

Subject: Annual Update on Environmental Initiatives

September 26, 2023

Dear Williams students, faculty, and staff,

I write with this annual update on our environmental initiatives after a summer of especially stark reminders about the effects and challenges of a changing climate. Record-high global heat and ocean temperatures, wildfires, torrential rain, and hail storms have upset human health and security, and accentuated scientists' warnings about the long-term intensification of weather events from our impact on the environment. Here at Williams, we seek to address the manifold environmental challenges of our time and inspire greater environmental consciousness by teaching students various ways of understanding and tackling complex issues, and by modeling environmental responsibility through our institutional actions.

Below are some highlights of the many kinds of environmental work pursued over the past year with notes along the way about what remains to be done.

Research and Teaching

Supporting innovative faculty research and weaving study of the environment throughout the curriculum remain at the center of the college's environmental commitments. Faculty are delving into important issues in their research and creative work, as can be seen from even the few examples below. And they are bringing their knowledge into the classroom, giving students the opportunity to learn about environmental issues through multi-disciplinary lenses from art to economics to geosciences.

Faculty Research – A Few Illustrations

- Assistant Professor of Chemistry [Anthony Carrasquillo](#) delivered a talk at MIT on “Condensed Phase Reactions of Hydroxy Nitrates: New and Unexplored Degradation Mechanisms.”
- José Constantine, Associate Professor of Geosciences and Chair of the Environmental Studies Program, was awarded a National Science Foundation grant to research the [origins and functioning of oxbow lakes](#) on river floodplains, which serve as sinks for sediment-associated contaminants.
- Assistant Professor of Architecture and Environmental Studies Giuseppina Forte co-authored an article published in *Social Sciences* titled, [“Design for Climate Change in the Neoliberal Present: Gentrification, Ecocide, and the Loss of Urbanity in New York City.”](#)
- Assistant Professor of Biology Allison Gill published a [paper](#), with Rollie Grinder '21 as a coauthor, in *Biogeochemistry* titled, [“Soil carbon availability decouples net nitrogen mineralization and net nitrification across United States Long Term Ecological Research sites.”](#)
- Associate Professor of Environmental Studies Laura Martin is a 2023 Falling Walls winner in the Social Sciences and Humanities for her project on [biodiversity restoration and designing wildness](#).

- Assistant Professor of Environmental Studies Brittany Meché published an article in *Environment and Society* titled, [“Black as Drought: Arid Landscapes and Ecologies of Encounter across the African Diaspora.”](#)

Student Education

- The [Environmental Studies Program](#) continues to draw considerable student interest and offers a vibrant, multi-disciplinary curriculum due in large part to the tremendous work of its relatively small number of faculty members. Almost thirty students in the Class of 2025 have declared a [major in Environmental Studies](#), a historic high. Together with the Class of 2024, there are currently more than fifty Environmental Studies majors. Over a dozen students have decided to pursue a [concentration in Environmental Studies](#).
- In 2022-2023, a wide range of courses about the environment were offered across the curriculum, from Professor Mea Cook’s [Climate Changes](#) to Professor Matthew Gibson’s [Pollution and Labor Markets](#) and Professor Brittany Meché’s [Africa and the Anthropocene](#).
- About twenty Williams students attended [Williams-Mystic](#): The Coastal and Ocean Studies Program of Williams College and the Mystic Seaport Museum. Students participated in field seminars for which they traveled to places from Sitka, Alaska to Southern Louisiana, engaging with coastal communities about issues such as land loss, fisheries depletion, and climate-fueled disasters. There were also students who pursued Marine Ecology and Oceanographic Process research projects about the impact on marine ecosystems of phenomena such as ocean acidification, sea level rise, and changing temperatures.
- The Maritime Studies concentration is currently being revitalized as Coastal and Ocean Studies, led by Professor Rónadh Cox.

Campus Sustainability

Of our many sustainability initiatives, decarbonization of the campus is the largest in scale, longest in time horizon, and most significant in financial investment. The paths to moving the campus away from fossil fuel combustion will be developed through the Energy and Carbon Master Plan (ECMP), which will focus on transitioning our heating and cooling systems to greener sources of energy. Because campus heating is our largest source of carbon emissions, this project is crucial for realizing the college’s goal of reducing our greenhouse gas emissions from 1990-1991 levels by 80 percent and ultimately becoming a net zero emissions campus. (As of 2021-2022, we had realized a 36-percent reduction.) The approach as of now to the planned Phase I of the ECMP is to commit about \$100 million to upgrading the electrical system of the entire campus as a necessary step toward campus electrification; building a new district energy plant with the capability of harnessing renewable energy to ultimately serve much of the north and west parts of campus; installing new piping to distribute low temperature hot water rather than steam from the plant to the buildings; and converting select buildings, most likely dorms, to be heated and cooled by heat pumps as part of their more wholesale renovation. More information about the ECMP will be shared as it develops over the coming months and a project website will be launched this year.

Work also continues in each of the priority areas laid out in the college's [Strategic Plan](#) which defines Sustainability, like Diversity, Equity, Inclusion, and Accessibility, as a cross-cutting commitment.

Climate Action

- After much discussion, debate, and revision, the [Air Travel GHG Emissions Information & Reduction Program](#) was launched last October. In this first year of the program, initial data suggest that carbon emissions from college-funded travel are lower than pre-pandemic levels (1,788 MTCO₂e for October 2022-June 2023 compared to ~3,600 MTCO₂e for October 2018-June 2019).
- The college supplemented our approach to the [Renewable Energy Certificates](#) (RECs) earned from our participation in the Farmington Solar Project with the strategy of swapping, or arbitraging, the RECs. The arbitrage revenue will be invested in additional climate action projects on campus to help accelerate our progress toward net zero emissions.
- On the advice of the student Alhambra Consulting Group, and with support from Facilities Operations, a pilot program to electrify the college's vehicle fleet is underway and the first plug-in hybrid van has been purchased.

Buildings, Landscaping, and Land Use

- To further embed sustainability considerations into new construction or major renovation of buildings (large capital projects) as well as renewal work on buildings (smaller capital projects), the Board of Trustees endorsed in June 2023 an updated and expanded [Sustainable Building Policy](#). Ongoing large capital projects will add built square feet to campus, but this policy is informing the sustainability goals for the Davis Center, a new Williams College Museum of Art, and the Multipurpose Recreation Center.
- Several campus buildings have received green certification in the past year: Saint Anthony Hall at the Center for Development Economics ([LEED Gold](#)), Fellows Hall at the Center for Development Economics ([Zero Energy Certification](#)), and Wachenheim Science Center (LEED Platinum, exceeding the anticipated LEED Gold certification).

Community, Diversity, Equity, and Inclusion

- The college's [Community Climate Fund](#) continued to support carbon reduction projects in the local community, with particular attention to underserved populations. Although funding will be challenged by budget reductions, this commitment is firm.
- The [Sustainable Living Community](#) promoted environmental justice and sustainable practices in its second year as a TAPSI house.
- For the tenth year, the Zilkha Center in partnership with the Davis Center offered [Root](#), an EphVentures orientation program for first-year students.

Responsible Consumption

- To reduce food-related carbon emissions as part of the [Cool Food Pledge](#), Dining Services designed innovative plant-rich meal options including the popular Plant Rich Bowl Meals. Student interns with the Zilkha Center worked to collect and analyze data to track our performance on the pledge.

- Efforts to reduce waste and increase the circularity of durable goods continued in keeping with the [Zero Waste Action Plan](#), but progress has been hampered by the staffing costs typically required for waste mitigation as well as our deeply-ingrained habits and well-established systems of consumption. Work to encourage swag reduction, waste diversion, and goods reuse is ongoing.
- Taking the mantle from the Zilkha Center, students turned [Generation Conscious](#) into a Registered Student Organization to continue providing support for the use of biodegradable laundry detergent sheets.

Accountability and Transparency

- The [Sustainability Action Planning Group](#) was formed in the fall to promote the articulation of a sustainability vision for the college and the development of Sustainability Action Plans by administrative units. The aim for this coming year is to maintain momentum for individual administrative units to craft their own sustainability plans.

Williams is dedicated to those environmental and sustainability efforts we are particularly well suited to advance, and remains focused on having meaningful impacts with finite resources in tandem with other priorities of the college. This shared commitment to confront complicated issues of deep significance will no doubt continue to animate our environmental and sustainability work in the years ahead.

Your sincerely,

Eiko Maruko Siniawer
Provost & Class of 1955 Memorial Professor of History