Council Members Present (via Zoom):

Dannielle Glaros — Assistant Vice President & Chief of Staff, Office of the Vice President Vice President (Standing in for Bob Reuning, Vice President & Chief Administrative Officer (Chair)

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

Ann Tonggarwee — Deputy Chief of Staff, Office of the President

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

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

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

Stephanie Yearwood — Professor, Environmental Science and Technology

Tim Knight — Program Director, Environment, Technology and Economy

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

Susan Corry — Director, Engineering and Energy, Facilities Management

Thomas McMullen — Special Assistant to the Provost, Facilities Management

Courtnee Connon — Graduate Student Representative

Zie Goodman — Undergraduate Student Representative

Meeting start time: 12:00 pm

Meeting Highlights

Welcome & Agenda Overview — *D. Glaros*

Dannielle Glaros, Assistant Vice President and Chief of Staff (Division of Administration), opened the December meeting while filling in for Chair Bob Reuning. She confirmed no new attendees were present and outlined the day's agenda, beginning with Sustainability Fund recommendations followed by a discussion of the draft Council goals.

Sustainability Fund Grant Recommendations, December 2025 — *Z. Goodman*

Undergraduate representative and Chair of the Sustainability Fund Review Committee (SFRC), Zie Goodman, presented five project recommendations for Council consideration (*Appendix A*). Before describing each proposal, Goodman reviewed FY26 budget status and allocation totals.

Total requests to the fund across FY26–FY28 came to $2.2 million. There is a total of $1.1 million in funding available for FY26. After the November project approval, the remaining balance for FY26 stood at $1,055,836. For the December Council meeting, the committee recommended funding five projects totaling approximately $574,000 across FY26, FY27, and FY28, with $238,000 recommended in FY26, $166,000 in FY27, and $169,000 in FY28. If approved, these allocations would leave an estimated FY26 balance of $817,469.

Goodman introduced the first proposal, Environmental Sustainability Through Learning and Practice, which requested $302,571 over three years to support two undergraduate interns and one full-time Environmental Sustainability Associate. The SFRC recommended full funding for the project which would expand the university's capacity for environmental sampling, data management, site inspections, stormwater monitoring, and compliance support. The proposal aimed to provide essential staffing for launching the Green Labs pilot, developing recycling programs for lab plastics, and increasing outreach, training, and prevention programs. Discussion included the clarification that proposals must attach a supplemental form that justifies the inclusion of labor costs, a new stipulation to the fund bylaws which were updated the past year. Scott Lupin also provided background on the motivation and history of the Green Labs program, a version of which was piloted a decade ago, but was halted because it was too labor-intensive and lacked the staffing support needed for a sustainable launch. Additional staffing of the Environmental Associate and interns as well as interoffice collaboration within ESSR would better position the Green Labs program for success. The project received 7 yes votes and 2 abstentions. Since the Council had a quorum present, and a simple majority voted yes, **the proposal was approved.**

The second proposal was the UMD Waste Audit Grant Proposal, which aims to strengthen data collection on waste streams and support improved waste-diversion planning. The SFRC recommended funding the entire request of $39,700, to cover waste sampling audits for 4 residence halls and 4 academic buildings. The sentiment was raised that waste audits are essential to the university's waste management strategy, yet are not funded as a regular operational expense. In addition, it was mentioned that the rate of return is strong since the audit could reduce hauling costs and save substantial money. **The proposal was approved.**

The Council then considered the Terp Farm Experiential Education Leadership Pilot Program, which would fund a pilot program offering hands-on agricultural and food systems experience at the Terp Farm while scaling up the supply of food for campus dining halls. The SFRC recommended providing funding for $196,291 of the requested $386,005 to cover 8 of the 15 interns. This decision was based on conversations with the project lead who expressed confidence in finding other funding sources for the

remaining interns. Council members expressed strong support for the project's educational and operational value, emphasizing the importance of hands-on agricultural experience, and that the program's limitation has always been funding the student labor necessary to operate at scale. **The proposal was approved.**

The Stamp Herb Garden proposal sought funds to refresh garden beds on either side of the entrance to Stamp. The proposal requested $13,400 to cover costs for renovation of the irrigation system, materials including soil, compost, and herbs, educational signage, and an undergraduate part-time gardener. The project will engage students and staff from Stamp to harvest herbs that may be donated to the dining halls or Campus Pantry. The SFRC recommended removing the costs associated with the undergraduate student intern and contingency costs, decreasing the recommended funding to $8,000, as this internship was not seen as providing as much value to students compared to the internships proposed by other projects. There was discussion around the volume of herbs that could be produced in the beds and how they would be used, the choice of herbs mentioned in the proposal, and the potential to collaborate with Facilities Management to save costs on landscaping materials. **The proposal was approved.**

The final proposal sought funding to replace the water-cooled condensers used in the undergraduate organic chemistry laboratories with air-cooled condensers to reduce the significant amount of water currently used during the four annually recurring laboratory experiments. The project would also be integrated directly into the Organic Chemistry II curriculum, with students comparing air-cooled and traditional water condensers in their lab reports, including reflections on environmental impact and principles of Green Chemistry. The department noted that student laboratory fees are unable to cover the initial investment for new condensers. A consideration about any safety hazards regarding water-cooled systems was raised, and the Council agreed that approval should be contingent upon a follow-up meeting between the project team and ESSR to review the equipment and address any safety precautions. **The proposal was contingently approved.**

Sustainability Council Goals Draft Review Process — *S. DeLeon*

Sustainability Manager, Sally DeLeon, presented a draft set of updated Sustainability Council goals, developed from the breakout discussions in November and additional input gathered since that meeting. DeLeon walked through the major high-level themes that emerged from breakout groups, noting how frequently each theme appeared across group discussions. When asked how Council goals are used, DeLeon explained that the goals often reflect existing work, call attention to areas that need support, and identify where work groups might be needed.

To illustrate how complex discussions can become coherent goals, DeLeon showed a process model from the Council of Ministers of Education to illustrate how concepts like "Indigenous Ways of Knowing" are

operationalized into actionable goals. The six drafted goals were Responsible Science, Technology & Humanities; Community Partnership for Impact; Food Resiliency and Access; Experiential Learning; Sustainable Infrastructure; and Indigenous Knowledge.

As a way to support the future rollout of the goals, DeLeon introduced the concept of "regeneration" as a potential unifying theme for public communication and engagement. Members were encouraged to continue thinking about whether the framing of regeneration could help communicate the goals to a broad campus audience. Council members were instructed to provide written feedback on the goals and/or participate in optional small-group discussions with the Office of Sustainability. The Office of Sustainability will use this feedback to prepare a final draft of the goals, which will be presented to the Council in the spring.

Adjourn 1:55 PM

Appendices

Appendix A: Sustainability Fund Grant Recommendations December 2025

Appendix B: Draft Update to Sustainability Council Goals

GRANT RECOMMENDATIONS December 2025

Sustainability Fund Budget for FY26-FY28

Summary of Total Requests		Recommendations for 12/1/25	
FY26 Requested	$1,214,280.47	FY26 Recommendations	$238,367.12
FY27 Requested	$531,220.76	FY27 Recommendations	$166,598.26
FY28 Requested	$535,779.37	FY28 Recommendations	$169,614.87
Total Requested	$2,281,280.60	**Total Grant Recommendations**	$574,580.25
FY26 Total Available	$1,114,108.15	Amount remaining for FY26 if recommendations are approved	$817,469.83
FY26 Total Available after 11/3 Council Meeting	$1,055,836.95		

Projects Recommended for Funding

1. Environmental Sustainability Through Learning and Practice

2. University of Maryland, Waste Audit Grant Proposal 2025-2026

3. Terp Farm Experiential Ed. Leadership Pilot Program

4. STAMP Herb Garden

5. Replacing Water Condensers in Undergraduate Organic Chemistry Teaching Laboratory Courses

Environmental Sustainability Through Learning and Practice

Total Requested	$302,571.75	SFRC Recommended	$302,571.75
FY26 Requested	$97,886.42	SFRC Recommended	$97,886.42
FY27 Requested	$100,834.36	SFRC Recommended	$100,834.36
FY28 Requested	$103,850.97	SFRC Recommended	$103,850.97

Summary: The proposal seeks $302,572 to fund two undergraduate internship positions and a full time Associate position (ideally a recent UMD graduate) to support enhanced environmental monitoring to prevent pollution incidents and to launch the Green Labs program.

Submitted by: Scott Lupin, Director, Office of Sustainability; Associate Director, ESSR

Environmental Sustainability Through Learning and Practice

- **Primary Goal:** To create an opportunity for students and a recent graduate to learn about and gain experience in environmental management while supporting the launch of the UMD Green Labs program.

- **Expected Impact:**
  - Enhance training and education of lab members, build a Community of Practice, and implement a new recycling program for laboratory waste and energy use through the UMD Green Labs pilot program.
  - Undergraduate students will be provided with professional development to prepare for a career in environmental management and sustainability.
  - Strengthen connections between OEA and campus community through education and outreach.
  - Increased stormwater monitoring/management and site visits of areas with environmental risk.

- **Need:** OEA has limited staffing and requires these positions in order to feasibly and successfully launch the Green Labs pilot program and expand outreach to the UMD community.

- **Proposed Positions:**
  - 2 Environmental Sustainability Interns: sample environmental media, manage environmental data, and support risk assessment and mitigation.
  - 1 Environmental Sustainability Associate: support environmental management programs, launch Green Labs pilot program, and oversee interns.

- **Metrics for Success:** Associate and intern written reports; number of trainings/presentations, site inspections, and hours spent on environmental programs.

Environmental Sustainability Through Learning and Practice

	FY26	FY27	FY28
Intern 1	$5,120.00	$5,280.00	$5,440.00
Intern 2	$5,120.00	$5,280.00	$5,440.00
Associate	$62,500.00	$64,375.00	$66,306.25
Fringe Benefits	$24,646.42	$25,399.36	$26,164.72
Non-Labor Training	$500.00	$500.00	$500.00
FY26 Request			$97,886.42
FY27 Request			$100,834.36
FY28 Request			$103,850.97
Total Request			$302,571.75

University of Maryland, Waste Audit Grant Proposal 2025-2026

Total Requested	$39,700.00	SFRC Recommended	$39,700.00
Note	SCS Engineers quoted 2026 waste audit at $39,700.00, which includes waste samples from 4 residence halls and 4 academic buildings.		

Summary: The proposal seeks $39,700 to conduct a 2026 waste audit consistent with the methodology previously used in the 2014 UMD Waste Stream Analysis. The audit includes four academic buildings with cafes and the same residence halls analyzed in 2014: Baltimore Hall (suite-style), Oakland Hall (traditional with trash rooms), Anne Arundel Hall (low-rise, historic), and Hagerstown Hall (traditional, no trash room). The findings would be used to inform the direction of waste management efforts on campus and to support waste education.

Submitted by: Adrienne Small, Recycling & Solid Waste Coordinator

University of Maryland, Waste Audit Grant Proposal 2025-2026

- **Primary Goal:** To directly measure how material composition and waste diversion behaviors have evolved.

- **Expected Impact:** Results will be used to enhance waste diversion strategies, develop educational outreach, and potentially implement source separated collection points.

- **Need:** The last large scale audit was conducted in 2014 by SCS Engineers. Given changes in consumption habits, packaging waste, composting capabilities, and waste disposal costs, a new audit is needed to better inform campus waste collection and diversion.

- **Proposed Sampling:**
  - For each building on two different days of the week:
    - 1 sample of landfill-destined waste (up to 200 pounds)
    - 1 sample of source-separated recycling (up to 150 pounds)
    - 1 sample of source-separated organics (up to 200 pounds)

- **Metrics for Success:** Waste composition analysis, diversion rate, and contamination rate.

- **Broader Impacts**:
  - If UMD diverts even 200 tons of additional waste annually through improved sorting, this would prevent 560 metric tons of CO_2 emissions.
  - Assuming UMD currently spends $200,000 annually on waste disposal, a 20% reduction in landfill hauling fees could yield $40,000 in yearly savings.
  - Results will inform campus-wide waste strategies and the campus recycling collection program.

Terp Farm Experiential Ed. Leadership Pilot Program

Total Requested	$386,005.50	SFRC Recommended	$197,291.70
FY26 Requested	$128,668.50	SFRC Recommended	$65,763.90
FY27 Requested	$128,668.50	SFRC Recommended	$65,763.90
FY28 Requested	$128,668.50	SFRC Recommended	$65,763.90

Summary: This proposal requests $386,005.50 ($128,668.50/year) to launch the Terp Farm Experiential Education Leadership Pilot Program. This initiative gives students experience in agriculture while expanding the Terp Farm's produce outputs to reduce food waste, augment the amount of local produce purchased by the UMD system, and encourage sustainable food purchasing.

Submitted by: Anya Pforzheimer, Department of Dining Services

Terp Farm Experiential Ed. Leadership Pilot Program

- **Primary Goal:** To expand on the success of the 2025 Terp Farm summer internships and provide students with experiential learning and leadership skills while scaling up food production, allowing Dining Services chefs to plan for consistent supply of certain crops.

- **Expected Impact:**
    - Support waste reduction and greenhouse gas emission reduction goals with the purchase of local produce.
    - Increased crop production on site due to increased staffing.
    - Provide students with paid agricultural experience.
    - Increase volunteer opportunities for classes and other groups, lead by Terp Farm interns.
    - Increase University prestige by offering a full half-year experiential educational program focused on sustainable agricultural practices.

- **Need:** Terp Farm needs a large cohort of students for the success of the project, which they do not have the funds for. A three-year pilot program allows them to set up a strong foundation for the program.

- **Metrics for Success:** Surveying participating students, measured success of fall harvest, and number of volunteer groups.

- **Broader Impacts**:
    - The overarching goal for Terp Farm is to eventually supply 100% of the sweet potato and winter squash needs for the Dining Halls, year-round.
    - Want future incoming students to know they have the opportunity to volunteer or work at the Terp Farm.

Proposed Budget

Hourly Pay & Fringe Benefits (10 Summer interns)	$114,372.00
Hourly Pay & Fringe Benefits (5 Fall interns)	$14,296.50
FY26 Request	$128,668.50
FY27 Request	$128,668.50
FY28 Request	$128,668.50
Total Request	**$386,005.50**

**Maryland Agricultural Experiment Station, Upper Marlboro Facility will provide funding for an additional summer intern.

Recommended Budget

Hourly Pay & Fringe Benefits (5 Summer interns**)	$57,186.00
Hourly Pay & Fringe Benefits (3 Fall interns)	$8,577.90
FY26 Request	$65,763.90
FY27 Request	$65,763.90
FY28 Request	$65,763.90
Total Request	**$197,291.70**

**Based on conversations with stakeholders, they felt confident they can find funding for three additional summer interns and one additional fall intern outside of the Sustainability Fund Grant.

STAMP Herb Garden

Total Requested	$13,400.00	SFRC Recommended	$8,000.00

Summary: This proposal requests $13,400.00 to refurbish the 36ft x 3ft beds on each side of the STAMP Student Union main entrance. This includes renovation of the irrigation system and renewal with fresh soil, compost, and herbs. The project will engage student groups and student volunteers to support and learn from the herb garden. As well as materials and tools, funding is requested for educational signage/outreach and an undergraduate part-time gardener.

Submitted by: Donna Lim, Associate Director, STAMP Administration

STAMP Herb Garden

- **Primary Goal:** To revitalize the STAMP Herb Garden, creating a learning environment for students to engage in environmental stewardship while supporting sustainable food production on campus.

- **Expected Impact:**
  - Create an outdoor classroom and stewardship opportunity for students.
  - Strengthen connections between student organizations, Dining Services, and the Arboretum & Botanical Gardens.
  - Education and outreach through cooking demos and signage teaching about sustainable food production.
  - Provide herbs to Dining Services and UMD's Campus Pantry.

- **Need:** Funds are required to reestablish the herb garden. Long term maintenance and upkeep will be managed by STAMP staff under the training and guidance of the Arboretum & Botanical Garden staff.

- **Metrics for Success:** Herb yield, student/community engagement hours, pollinator counts, and annual soil quality tests.

- **Broader Impacts**:
  - In 2024, sixteen pounds of herbs were donated to the Campus Pantry from the existing herb garden. They aim for the same amount in 2026.
  - Design plans, maintenance guides, and other documentation will be available for other departments to use in the development of small herb gardens in more campus courtyards or rooftops.

Proposed Budget

Garden Bed Materials & Tools	$3,000.00
Soil, Mulch, LeafGro Gold, Plants/Seeds	$3,000.00
Irrigation Upgrade Equipment & Labor	$1,000.00
Educational Signage & Outreach	$1,000.00
Undergraduate Student Stipend	$4,400.00
1% Contingency	$1,000.00
FY26 Request	$13,400.00
Total Request	**$13,400.00**

Recommended Budget

Garden Bed Materials & Tools	$3,000.00
Soil, Mulch, LeafGro Gold, Plants/Seeds	$3,000.00
Irrigation Upgrade Equipment & Labor	$1,000.00
Educational Signage & Outreach	$1,000.00
FY26 Request	$8,000.00
Total Request	**$8,000.00**

**Applicant affirmed project can be carried out without undergraduate part-time gardener and 1% contingency.

Replacing Water Condensers in Undergraduate Organic Chemistry Teaching Laboratory Courses

Total Requested	$27,016.80	SFRC Recommended	$27,016.80
Note	Total covers 240 Dimroth condensers quoted at $112.57 each.		

Summary: This proposal requests $27,016.80 to replace water-cooled condensers with commercially purchased air-cooled condensers in undergraduate organic chemistry labs, reducing lab water use. Condensers will be used in Organic Chemistry I and Organic Chemistry II Laboratory courses. Organic Chemistry II students will participate in an experiment comparing the water waste associated with each condenser while learning about green chemistry.

Submitted by: Sonia Hirschauer, Lecturer, Chemistry & Biochemistry

Replacing Water Condensers in Undergraduate Organic Chemistry Teaching Laboratory Courses

- **Primary Goal:** To reduce the water waste produced by Undergraduate Organic Chemistry labs by using air-cooled condensers in place of water-cooled condensers.

- **Expected Impact:**
  - If used for all 4 experiments requiring condensers, 680,000 liters of water could be saved each year (170,000 liters per experiment).
  - Air-cooled condensers will be easier to use and eliminate water splash/mess, improving student experience.
  - Organic Chemistry II students will compare and contrast air condensers and water condensers, discussing the ease of use, reaction outcomes, and environmental impact of each.

- **Need:** 240 air-cooled condensers will be shared across 8 lab rooms. There is not enough money from student laboratory fees to cover this initial expense, but student fees will cover replacement of broken glassware. The condensers are reusable and have a 20+ year lifetime, meaning there are no future expenses associated.

- **Metrics for Success:** Student opinion via survey and lab report, number of experiments using air condensers, number of students using air condensers, and estimated water savings.

- **Broader Impacts**:
  - Given an estimated 170,000 gallons of water used for condensers per experiment per year, there will be an annual cost savings of $4,530, recuperating cost of condensers in 5 years.
  - If successful, findings can be reported to other campuses and UMD research laboratories to encourage changes toward sustainable laboratory practices.

DRAFT GOALS

University Sustainability Council
December 1, 2025

SUSTAINABILITY COUNCIL ORIGINAL GOALS 1.0
(2014-2025)

Carbon Neutrality

100% carbon neutral by 2025 compared to 2005, site energy conservation measures, expansion of renewable sources, zero emission vehicle expansion

Education for Sustainability

Formal and informal opportunities for students to gain knowledge/ skills and to collaborate with staff/faculty on solutions

Local and Global Impact

Partner to further sustainability in Maryland and beyond, encourage sustainable procurement at UMD, support green dining programs

Smart Growth

Alternative transportation, environmental stewardship in landscape, high performance building and utility design

Sustainable Water Use

Reduce purchases of potable water, expand harvesting and reuse, responsibly manage stormwater to protect the Chesapeake Bay
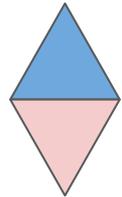
Waste Minimization

Divert 75% from the landfill, reduce solid waste generated per person 1% annually, increase cleaning and waste sorting

❯ THEMES THAT YOU SHARED

Council Breakout Groups - Common Themes

04 — Material impacts of UMD's research supply chain
- Positive AI and Quantum Impacts
- Clean energy and infrastructure solutions
- Water reuse opportunities, Waste reduction

03 — Leadership & Public Service
- Share skills and resources with public
- Collaborate with other universities
- Launch initiatives with broader goals

03 — Hands-on, Individualized Education (real and digital)
- Integrate sustainability skills with badging platforms
- Workforce development programs for faculty & staff
- Tools to use campus infrastructure for teaching

02 — Resilient and Equitable Food System
- Help Dining Services source locally grown foods
- Make healthy food and farming accessible to everyone
- Provide climate change adaptation help to farms, food distributors, food pantries, and food insecure people

02 — Creativity around Funding
- Incorporate sustainability asks into funding request packages where feasible
- Align Climate Action Plan with new regulations
- Emphasize human dimensions of sustainability

02 — Campus Infrastructure
- Focus on infrastructure maintenance and durability
- Incorporate greywater reuse into facility systems
- Model sustainable growth (as defined by State?)

01 — Indigenous Connections
- Piscataway culture, ecoknowledge, and perspective
- Build and strengthen tribal relationships
- Center equity and environmental justice

Category	Top Idea	Impact	Feasibility
Energy	Clean, resilient power to meet research needs		
Funding	Align council goals with meeting ambitious, new regulations		
Research	Redundancy in facilities to accommodate maintenance needs	Would help address deferred maintenance more quickly	??? Depends on scale
Infrastructure	Model responsible building stock and infrastructure management; Model sustainable growth		

Dyani
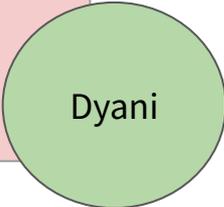
Category	Top Idea	Impact	Feasibility
AI Intersection	AI & Quantum nexus to sustainability goals		
Leadership	Trust ourselves and share lessons learned externally		
Creative Adaptation	Emphasize human dimension and reframe funding and policy challenges as opportunities		
Funding	How university reacts to policy changes and funding opportunities		

Ha
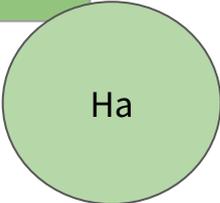
Category	Top Idea	Impact	Feasibility
Food	Focus on food security and climate impact		
Water	Greywater reuse and repurposing		
Community	Collaborate with other universities and launch larger initiatives		
Education	Improve students knowledge/skills through Terps Learn Everywhere and other individual actions support		

Solana
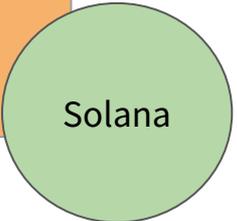
Category	Top Idea	Impact	Feasibility
Consumption & Production Impacts	Scope 3 impacts from waste management, energy procurement, and contracts for goods and services		
Dining	Support for local farms and food insecure people		
Education/Workforce Development	Transparency, accountability and shared resources for faculty and staff; Impacts of UMD education on global population		

Taylor
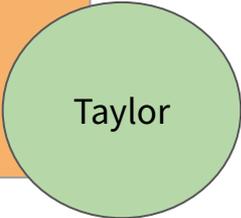
Category	Top Idea	Impact	Feasibility
Equity	Connect with local BIPOC and Indigenous groups through purchasing and relationship building		
Community	Create more opportunity for campus to be used as a public classroom to share skills with wider population		
Operations	Provide resources to support best practices in food, labs, AI, and renovations		
Education	Incorporate campus infrastructure into curriculum more intentionally		

Savannah

EXAMPLE
PROCESS & GOALS

INCORPORATING INDIGENOUS WAYS of KNOWING

CHRIS SCRIBE

The Role + Importance of INDIGENOUS EDUCATORS in post-sec teaching

Education was DESIGNED WITHOUT INDIGENOUS PEOPLE IN MIND

Acknowledge TRUTH, before reconciliation.

In the 1970s... my grandfather received a substandard schooling to be a LABORER... A SLAVE...

HE HAD a PhD on the LAND

thousands of YEARS of KNOWLEDGE...

we must return

DR. SYLVIA MOORE

Leading change in Indigenous Education within Faculties of Ed

RELATIONSHIP

We HEAR through our language

LEARN the RIGHT WAY - by asking ACKNOWLEDGING

He made space in the education system to share his knowledge...

SCHOOL
MEMORIAL U.

Language is the KNOWLEDGE HOLDER

the NEXT Generation of Educators are Leading CHANGE

eg. language program run + owned by community

links to communities

DR. JACQUELINE OTTMANN

VISIONARY LEADERSHIP in HISTORY
• SACRED TREATIES...
• CHIEF SHINGWAUKONSE's 1830's goals...

HOW Do settler teachers BENEFIT FROM colonialism?

How did I learn Canadian History / IES?

How Do I Interrupt stereotypes?

before UNDRIP & TRC: we had other ways of UPHOLDING what was needed in RELATIONSHIP

CANADIANS have been denied INDIGENOUS teachings

HOW CAN INDIGENIZATION OF EDUCATION BE EMBEDDED + HOW?

EG. RCAP is 4000 pages + 44 recommendations
① RECOGNITION
② RESPECT
③ SHARING
④ RESPONSIBILITY

Like the SILVER Meda-llion...
WHAT METAPHORS GUIDE US TODAY?

DECOLONIZING
TEACHER EDUCATION

PATHWAYS
For indigenous students to become teachers

WHAT BARRIERS EMOTIONS stop teacher candidates from LEARNING?

PREPARING TEACHERS to TEACH INDIGENOUS CONTENT

A RENEWED RELATIONSHIP

it's still IMBALANCED in canada

THE TRC #57 calls FOR EDUCATION To PUBLIC SERVANTS
– HISTORY of ABORIGINAL PEOPLE
– UNDRIP
– TREATIES • RIGHTS
– INDIGENOUS LAW
– ABORIGINAL / CROWN RELATIONS

This is the PROGRAM!

TO DO:
• INVITE INDIGENOUS STUDENTS TO CREATE INDICATOR?
• TEACHERS IN TRAINING EXPERIENCING RACISM IN THEIR CLASSROOMS. Do provisions exist for REGULAR PROFESSIONAL DEV?
• PLAN to NAME + address systemic barriers.

COMMUNITY DRIVEN INDICATORS

DR. AVRIL AITKEN

RESPECT • RELEVANCE • RECIPROCITY • RESPONSIBILITY

What makes INCLUSIVE + WELCOMING LEARNING?

WHAT WOULD MAKE PARTNERSHIPS ETHICAL?

WHAT it is to LIVE a GOOD LIFE

DR. ANGELA JAMES

SHAPING THE GROWTH + DEVELOPMENT of a CAPABLE PERSON

RELATIONAL INFLUENCES

this was gifted to me...

RECURRING INFLUENCES

SPIRAL GUIDES for learning...

QUESTIONING INFLUENCES

GROUNDING INFLUENCES

SHAPING INFLUENCES of a CAPABLE PERSON

♡ to create schools that are like HOME
♡ Indigenize the curriculum
♡ listen + be guided by Elders

Dr. Susan Dion

Creating opportunities for teacher candidates to INTERROGATE what they DON'T KNOW... NEED to KNOW... and want to LEARN

Biggest IMPACT is hearing COMMUNITY VOICES

"not knowing" isn't ENOUGH ANYMORE

IF I LOSE that CONNECTION... where could I go to RE-LEARN it?

The Education system has brought us to the brink of genocide...

WHAT is VISIBLE EVIDENCE of INCLUSION

dominant settler colonialism!

FINDING LARGE EXTENT OF RACISM IN POST SEC CLASSROOMS

How do these RECONCILE?

the LAND is OUR greatest Teacher

Example sub-goals: "Indigenous Ways of Knowing"

Council of Ministers of Education, Canada - Actionable Recommendations (2018)

- Establish and maintain productive relationships and meaningful partnerships.
- Share and disseminate culturally appropriate resources and information. Create spaces and provide structure for sustainability.
- Respect and include indigenous knowledge, worldviews, culture, and history in schools.
- Value indigenous ways of learning and teaching in the classroom.
- Integrate Indigenous worldviews and perspectives into learning environments, since Indigenous education is for everyone.

Example: Indigenous Connections to Original Council Goals

Solar projects incorporating Indigenous principles have demonstrated superior performance and community acceptance compared to conventional implementations.

Photo of Illinois tribal leaders and solar developers collaborating on a community solar project. Photo credit: illinoisrenew.org

FIRST DRAFT 2.0 GOALS

DRAFT SUSTAINABILITY COUNCIL GOALS 2.0

Responsible Science, Technology & Humanities

Understand regional and global environmental and public health impacts of energy, water and chemical usage; Development of resources for sustainable technology, laboratory, field study, and art at UMD

Community Partnership for Impact

Partner to further sustainability in Maryland and the world; Engage people across UMD's subcultures; Emphasize human dimensions and stories of sustainability; Creativity in seeking funds to support sustainability progress

Food Resiliency and Access

Make nutritious and sustainable food available to the entire UMD community; Promote education and research about food security and interconnection with environment and health; Partner with leading national organizations to create a regenerative food system

Experiential Learning

Formal and informal opportunities for students, staff and faculty to gain knowledge/skills for planetary regeneration; Physical and digital structured spaces to encourage demonstration and collaboration across disciplines; Recognition for participation in SustainableUMD community experiences

Sustainable Infrastructure

High performance building design, net zero carbon power and transportation, clean and reliable heat and power, user-friendly systems to reduce and recycle waste, alternative transportation, regenerative campus landscapes

NOTE: This goal should be aligned with Maryland's ambitious, new regulations

Indigenous Knowledge

Honor ancient wisdom and modern indigenous science to improve research, food resiliency, learning, and infrastructure projects; Build trust and relationships with indigenous communities in Maryland, Incorporate indigenous ways of understanding sustainability into UMD's culture

Responsible Science, Technology & Humanities
Environmental and Social Management across Lifecycle of Innovation

- Assess the environmental, energy system, and community impacts of UMD's research focus, and devise strategies to reduce harms and increase benefits
- Identify and implement net zero carbon technologies and energy conservation measures for buildings that support academic research
- Measure environmental impacts from UMD's purchasing of goods and services, and devise strategies to right size purchasing and engage with suppliers around sustainability goal setting
- Build a culture of sustainability among all of UMD's researchers
- Encourage cross-disciplinary work between colleges to develop and teach about interdisciplinary solutions to environmental justice, ecological health, and other sustainability challenges
- Foster community discussion of sustainability impacts from AI and Quantum use and develop resources to support sustainability literacy and informed choices about these new technologies
- Implement a comprehensive Life Cycle Assessment (LCA) of the research value chain (or supply chain), assessing environmental impacts, community effects, and energy use from upstream inputs to downstream outcomes.

Community Partnership for Impact
<mark>Model Courage, Connection and Compassion for Marylanders</mark>

- Empower Terps to serve their home communities with accurate, timely and useful sustainability skills and resources
- Collaborate with other higher education institutions to exchange lessons learned and resources that support sustainability at the community level
- Support campus units to launch, fund and prioritize initiatives that support progress on campus, state and global sustainability goals
- Collaborate with the College Park community to understand residents' interests and co-create mutually beneficial engagement programs
- <mark>Inspire and equip our community and visitors to engage with sustainability in their own spheres through signage, public events, and digital information</mark>
- Create opportunities for students to develop skills, gain valuable experience, and explore career opportunities that prepare them to become future leaders in the sustainability field.

Food Resiliency & Access
Use dining and nutrition to nurture Maryland communities

- Promote education and research about the interrelationship between food, agriculture, the environment and health
- Demonstrate ways to meet people's nutritional needs in a cost effective, safe, responsible and sustainable manner
- Make nutritious and sustainable food available to the entire UMD community
- Develop reciprocal relationships with Maryland farmers who are new to farming, underrepresented in agriculture, and/or utilizing regenerative agriculture practices
- Share resources and support to help Maryland's food systems make the transition to climate resilient, non-polluting, equitable and regenerative
- Partner with leading organizations to create a national regenerative food system
- *Taylor: Maximize food waste diversion by creating new engagement pathways for food waste education and improving the quality of collected compostable materials*
- *Taylor: Advance targeted research on how climate change affects food systems and use the findings to develop strategies that enhance statewide food resilience*
- *Taylor: Increase campus food purchases from local, sustainable, and/or ethical suppliers to 25% of total annual spend (as defined by AASHE's STARS 3.0)*

Experiential Learning

Coach faculty, students and staff to deepen their experience with problem solving and innovation to solve sustainability challenges

- Create interactive, digital opportunities for Terps to gain critical thinking, systems thinking, collaboration, and eco-literacy skills
- Provide tools to help students, faculty and staff use the physical campus landscape, buildings and infrastructure for learning and teaching
- Recognize and reward sustainability mentoring relationships
- Expand workforce development programs to support faculty and staff in understanding and communicating about modern sustainability concepts
- Develop and communicate student pathways to complete General Education requirements *and* deepen sustainability literacy and skills

Sustainable Infrastructure

Transform campus infrastructure to conserve and regenerate the planet's natural resources

- Implement and regularly revise UMD's Climate Action Plan to achieve long term targets for net zero Scope 1 and 2 carbon emissions

- Phase out purchasing of verified carbon reduction credits by 2035 and offset all residual carbon emissions with durable, verified carbon removal credits

- Find ways to incorporate demonstrations of clean energy technologies and other sustainability innovations developed at UMD into campus operations and education

- Increase safe and responsible greywater reuse on UMD's campuses

- Position the university as a living model of sustainable urban systems by showcasing sustainable growth, including: forward-looking maintenance, green buildings, biodiverse landscapes alternative transportation, bicycle infrastructure, responsible production and consumption, progress toward zero waste, and responsible waste collection and management

Indigenous Knowledge
Incorporate indigenous ways of knowing into UMD's culture

- Incorporate indigenous ways of understanding sustainability and stewardship into UMD's identity, culture and subcultures
- Partner with leading North American organizations to learn from indigenous peoples and adapt effective ideas for regenerating indigenous community
- Honor the history and culture of Piscataway people on UMD's campus
- Invite Piscataway Conoy Tribe and the Piscataway Indian Nation to advise on the design educational opportunities for UMD students, faculty and staff
- Engage students, staff and faculty in indigenous ways of knowing through campus art, events and storytelling on campus

CONCEPT TO TIE THEMES TOGETHER

Re
generation
Ending
the climate
crisis
in one
generation

Paul Hawken

NATIVE
AMERICAN ROOTS

RELATIONALITY AND INDIGENOUS
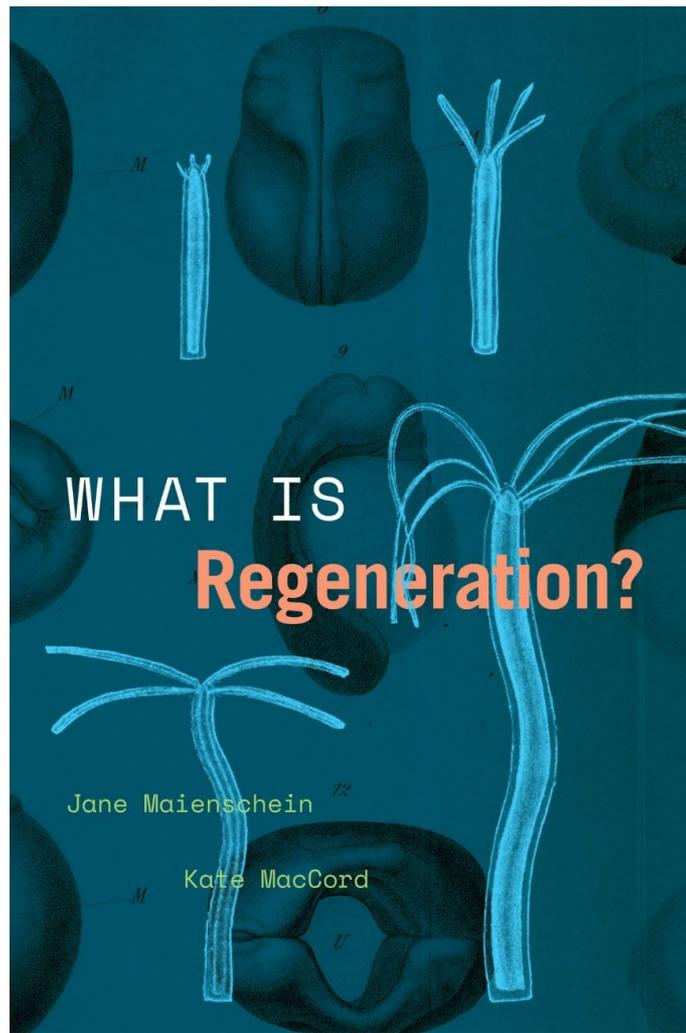REGENERATION UNDER EMPIRE, 1770–1859

CHRISTIAN MICHAEL GONZALES

WHAT IS
Regeneration?

Jane Maienschein

Kate MacCord

BLACK CINEMA 1898–1971

REGENERATION: BLACK CINEMA 1898-1971

WATER
ON
EARTH

THE STORY OF ITS ORIGIN, HABITATS,
NEGLECT AND REGENERATION

SHRUTI MATHUR | RAJENDRA KUMAR

What does regeneration mean to you?

What do you think of as regeneration?

"[Organismal] **Regeneration** is the process of replacing or restoring damaged or missing cells, tissues, organs, and even entire body parts to full function. All living organisms, including plants and animals, have some ability to regenerate as part of their natural maintenance of tissues and organs." - *National Institute of General Medical Sciences*

*"*Remembering the past to inspire the future*" - Indigenous **Regneration**.org*

*"*The farms spotlighted at this event are a prime example of **regenerative agriculture** being a solution for water quality and quantity, as well as climate resilience and biodiversity.*"*
- Chesapeake Bay Foundation Restoration Scientist

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"Remembering the past to inspire the future" - *Indigenous Regneration.org*

"The farms spotlighted at this event are a prime example of **regenerative agriculture** being a solution for water quality and quantity, as well as climate resilience and biodiversity."
- *Chesapeake Bay Foundation Restoration Scientist*

Beyond sustainability we could aim for

Regeneration

GPT 4o - UMD1

Planetary Regeneration

Planetary Regeneration refers to a holistic approach focused on **global cooperation and collective action** to address the interconnected challenges facing our planet. It emphasizes the necessity of integrating efforts to mitigate climate change, protect biodiversity, and transition to sustainable energy sources. Here's a detailed explanation of its key components:

Illustration copyright from Global Earth Repair Foundation

Planetary Regeneration is rooted in the understanding that the well-being of individuals, communities, nations, and the planet itself are intricately linked. Therefore, it calls for integrated, sustainable approaches to ensure a healthy future for all life on Earth [1].

[1] The 5 Worlds of Regeneration

1. Global Cooperation - Emphasizes that no single nation can achieve SDGs alone.

2. Sustainability and Biodiversity - Involves actions to protect biodiversity and promote sustainable practices that ensure ecosystems are preserved and flourish.

3. Transition to Sustainable Energy - Shifts from fossil fuels to renewable and sustainable energy sources, reducing carbon footprints and promoting eco-friendly technological advances.

4. Regenerative Practices - Implements reforestation, sustainable agriculture, ecological conservation projects and other regenerative practices to restore and sustain natural systems.

5. Shared Responsibility - Transcends national boundaries and involves actions for the Common Good, highlighting interconnectedness of life on Earth

6. Trust and Collaboration - Fosters collaboration and builds trust across individual, community, organizational, and governmental levels through open communication, shared values, and empathy towards each other's needs and perspectives

This video was made by The Regenerators to inspire people to participate through cooperation and collective Action

"The Regenerators is a growing movement of people around the world who are interested and invested in learning about regeneration, and integrating regenerative practices into their lives, so that collectively we can improve our ecological and social systems."

Council Goals 1.0: Culture of Environmental Stewardship

(2014 - 2024) Voluntary Commitments, **SustainableUMD** Culture & Network Building

2025: Achieved UMD's 2009 foundational goal of Carbon Neutrality. This is the goal that originally established the Sustainability Council in 2009.

Council Goals 2.0: Targeting Regeneration (2026-2036)

Aligns with FORWARD, The University of Maryland Campaign for the Fearless

- ***Tomorrow's Trailblazers:*** *enhance students' academic and personal <u>growth</u>, prepare them to launch careers in a quickly evolving job market*
- ***Bold and Brave Solutions:*** *push frontiers in emerging fields, <u>spin out innovations</u> that tackle our world's most pressing problems*
- ***Stronger Communities:*** *come together, <u>deepen connections</u>, elevate excellence, <u>unite to do good on our campus and around the globe</u>*

Introduction from *Regeneration, Ending the Climate Crisis in One Generation*. Hawken (2021).

"***Regeneration*** means putting life at the center of every action and decision."

"To address and reverse the climate crisis requires **connection** and reciprocity. It calls for moving out of our comfort zones to find a depth of **courage** we may never have known."

"It means neither hope nor despair; it is action that is **courageous and fearless**."

"The ultimate power to change the world does not reside in technologies. It relies on reverence, respect, and **compassion**–for ourselves, for all people, and for all life. This is ***regeneration***."

FORWARD Campaign: Select Unit Priorities
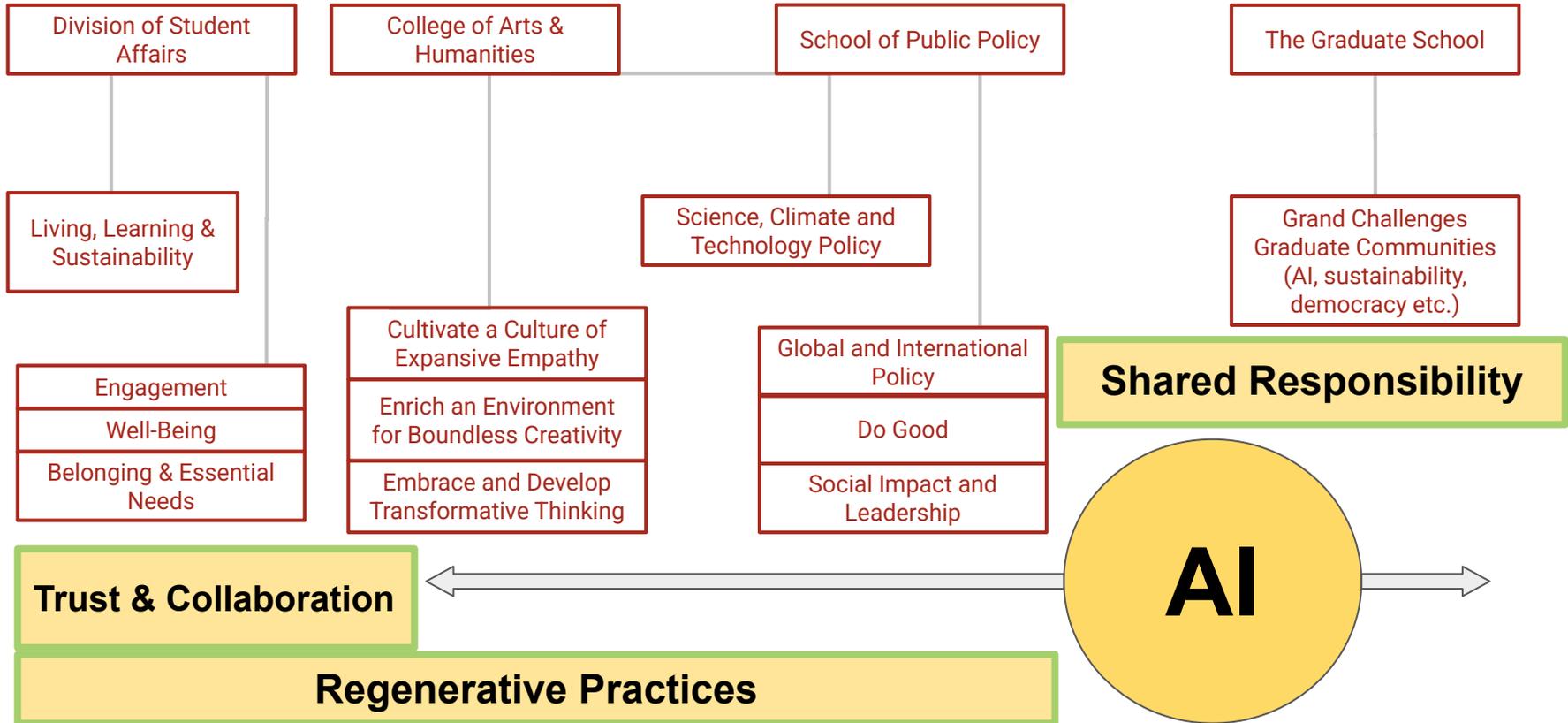
Reframing Common Themes for Regeneration Goals

1. Strengthen positive impacts from our research supply chain
2. Lead with Courage, Connection and Compassion
3. Coach faculty, students and staff to deepen experience with problem solving and solutions to sustainability challenges
4. Use food and nutrition to nurture Maryland communities
5. Be fearless in finding creative ways to fund regeneration
6. Transform campus infrastructure to regenerate natural resources
7. Incorporate indigenous ways of knowing into UMD's culture

REFLECTION

1. What do you think of "Regeneration" as a behind the goals theme?
   a. Do you have any alternative ideas to suggest to inform our communications and marketing about the new goals?
2. Do you have any other ideas for goals that you would like us to work with you on developing before our next meeting?

3. Which draft goals resonate with your perspective on where we should focus? Why? (self reflection between meetings)
4. Which draft goals are problematic (if any) and why? (self reflection between meetings)

❯ NEXT STEPS

- Take time in December and January to read over the draft goals, digest them, and record your suggested edits, improvements and questions

- If you are interested and willing, engage in small group conversations about each of the six draft goals on Zoom with the Office of Sustainability

- Submit Reflection Google Form (Deadline is Feb. 3rd)

Thank You!

AI NOTES FROM CHECK IN WITH ERIC WACHSMAN (TO BE DELETED AFTER WE UPDATE SLIDES WITH HIS INPUT)

Sally and Dyani initially wait for Eric to join their scheduled meeting to gather his input on sustainability council goal revisions, but he declines the invitation citing a scheduling conflict, though he later joins while eating lunch between meetings. Eric provides feedback on updating the council's goals, emphasizing the need to phase out carbon offsets rather than retire the carbon neutrality goal, identifying data centers and AI energy consumption as Maryland's most pressing sustainability challenge, and advocating for the university to deploy technologies developed on campus to showcase innovation while working toward net zero by 2035. Sally shares her draft presentation consolidating input from multiple council member groups into six proposed goals and plans to present this work to the full council in December for discussion and refinement over likely two meetings.

Next Steps
- Sally: Ask Scott about the purpose and expectations for the Green Labs check-in meeting scheduled for December 3rd
- Sally: Schedule a meeting with Eric for next week or get his responses via email to the sustainability goals questions
- Sally: Get input from Brian and Mark on the sustainability goals questions
- Sally: Review and add Eric's input to the sustainability goals presentation slides after incorporating his feedback
- Sally: Send Eric's OP-ed about data centers and energy to the entire Sustainability Council
- Sally: Go over the draft sustainability goals presentation with Scott before sending it out to everyone
- Dyani: Write up Eric's responses to the sustainability goals questions in narrative style on the whiteboard page
- Dyani: Send out the PDF meeting minutes with attachments
- Sally: Review Dyani's notes from Eric's interview and add any missing details while the conversation is fresh