



Meeting Summary

March 6, 2026

Council Members Present (via Zoom):

Bob Reuning — Vice President & Chief Administrative Officer (Chair)

Mary Dorman — Executive Director, Environmental Safety, Sustainability & Risk

Scott Lupin — Assoc Director, Environmental Safety, Sustainability & Risk; Director, Office of Sustainability

Colleen Wright-Riva — Assistant Vice President, Division of Student Affairs

Stephanie Yearwood — Professor, Environmental Science and Technology

Tim Knight — Program Director, College Park Scholars Program, Environment, Technology & Economy

Susan Corry — Director, Engineering and Energy, Facilities Management

Thomas McMullen — Special Assistant to the Provost, Facilities Management

Zie Goodman — Undergraduate Student Representative

Eric Wachsman — Professor, Materials Science and Engineering; Director, Maryland Energy Innovation Institute

Bryan Quinn — Director of Technical Operation, Department of Electrical & Computer Engineering

Shannon Files — Director of Enterprise Data Services, Division of Information Technology

Guests Present:

Javiera King — Executive Assistant, Division of Information Technology

Meeting start time: 1:00 pm

Meeting Highlights

Welcome and Agenda Overview— S. Lupin

Scott Lupin opened the meeting and welcomed attendees. Shannon Files introduced herself as the new Director of Enterprise Data Services in the Division of Information Technology, joining the Council following the retirement of Mark Addy. Lupin reported that the Sustainability Fund Review Committee has completed its review of all submitted proposals. The projects in this meeting and those presented to the Council in April are the final projects to be reviewed for this academic year.

Sustainability Fund Grant Recommendations, March 2026 — Z. Goodman

Undergraduate representative and Sustainability Fund Review Committee (SFRC) Chair, Zie Goodman, presented the committee's grant recommendations for this meeting (*Appendix A*). Goodman explained that an additional \$334,000 in proposals had been received at the January 15 deadline, bringing total requested funding for the funding cycle to approximately \$2.6 million overall and \$1.4 million for FY26. The SFRC recommended funding four projects totaling \$112,365, including \$98,779 from FY26 funds and \$13,586 from FY27.

The first proposal, "Campus Stormwater Innovation through Student-Led Biochar–Biopolymer Soil Treatment Pilot for Sustainable Infrastructure", requested \$50,000 over two years. The project would implement and evaluate a biochar–biopolymer amended soil cover system installed along pavement edges near Lot 11 with the aim to reduce pollutants entering campus waterways from roadway runoff. The system is expected to reduce pollutant loads, including PFAS, heavy metals, nutrients, hydrocarbons, and other contaminants. In addition, the project would provide hands-on research opportunities for undergraduate students in environmental engineering and sustainability monitoring. Council members asked questions regarding the fate of applied materials after the experiment and safety considerations for working near parking lots and roadway shoulders. The Sustainability Fund Administrator agreed to follow up with the applicant on these topics. Ultimately, the benefit of testing passive bio-based treatment systems for stormwater infrastructure and the educational value of the project were deemed worthwhile and **the proposal was approved.**

The "Wood Vault" proposal requested \$20,700 to bury waste wood at the Turfgrass Research Farm. The project would prevent carbon emissions associated with burning or decomposing wood while testing a carbon sequestration method. The project includes funds for installing sensors to monitor oxygen and methane levels and ensure the vault remains in anaerobic conditions. It is expected to sequester 5–10 tons of CO₂ and involve undergraduate students in research activities such as sensor deployment, carbon accounting, and data analysis. During discussion, Council members raised questions about methane formation and the long-term effectiveness of the technology as a carbon sequestration method. It was noted that although the long-term climate impact is uncertain, the relatively low cost makes the project a worthwhile experiment. **The proposal was approved.**

The third proposal, "Restoration and Implementation of the Golf Course Rain Garden", requested \$5,549 to restore the University of Maryland Golf Course rain garden, which includes removing debris, introducing native plants, and improving the outflow pattern of the rain garden. The student-led restoration supports UMD's commitment to qualify as a bird and bee campus by creating improved pollinator habitat while enhancing stormwater management. The rain garden is estimated to treat

approximately 60,000 gallons of stormwater annually once restored. Multiple Council members emphasized that Facilities Management personnel were aware of and in support of the project. **The proposal was approved.**

The final proposal, “Campus Biodiversity Baseline for Nature-Positive UMD”, requested \$38,070 (\$36,115 of which was recommended by the SFRC) to conduct a campus-wide biodiversity inventory to establish a biodiversity baseline. The project will use environmental DNA sampling and bioacoustic monitoring to identify species present across campus and map biodiversity hotspots. This project would enable identification of areas needing restoration and help to guide future sustainability efforts on campus. The data will be incorporated into coursework and research across multiple departments. A question was raised about what kind of organisms will be included in the study, and it was clarified that the sampling would be as comprehensive as possible, including measurements of soil microorganisms, insects, and birds, for instance. There was also a question about the feasibility of decreasing the proposed intern hourly rate from \$20/hour to \$16/hour, as recommended by the SFRC, which the project lead confirmed through prior communication. **The proposal was approved.**

Draft of New Council Goals — S. DeLeon

Sally DeLeon presented an updated draft of the Sustainability Council’s new goals for the next 10 years (*Appendix B*), noting that the document remains a working draft and is still undergoing final internal and external review. She thanked the Council members for their engagement throughout the process, helping to refine and consolidate the goals since the previous version presented in December. Some sections still need additional input from external stakeholders (e.g., Dining Services and Student Affairs).

DeLeon highlighted key updates, including refocusing the first goal to emphasize a culture of sustainability in research operations and in STEM research environments, with elements related to the humanities incorporated into a different goal. Sally invited feedback from the Council on each goal. The discussion included a suggestion to strengthen language around AI literacy by emphasizing active implementation (e.g., training) rather than passive resource development. Clarification was sought on whether community-focused goals should explicitly include on-campus sustainability efforts, and DeLeon noted that this is addressed in other goals but acknowledged the overlap. Council members were reminded that they have commenting access to the draft and are encouraged to provide additional feedback asynchronously.

Sustainability Fee Update — S. Lupin

Scott Lupin reported that he and Taylor Brinks recently presented to the Graduate Student Government (GSG) Assembly regarding the proposed graduate student Sustainability Fund fee and how the Fund operates. The GSG Assembly voted with a slight majority in support of adopting a sustainability fee for graduate students. However, the decision is not yet binding and must be revisited by the GSG in the next academic term before implementation. If adopted, the graduate students would contribute an additional \$140,000 to the fund annually.

Adjourn 2:17 pm

Appendices

Appendix A: Sustainability Fund Grant Recommendations March 2026

Appendix B: Draft of New Council Goals



GRANT RECOMMENDATIONS March 2026



Sustainability Fund Budget for FY26-FY28



Summary of Total Requests		Recommendations for 3/6/26	
FY26 Requested	\$1,453,951.33	FY26 Recommendations	\$98,778.90
FY27 Requested	\$614,582.76	FY27 Recommendations	\$13,586.00
FY28 Requested	\$547,279.37	FY28 Recommendations	\$0.00
Total Requested	\$2,615,813.46	Total Grant Recommendations	\$112,364.90
FY26 Total Available	\$1,114,108.15	Amount remaining for FY26 if recommendations are approved*	\$718,690.93
FY26 Total Available after 12/1 Council Meeting	\$817,469.83		

**Excluding the \$25K from MEIP for student research*



Projects Recommended for Funding



1. Campus Stormwater Innovation through Student-Led Biochar–Biopolymer Soil Treatment Pilot for Sustainable Infrastructure
2. Wood Vault
3. Restoration and Implementation of the Golf Course Rain Garden
4. Campus Biodiversity Baseline for Nature-Positive UMD



Campus Stormwater Innovation through Student-Led Biochar–Biopolymer Soil Treatment Pilot for Sustainable Infrastructure



Total Requested	\$50,000	SFRC Recommended	\$50,000
FY26 Requested	\$36,414.00	SFRC Recommended	\$36,414.00
FY27 Requested	\$13,586.00	SFRC Recommended	\$13,586.00

Summary: This project requests \$50,000 over two years to implement and evaluate a biochar–biopolymer amended soil cover system installed along pavement edges near Parking Lot 11 to reduce pollution loading to campus waterways. The funding would cover undergraduate student employees, a graduate student assistant, and project supplies.

Submitted by: Jongwan Eun, Department of Civil & Environmental Engineering



Student-Led Biochar–Biopolymer Soil Treatment Pilot for Sustainable Infrastructure



- **Primary Goal:** To create a reactive stormwater barrier to intercept pollutants before they reach deeper soils or drains while creating a hands-on sustainability testbed that integrates education, research, and outreach, strengthening experiential learning opportunities in sustainable infrastructure design.
- **Expected Impact:**
 - Reduced pollutant loads and improved water quality by reducing contaminant transport from roadway runoff.
 - 60–80% PFAS reduction through sorption to biochar surfaces
 - 70–90% heavy metal removal via ion exchange and surface complexation
 - 50–70% nitrogen and phosphorus reduction through sorption and biological immobilization.
 - 40–60% reduction of hydrocarbons and organic residues from roadway runoff
 - Provide at least 10 undergraduate students with experience in research design, field installation, sampling, laboratory analysis, data interpretation, sustainability monitoring, and environmental engineering.
- **Need:** Conventional stormwater systems often struggle to remove low-concentration but persistent pollutants like PFAS, which this research aims to improve upon.
- **Metrics for Success:** They will use quantitative environmental measurements, hydraulic performance data, and educational outcomes to evaluate the soil treatment and student experience.
- **Broader Impacts:**
 - Supports the development of a passive, bio-based system to replace energy-intensive chemical treatment processes, which aligns with UMD’s carbon neutrality and sustainable infrastructure objectives.
 - The low-maintenance system can reduce compliance costs for campus stormwater infrastructure.



Recommended Budget



	FY26	FY27
Graduate Research Assistant	\$4,483.00	\$2,353.00
Graduate Student Tuition Remission	\$2,766.00	\$5,808.00
Undergraduate Research Assistants	\$5,166.00	\$5,424.00
Biochar & Biopolymer Treatment	\$4,000.00	\$0.00
Analytical Testing (PFAS, metals, and nutrient analyses)	\$6,000.00	\$0.00
Supplies (Lysimeter, tubing, safety supplies, temperature sensor, weather stations, etc)	\$14,000.00	\$0.00
FY26 Request		\$36,414.00
FY27 Request		\$13,586.00
Total Request		\$50,000.00



Wood Vault

Total Requested	\$20,700.00	SFRC Recommended	\$20,700.00
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Summary: This project, led and developed by undergraduate students in the Environmental Monitoring Lab, requests \$20,700 to create a wood vault at the Turfgrass Research Farm. Waste wood will be buried, preventing the release of CO₂ into the atmosphere due to burning or decay. Funding would cover the expense of creating the wood vault and installing sensing devices for data collection and long-term monitoring.

Submitted by: Griffith Uy, Student, Head of Sensor Deployment for the Environmental Monitoring Lab



Wood Vault



- **Primary Goal:** To develop and test a method of carbon sequestration and a way to seal gases underground through the development of a wood vault.
- **Expected Impact:**
 - The Wood Vault will sequester an estimated 5–10 tons of CO₂.
 - Provide undergraduate students with hands-on experience in sensor deployment, carbon accounting, solar design, data analysis, and practical skills in climate and engineering research.
- **Need:** Funding is necessary to install the wood vault but the system is fairly self-sufficient and is expected to run for at least the next 5-10 years.
- **Metrics for Success:** Sensors will be used to measure oxygen and methane levels, ensuring they remain low and the wood vault is functioning successfully.
- **Broader Impacts:**
 - The results will inform future sustainability initiatives and demonstrate scalable carbon sequestration methods for other institutions.
 - Engage 12-17 undergraduate students from varying disciplines in an interdisciplinary learning environment.
 - The use of low-cost sensors helps reduce the overall costs, making wood vaults more feasible as carbon sequestration solutions compared to competing systems costing \$100,000.



Recommended Budget



Item	Cost
Excavator & Crew	\$3,164.00
Installation (log & pipe installation, root prune, seed & curlex)	\$4,640.00
Solar Powered System x3	\$3,132.00
GHG Gas Concentration System x2	\$4,300.00
Soil Flux Chamber w/ Sensor Package	\$4,100.00
Shipping	\$1,364.00
FY26 Request	\$20,700.00
Total Request	\$20,700.00



Restoration and Implementation of the Golf Course Rain Garden

Total Requested	\$5,549.46	SFRC Recommended	\$5,549.46
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Summary: This project requests \$5,549.46 to revitalize the University of Maryland Golf Course rain garden. UMD has committed to being a bird and bee campus, and this project is part of an initiative to improve habitat and conditions for these animals. Funding will cover the cost of materials to clean up waste and debris, develop new habitat with native plants, and enhance the outflow area of the rain garden.

Submitted by: CRAMP-P Team, College Park Scholars: Environment, Technology, and Economy



Restoration and Implementation of the Golf Course Rain Garden



- **Primary Goal:** To improve campus biodiversity through the development of native habitat at the golf course rain garden.
- **Expected Impact:**
 - Increased biodiversity and revitalized garden will make the area less vulnerable to sudden storms.
 - Support UMD's bird/bee campus goals through the development of bird and pollinator habitats.
 - Students will gain hands-on experience in the implementation of a project based in biodiversity and stormwater management.
- **Need:** This garden has not been fully functional or healthy for quite some time and was identified as an area of restoration interest by the golf course due to positioning, high rates of erosion, and loss of native plants to invasive plants.
- **Metrics for Success:** Pollinator counts, invasive/native plant before/after count, and water drainage observations 24-48 hours after a storm event.
- **Broader Impacts:**
 - It's estimated that the rain garden will treat roughly 60,000 gallons of stormwater each year from the parking lot.
 - Restoration will reduce maintenance and create an opportunity for educational outreach at the golf course.



Recommended Budget



Item	Cost
Leafgro	\$1,429.28
Soil Materials (topsoil, sand, mulch)	\$1,231.53
Native Plants (milkweed, spicebush, river birch, serviceberry, goldenrod, etc)	\$1,028.20
Rocks (3 in to 5 in)	\$1,187.20
Shipping and Emergency Fund	\$673.24
FY26 Request	\$5,549.46
Total Request	\$5,549.46



Campus Biodiversity Baseline for Nature-Positive UMD



Total Requested	\$38,070.00	SFRC Recommended	\$36,115.44
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Summary: This proposal requests \$38,070.00 to conduct a campus-wide inventory for a biodiversity baseline. The data will be used to evaluate campus sustainability efforts, identify areas of low/declining biodiversity, and be incorporated into course curriculum. Funding will cover the salary of 2 undergraduate students, bioacoustics and environmental DNA equipment, and outreach.

Submitted by: Juanita Choo, Faculty, Environmental Science & Technology



Campus Biodiversity Baseline for Nature-Positive UMD



- **Primary Goal:** To establish a campus biodiversity baseline through student-led data collection to be used to support sustainability and biodiversity initiatives on campus.
- **Expected Impact:**
 - Produce maps of on campus areas with low biodiversity, to be targeted for restoration.
 - Use environmental DNA analysis to identify and map sites on campus where the soil is most biodiverse and effectively acting as a carbon sink.
 - Create an opportunity for undergraduates to collect, analyze, and interpret environmental DNA and bioacoustics data, meaningful skills for careers in environmental consulting and conservation.
- **Need:** This data will inform research and restoration work on campus and 4 faculty members have expressed interest/commitment to integrating the dataset into their courses.
- **Metrics for Success:** Quantity of distinct species identified on campus, quantity of students (interns, volunteers, and course students) trained and involved in the project.
- **Broader Impacts:**
 - Individual departments often spend \$500-2,000 on localized biological surveys for specific classes, research, or student capstones, a cost that will be eliminated with open-access campus data.
 - Methodology can be scaled to other universities and support the development of a unified data network.



Proposed Budget



Salary for 2 Undergraduate Students (\$21/hr for 480 hours)	\$10,080.00
Bioacoustics Equipment (recorders, memory cards, recorder mounts)	\$5,800.00
Field tablet for standardized data entry	\$420.00
Environmental DNA soil/air sampling and collection equipment	\$3,450.00
DNA extraction kit with reagents x2	\$3,000.00
Outsourced sequencing and DNA processing fees	\$15,000.00
Poster printing for outreach	\$320.00
FY26 Request	\$38,070.00
Total Request	\$38,070.00



Recommended Budget



Salary for 2 Undergraduate Students (\$16/hr for 480 hours) & fringe benefits	\$8,125.44
Bioacoustics Equipment (recorders, memory cards, recorder mounts)	\$5,800.00
Field tablet for standardized data entry	\$420.00
Environmental DNA soil/air sampling and collection equipment	\$3,450.00
DNA extraction kit with reagents x2	\$3,000.00
Outsourced sequencing and DNA processing fees	\$15,000.00
Poster printing for outreach	\$320.00
FY26 Request	\$36,115.44
Total Request	\$36,115.44

Draft of New Council Goals

March 6, 2026



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**FEARLESSLY
FORWARD**

sustainableumd





Thank You!



- For giving your time and attention to read over the draft goals, digest them, and share your suggested edits, improvements and questions
- For engaging in small group conversations with the Office of Sustainability in January
- For submitting the Reflection Google Form





WORKING DOCUMENT

<https://docs.google.com/document/d/1Ylr2ctQbO8heLNPkLHtv77guNr54ycVzekHaYnLqs2g/edit?usp=sharing>



➤ **STAKEHOLDER CONSULTATION**



1) Culture of Sustainability in Research Operations



- Division of Research
- Facility and IT managers for STEM research departments
- Procurement officers
- Research safety managers
- Select Principal Investigators



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2) Community Partnership for Impact



- Center for Community Engagement
- Partnership for Action Learning in Sustainability
- AGNR Extension
- Leadership & Community Service Learning



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3) Food Resiliency & Access



- Dining Services
- Thrive Center for Essential Needs
- College of Agriculture & Natural Resources
- School of Public Health



**STAKEHOLDER
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4) Experiential Learning



- Teaching & Learning Transformation Center
- College Park Scholars
- Arts for All
- Resident Life
- Dining Services
- RecWell
- Arboretum Outreach Center
- Center for Social Value Creation
- Do Good Institute



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5) Sustainable Infrastructure & Campus Growth



- Facilities Management
- Residential Facilities
- Eppley Recreation Center
- Clarice Center for Performing Arts
- Dining Services
- Stamp Student Union
- Athletics
- DOTS



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6) Ecoregional Wisdom



- The Frederick Douglass Center for Leadership through the Humanities
- Arts for All
- Indigenous Futures Lab
- Nyumburu Cultural Center
- Arboretum Outreach Center
- Select Humanities, ENST, ENSP and Plant Sciences faculty members
- Global FEWture Alliance



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