

# State of Sustainability | 2022

Sustainability and making conscientious choices in both our daily work and in the overall future and running of the institution is a focus for Hillwood. Goal 2 of the strategic plan states, "Preserve Marjorie Post's important legacy by achieving best practices in the care of the collections, mansion, and campus, with a focus on environmental sustainability, to ensure Hillwood remains current and innovative."

HEAT, the Hillwood Environmental Action Team, was formed as a multi-department working group to collaborate and enact environmental changes at Hillwood. We are pleased to present the first annual State of Sustainability, featuring achievements and outreach from the preceding year and outlining those for the upcoming one.

Hillwood has made great strides in our environmental stewardship, ensuring the institution remains vital, healthy, innovative, and current, building a sustainable future for our communities and the world around us. We remain committed to protecting and maintaining the health of the environment.

# **Sustainability Achievements**

## 2022 Campus-wide Water Usage

At the end of 2021, we set out for 2022 to reduce the water consumption at Hillwood by 100,000 gallons. Thanks to the combined efforts of all staff turning off running water when possible, reporting plumbing issues to be repaired quickly, monitoring the water meters to identify potential leaks, and a fair amount of help from a rainy spring and summer, we shattered that goal. We reduced the water use by over 700,000 gallons even with record attendance and a young garden at the Collections and Research Center. There are many contributing factors to the total water usage at Hillwood, from washing hands and watering plants, to providing heating and cooling for the collection. It takes all of us working together to make a difference.

	Main A&B	Irrigation	Total
2021	1,489,121	1,091,987	2,581,108
2022	1,515,460	340,639	1,856,099
		Savings:	725,009

### **Facilities**

The Facilities team was instrumental in meeting our campus wide goal. Beyond repairing leaks, it was through their installation of water meters and diligent reading and recording data that HEAT was able to track progress. In 2022 alone, the recycling program prevented over 400 pounds of ballasts, batteries, and fluorescent bulbs from ending up in a trash bin. We have also collected the coffee grounds from the break rooms around campus for composting which totals approximately 14 cubic feet of additional material for the compost pile instead of the landfill.

#### **Horticulture**

A key focus for horticulture last year was switching from gas-powered to electric blowers and string trimmers, leading to a huge reduction (73%!) in gas use, which translates to cleaner air.

	Gallons of Gas Purchased
2021	333
2022	90
% change	-73%

The team also made strides in reducing waste, both paper and plastic. They collaborated with vendors to send back plastic pots (which houses many plants upon delivery) in the hopes they will be

reused and recycled. To aid in reducing paper use, we no longer print plant lists for the cutting garden, but instead, make the lists accessible via QR code.

A large project was clearing invasive plants from the woodlands and formal gardens, and the woodland stewardship program has been very successful. Staff and volunteers have removed 2/3 acre of English ivy and  $\frac{1}{2}$  acre of burning bush. Additionally, horticulture introduced a large number of native plants, as staff and volunteer added 2,441 native trees, shrubs, and perennials to the gardens.

#### **Collections/Curatorial**

For the past two years, the collections team has been transitioning all lighting in the mansion to LED bulbs. In 2022, this expanded to all exposed lighting, including  $\sim 300$  bulbs in the chandeliers alone. The collections team has now replaced around 80% of the bulbs in the mansion with LEDs ( $\sim 700$  bulbs). Phase 1 will be completed in 2023. Remaining areas to be addressed are equivalent to about 3% of total bulbs in the mansion.

	# of Bulbs	% of Mansion Lighting
Prior to 2022	158	17.61%
Phase 1: Exposed Lighting (2022)	518	57.75%
Phase 1: Exposed Lighting (January 2023)	191	21.29%
Phase 2: Special Projects	30	3.34%
Total	897	

#### **External Affairs**

After using plastic visitor tags for many years, which often fell off and littered the gardens or surrounding area outside Hillwood, visitor services made the switch to biodegradable visitor stickers. These stickers are water soluble and much better for the environment if they do fall off.

External affairs introduced a digital version of the visitor guide, available for download from Hillwood's website or via QR code. This will lead to less paper usage and litter throughout campus. Additionally, after phasing out use during the pandemic, visitor services returned all physical audio guides, in favor of promoting the audio tour on Hillwood's mobile app. With all information included in the app, visitors who choose to download this do not need the brochure for stop numbers, leading to less brochure usage. This also requires less energy usage with the removal of the large charging stations and ~150 audioguides.

### Administration/Volunteers

To reduce waste and replace the one-time-use utensils and paper products for volunteer and staff functions, Hillwood purchased standard dishes and flatware that are washable and reusable. They are now available in the Administration building and Horticulture break room.

Additionally, multiple departments, including volunteer services and administration, began distributing reports, documents, and training materials digitally, rather than providing printed folders and physical binders, greatly decreasing paper usage.

#### HFΔT

In 2022, HEAT hosted the first Sustainability Shark Tank contest, in which colleagues were invited to submit a proposal for a sustainable change or project at Hillwood that supported environmental protection, energy savings, carbon reduction, water conservation or other unique sustainability-related topics and could win \$1,000 toward completing it. Last year's winners were Matt Boyle and Katherine Parise with the submission of a compost chipper/shredder for the horticulture department.

## **Sustainability Outreach**

In addition to making physical changes at Hillwood, HEAT has also focused on sustainability outreach, sharing information and collaborating with likeminded organizations.

- Earth Day event HEAT hosted a program to celebrate Earth Day, setting up eight stations on the Lunar Lawn (four from Hillwood, four from invited outside organizations), hosting a native plant giveaway, and leading tours of the CRC native garden.
- Sustainability SharePoint site
- Volunteering with Rock Creek Conservancy
- APGA lectures Drew Asbury spoke twice with a lecture on sustainability at a historic property and a poster presentation on changes needed in the horticulture industry away from plastics
- Tour for DC Master Naturalists
- Expanded participation in the City Nature Challenge, including an event with Outdoor Afro
- Horticulture garden club talks (4) focused on gardening sustainably
- Sustainability lecture presented to the Charter 100 club

#### 2023 Goal and Initiatives

Looking ahead, HEAT has gathered information from across campus to develop an institutional goal and share upcoming department initiatives.

#### **Campus-wide Paper Usage Goal**

Paper is something that touches our lives nearly every day. According to the WWF, the United States is the second-largest paper producer and consumer country in the world. The pulp and paper industry, which makes products such as office and catalog paper, glossy paper, tissue and paper-based packaging, uses between 33–40% of all industrial wood traded globally. Pulpwood production can affect the climate, water quality, ecosystems and indigenous populations.

In 2022, Hillwood used 180,000 sheets of copy paper which was tracked through the amount purchased. Much of this is still essential to the daily operations of the museum. HEAT would like to invite all staff to examine paper usage across campus and whether it be through mindful printing or small procedural changes, join us in our goal to reduce paper usage by 5% (~10,000 sheets). Updates will be provided to staff periodically through the year.

### **HEAT and other department initiatives:**

- Host the 3<sup>rd</sup> annual Earth Day celebration on April 21 from 11 a.m. 2 p.m.
- Replace asphalt garden paths with Porous Pave (made out of recycled rubber)
  - o Development is working on a capital campaign to fund this initiative
- Finish LED Phase 1 bulb change out in the mansion
- Make captured rain water accessible to the orchids
- Continue to remove invasive plants in the woodlands and gardens
- Complete campus-wide paper shredding and subsequent recycling
- Implement reusable cases for exhibitions
- Continue to monitor water and electricity usage
- Bring back the Green Day of Horticulture as part of volunteer continuing education
- Receive consultation to improve the compost area