation and data collection over the past 5 years, USF has an ineffective waste reduction and waste disposal system that prevents it from achieving its sustainability goals.



## **Ineffective System**

- The USF Recycling Drop-Off Station on Sycamore Drive was closed in 2020 due to the irregular disposal of non-recyclable materials.
- There is confusion among employees and students regarding the proper disposal of trash and recycling into bins and dumpsters, which causes contamination of otherwise recyclable materials.
- USF does not consistently group trash and recycling receptacles together, despite the practice being recommended by local and national experts to reduce contamination.
- There is not available funding to replace items such as recycling receptacles on campus, and there has not yet been an assessment to determine the most practical or sustainable solutions, should funding be awarded.
- In a survey conducted in Fall 2020, 51% of students indicated that they did not know where to go on campus to recycle specific materials. Over 50% of students answered that they are unlikely to recycle if there is no recycling bin clearly visible in their area.

## **Ineffective System**

- From my own experience, I am only certain about what the Coca-Cola reverse vending machines (RVMs) recycle – clean water bottles and aluminum cans. Other bins are inconsistent and lack labels.
- Robin Rives, a former student at USF, conducted her own study to determine the campus' current practices. However, considering this study was performed in 2018, some aspects have changed over time. Recommendations were made, but only for recycling specifically.
- Angela Fama, a former student at PCGS, performed a waste audit to evaluate the materials in the MSC's trash and recycling. She found that most recyclable items were contaminated.
- Beyond recycling, students have limited accessibility to reuse or compost systems, unless they are student-led.



# **Failing Sustainability Goals**

- In 2010, USF created a climate action plan that is meant to serve as "a living document to be revised annually by the Office of Sustainability." However, USF lacks an active Office of Sustainability, a Director of the Office of Sustainability, and a Sustainability Initiative Steering Committee to annually review the CAP, benchmark progress, and move USF forward with local and Higher Education Sustainability Goals.
- <u>Florida Statute 403.7145(2)</u> requires (to the greatest extent practical) colleges and universities to maintain a recycling program.

STARS, a program of AASHE (Association for the Advancement of Sustainability in Higher Education), is a sustainability tracking, assessment, and rating system. USF is currently rated Silver.



USF overall had poor scores.

In 2022, 167,552.40 metric tons of CO2 were produced by USF.

~ 4.22 metric tons of CO2 were produced per campus user.



### **Waste Data**

Construction and demolition materials recycled, donated, or otherwise recovered:

1,717.37 Tons

Construction and demolition materials landfilled or incinerated:

188.52 Tons

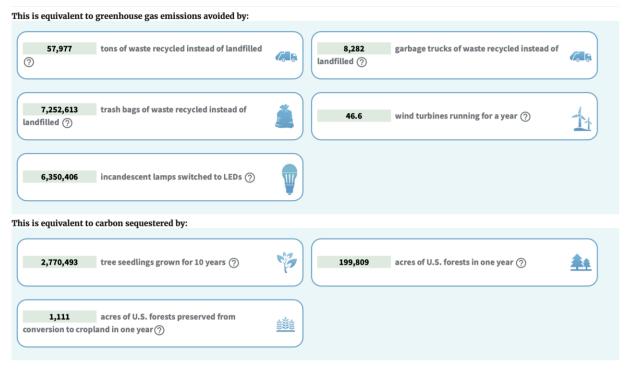
Percentage of construction and demolition materials diverted from the landfill or incinerator through recycling, donation and/or other forms of recovery:

90.11

Figures needed to determine total waste generated (and diverted):

Tigures needed to determine total waste generated (and diverted).			
	Performance Year	Baseline Year	
Materials recycled	87 Tons	87 Tons	
Materials composted	0 Tons	0 Tons	
Materials donated or re-sold	0 Tons	0 Tons	
Materials disposed through post-recycling residual conversion	0 Tons	0 Tons	
Materials disposed in a solid waste landfill or incinerator	485 Tons	485 Tons	
Total waste generated	572 Tons	572 Tons	

### **USF's CO2 Emissions**



(Calculated with the EPA's Greenhouse Gas Equivalencies Calculator)

### **About PLAN**

- The Post-Landfill Action Network (PLAN) was founded in 2013 by a group of college students at the University of New Hampshire.
- These students witnessed a **systemic waste problem** on their campus and developed the first student-led, financially self-sustaining, zero waste move-out program of its kind.
- Other campuses wanted to replicate the program and from there, PLAN was born.
- PLAN support students and staff with enacting a wide range of infrastructure changes on campus. They have worked with over 1,000 campuses across the US and Canada.



### STUDENTS





PLAN trains students to effectively navigate and impact their campus.

PLAN works
within colleges
and universities to
emulate zero waste
systems, spread
awareness on the
impacts of the
Linear Consumption
Economy, and hold the
campus accountable to
their waste.

mutual inspiration between students and partners.

**PLAN** fosters

PLAN supports the Student-Led Zero Waste Movement

PLAN provides collaborative opportunities for education about zero waste systems. PLAN builds relationships with a

wide variety of movement partners working toward zero waste to illustrate the many points of intervention in systemic change.

CAMPUSES



# **Atlas Fellowship Program**

Stage 1	Stage 2	Stage 3	
Perform a Holistic Campus-Wide Assessment	Establish a Campus-Wide Strategic Vision	Create a Zero Waste Action Plan	
<ul> <li>→ Establish a baseline to assess institutional gaps</li> <li>→ Lays the foundation for institutional goal setting and the ability to benchmark and track progress</li> </ul>	<ul> <li>→ Visioning allows stakeholders to engage with possible long-term solutions without the limitations of current systems, logistics, staffing and budgets</li> <li>→ Does not need specific details</li> </ul>	→ Fill in specific details: implementation strategy, cross-departmental collaboration and management, cost of implementation, expected timeline of implementation	
→ 1 Semester	→ 1 Semester	→ 1 Year (2 Semesters + Summer)	
	proposal to Admin (Provost, approval to move into Stage	clear institutional capacity to invest in	

## **Stage 1 Process**

- The assessment divides material management into two different scopes.
- This is based on how those materials are typically procured and used, and ultimately how those materials are managed when it comes time to either reuse, repair, compost, recycle, or dispose of them.

SCOPE 1 HARD GOODS Surplus Property and Hard-to-Recycle Materials  Materials the campus has direct control over	SCOPE 2 SOFT GOODS Food and Single-Use Materials  Materials the campus purchases, but has limited control over which bin the material is placed in
Electronics	Food Waste
Furniture	Food Packaging
Office Supplies	Disposable Dishware
Lab / Art Equipment	Disposable To-Go Ware
Vehicles / Tires / Oil	Compostable Dishware
Chemicals / EH&S material	Compostable To-Go Ware
Facilities / C&D material	Reusable Dishware
	Reusable To-Go Ware

### **Stage 1 Process**

- When interviewing stakeholders, the questions on the checklist ask about the existence of systems, infrastructure, and policy that demonstrate sustainable materials management, based on best practices that the Atlas team has observed on college campuses across the U.S.
- Each question is assigned a point value based on where the practice would fall on the zero-waste hierarchy.



# RETHINK/REDESIGN REDUCE REUSE RECYCLE/COMPOST MATERIAL RECOVERY RESIDUALS MANAGEMENT (Biological treatment and stabilized landfilling) UNACCEPTABLE (Waste deregulation, incineration, and "waste-to-energy")

### **Stage 1 Outcome**

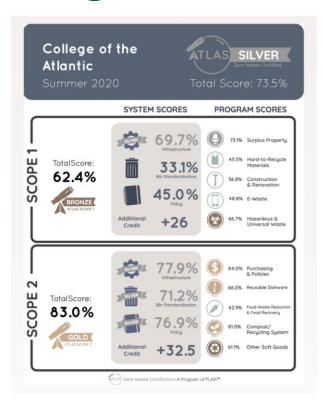


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(HRM)	
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- Score card is created, as well as a comprehensive report.
- Report provides recommendations for Stages 2 and 3.

# **Stage 1 Timeline**

Week 1-2: Start of Fellowship

• Complete stakeholder identification for any stakeholders that haven't been identified.

Week 3-9:

- PLAN provides support to fellow by following up with stakeholders who have not replied to requests for an interview or who have not filled out the Google form.
- Alternate contacts found where necessary.
- PLAN creates report draft.

Week 10: Wrap-Up

- Participate in an exit interview with Atlas staff and the fellow.
- Review the report draft and provide feedback.
- Submit payment.

### Students get involved with PLAN



By engaging with PLAN's programming and resources, student leaders deepen their understanding of the Waste Crisis.



Students work together to envision changes on their campuses.



Students **make change happen**, winning campaigns for administrative support and implementing zero waste infrastructure.



Infrastructure change leads to widespread behavior changes.



Momentum builds across campuses as PLAN spreads the word of student success.



Students graduate with a better understanding of zero waste systems.

The standard expectation of waste & consumption on a campus shifts, achieving a new normal.



# **Funding**

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tem	Source of Item (Website/Vendor Name)	Item Description	Cost Per Item	Quantity	Total SGEF Cost	
Materials, Supplies, Promotional Items and Services						
JSF PLAN Membership	Post-Landfill Action Network (PLAN)	Membership to participate			1000	
SF Tampa Atlas Stage 1 Assessment	Post-Landfill Action Network (PLAN)	Stage 1 fellowship program			3825	
					100	
					0	
otal					4925	
abor/Personnel, Stipend, Rentals, T	ravel, etc.					
					0	
					0	
					0	
					0	
otal					0	
other Costs (Indicate any other recu	rring fees such as equipment service fees, returns, etc.)					
•					0	
					0	
					0	
					0	
					0	
					0	
					0	
otal					0	
otal Direct Costs					4925	
dministrative Fee (6%)					295.5	
otal Project Costs					5220.5	
tar i roject costs					3220.3	

Note: I will be paid by Facilities Management Planning through my internship. No additional funding is needed.



# Thank you!

