

Improving Diversity, Equity, and Inclusion in the Woods Hole Scientific Community:

2024 Update

By The Woods Hole Diversity Initiative

Institutional Representatives

Nicole Cabana, NOAA Northeast Fisheries Science Center, WHDI Co-Chair

Mark Long, Sea Education Association, WHDI Co-Chair

Rob Thieler, U.S. Geological Survey

Rob Evans, Woods Hole Oceanographic Institution

Natalie Nevarez, Woods Hole Oceanographic Institution

Amy Gemmell, Woodwell Climate Research Center

Corrie Martin, Woodwell Climate Research Center

Anne Sylvester, Marine Biological Laboratory

Samantha Cummis, Marine Biological Laboratory

Executive Summary

This document is an update on actions taken by the [Woods Hole Diversity Initiative \(WHDI\)](#) to create a more diverse, equitable, and inclusive community in Woods Hole. This work has been guided by a [report](#) written by Dr. Robert Livingston, a leading scholar of diversity and inclusion. Commonly known as The Livingston Report, the 2018 document galvanized the Woods Hole science community, shedding light on uncomfortable truths and outlining a series of actions the partner institutions might take to build a better, more inclusive community.

In 2021, the WHDI compiled its first [update](#) on actions taken by the WHDI and its member institutions to address the issues described in the Livingston report. This document is a second update, this time with each institution providing its own summary of actions, challenges, and plans for the future. Both the 2021 update and this 2024 update are intended as accountability measures and also as demonstrations of our ongoing collective commitment to meet the challenges outlined in the 2018 Livingston Report.

Several themes emerge in the institutional reports that comprise this update, including:

- Each institution has engaged in activities promoting inclusivity, such as renaming meeting rooms, mounting more inclusive wall art, and providing workshops focused on inclusive principles and practices.
- The institutions have invested funds in DEI efforts. The institutions have made financial commitments to diversity, equity, and inclusion, for example hiring a full-time DEI officer, funding research and educational opportunities for previously marginalized communities, focusing on Indigenous knowledge in research grants, and recruiting students and researchers at conferences attended by scientific talent from underrepresented groups.
- Each institution has contributed to workforce development, participating in (and in some cases establishing new) internship and/or fellowship programs that provide opportunities for minorities underrepresented in our community and that encourage awareness and greater cultural competency among the host participants.
- The WHDI responded to Dr. Livingston's call to make structural changes to institutional practices and policies that promote the status quo. Some member institutions made significant changes to address this call. Actions range from hiring a diversity officer, to making sweeping changes to hiring practices, to changing wall art, building, auditorium and street names, and leading the development and success of a national campaign, Unlearning Racism in the Geosciences (URGE).

Each member institution recognizes that our efforts to date have neither identified nor solved all of the challenges that we face. However, our ongoing efforts represent a commitment to diversity, equity, and inclusion shared by the WHDI and each member institution. We still need to make progress in increasing the racial and ethnic diversity of

our science community. We also need to continue our work around inclusion, ensuring that all will be welcome and valued and able to achieve their full potential. We need to identify quantifiable measures to assess how we are doing with both goals – our diversity and our inclusiveness. One promising measurement effort has grown out of the WHDI-facilitated BRAID alliance. A team led by Onjale Scott Price, director of the WHDI's [Partnership Education Program](#) (PEP), has received National Science Foundation funding to measure the impact of diversity programs on host communities. This project is examining measures of inclusivity and support for underrepresented minorities through the lens of social science. The WHDI is excited about what we will learn through these efforts and will take the findings into consideration as we plan our next steps to address diversity, equity, and inclusion in our institutions and community.

The WHDI as a whole, and the member institutions individually, are committed to continuing the work to reduce barriers, build bridges, and shape a 21st century workforce that is as diverse as the nation in which we live and work.

Introduction

In 2004, the six Woods Hole science institutions – Marine Biological Laboratory (MBL), NOAA Northeast Fisheries Science Center (NEFSC), Sea Education Association (SEA), United States Geological Survey - Woods Hole Coastal and Marine Science Center (USGS), Woods Hole Oceanographic Institution (WHOI), and Woodwell Climate Research Center (Woodwell) – signed a Memorandum of Understanding (MOU) that established the Woods Hole Diversity Initiative (WHDI). The MOU recognized that diversity is a strength to be developed in our community. The WHDI enabled the institutions to work collaboratively to create “pathways of opportunity” that work to attract people from underrepresented groups by showing that the Woods Hole scientific and educational community has opportunities beginning with primary education and leading to higher education, postgraduate work, research and lifetime careers, both in Woods Hole and in the global scientific community.

The following year, the Woods Hole Diversity Advisory Committee (DAC) developed a roadmap to guide WHDI activities and initiatives. That roadmap catalyzed early successes, such as the launch of the Partnership Education Program (PEP), establishment of the John K. Bullard Diversity Award and Ambrose Jearld, Jr. Lecture, and creation of diversity committees and programming at individual organizations. However, the WHDI recognized that there were ongoing, structural challenges to its mission of developing diversity as a strength in our community.

Thus, in 2017, the WHDI commissioned Dr. Robert Livingston of the Harvard University John F. Kennedy School of Government to delve into these challenges and develop tailored recommendations. The Woods Hole Diversity and Inclusion Report was finalized and communicated to the WHDI institutions in April 2018 and has become known informally as the “Livingston Report.” The report illuminates issues of lack of diversity and systemic racism and bias in our scientific community, and in the larger community in which we live. The Livingston

Report also provided a five-year “rehabilitation plan” consisting of discrete strategies and measurable steps.

The WHDI recognizes that our institutions have a responsibility to bring change to our Cape Cod community locally, and to the Earth and ocean sciences community globally. This process starts with identifying problems and making changes in our own institutions. A commitment to change requires resources and hard work at all levels of our institutions.

Taking these steps is part of our commitment to reform, to improve equity and equality, and to better reflect the society that we serve as scientists, engineers, and educators. This requires sustained efforts at each of our institutions, and in the community at large.

The WHDI and our respective institutions took the Livingston Report as a call to action. Much remains to be done but notable progress has been made, with the six institutions working to implement the recommendations in ways that fit their different organization types, sizes, funding models, and modes of operation. While the WHDI commissioned the Livingston Report and endeavors to support and amplify efforts to address its recommendations, individual and grassroots efforts have been critical in advancing important institutional and community issues, and are essential to create the changes that we seek as a scientific community.

What follows is not an exhaustive list of each action and initiative, but rather, an overview of our approaches to take action on the Livingston Report, with representative and notable examples from individual institutions. Each institution maintains more complete accounts of their efforts and accomplishments from which content in this report is drawn.

As noted in our most recent (2021) update, the 2018 Livingston Report emphasized the need to change or dismantle the structures that underpin the lack of diversity in our community. The WHDI has played, and continues to play, a significant role in mobilizing the six major institutions to address systemic racism and to build an inclusive, diverse, equitable community.

While community-building is properly a collaborative effort, much of the work has to be done by the individual institutions that compose the Woods Hole Science community. With this in mind, the six WHDI institutions offer this report of the status of our DEIA efforts. The institutions’ contributions are provided in the sections below in alphabetical order.

Marine Biological Laboratory

The Livingston Report of 2018 provided specific strategies to achieve a more diverse and inclusive scientific environment in the Woods Hole area. Since that time, the Marine Biological Laboratory (MBL) has worked regionally through the Woods Hole Diversity Initiative to implement recommended strategies. The MBL also supports an institutional D&I Committee focused on creating an inclusive, diverse and welcoming environment on campus. These efforts since 2021 are reported here:

[Recruiting to a Welcoming Environment.](#)

To make our spaces relevant and reflective of society, MBL revamped some campus lobbies and hallways to highlight participants traditionally unrecognized for their contributions to science. As outlined in the 2021 report, the Lillie Auditorium was renamed the Cornelia Clapp Auditorium to underscore her role as a founder of MBL and one of the first women to earn a Ph.D. in biology. Since then, the MBL has continued to add signage, photographs, historical reminders and balanced displays throughout the Loeb Building and in the entry to the Cornelia Clapp Auditorium. These displays show the breakthrough contributions to science and education from diverse scientists such as Ernest Everett Just, Lilian Vaughan Morgan, Katsuma Dan and other unrecognized forces in science.

Ongoing Campaigns of Recognition.

The MBL D&I Committee has continued to identify, evaluate and reinvent our shared entry and work spaces to better reflect a diverse population. One outcome will be a proposal to the MBL Director that offers suggestions for further recognition of past diverse participants to make our spaces more welcoming. Other campaigns of recognition include the following:

- *Acknowledging the impacts of exclusion.* In 2022, the MBL implemented a Land Acknowledgement recognizing the contributions and sovereign rights of the Wampanoag Tribes. The statement was developed with Wampanoag tribal elders and was inaugurated on January 19, 2022 with an educational seminar by Dr. Nitana Greendeer (citizen of the Mashpee Wampanoag Tribe and contributor to the Wôpanâak Language Reclamation Project). The Land Acknowledgement appears on the MBL website and message boards; MBL encourages its use in email signatures and that it be read before seminars and other events as a reminder of our commitment to Wampanoag culture and sovereignty. Interactions with the Wampanoag Tribes are ongoing through a partnership with the Aquinnah Wampanoag Natural Resources Department to monitor the striped bass migration and spawning on Aquinnah waters on Martha's Vineyard.
- *Legacy of Leadership campaign.* The MBL WHOI library staff have changed the content of the tours and talks given to the public and to students of Advanced Research Training Courses, undergraduate courses, and the high school program. These changes include acknowledging during tours that the library's holdings are Eurocentric, and by discussing the historical obstacles faced in science by women, people of color, LGBTQ+ and other often excluded people. This effort is visible in the library displays and carried forth by the librarians tour guides who shine the light on the many individuals from marginalized groups who made key contributions to Woods Hole science.
- *Be Yourself @ MBL campaign.* In 2022, the D&I committee expanded the Be Yourself @MBL campaign described in our 2021 Report by designing and installing banners in the MBL Quad celebrating diversity, with a second set of banners installed in 2023. The message is also disseminated through our campus monitors, themed clothing and other items at the MBL gift shop. The "Be Yourself @ MBL" stickers and pins are ubiquitous across campus and synonymous with the broader MBL commitment to belonging and appreciation of everyone.

Communicating and Implementing D&I Actions.

- *MBL D&I monthly newsletter.* A monthly newsletter instituted in January 2023 informs the MBL community of our local and regional community activities, news, and resources

related to diversity, equity, and inclusion. The newsletter invites op-ed pieces from MBL community members and serves as a central resource to enhance local awareness of social issues and encourage community-wide discussions that promotes combined action toward a more inclusive future.

- *Juneteenth Celebration.* Starting in June 2022, MBL instituted a dedicated celebration of the Federal Juneteenth holiday with an inaugural “Juneteenth Lecture” as the kick-off to our annual Friday Evening Lecture (FEL) series. This Juneteenth FEL is now held annually on the Friday closest to the Juneteenth holiday, along with a Juneteenth picnic for MBL employees and visitors, a movie night, and raffles of gift certificates to local BIPOC businesses. The speaker for the Juneteenth lecture is hosted across institutions and often participates in broad discussion on how to overcome systemic barriers to increasing diversity.
- *Supporting the LGBTQ+ community.* In 2022 and 2023, MBL celebrated Pride Month awareness through the summer 2023 with a weekly table at the Swope Conference Center, which featured posters of queer scientists past and present, MBL Pride-themed gifts and information on our D&I work. A panel of LGBTQ+ scientists from across Woods Hole discussed the advances and challenges to welcoming people from the LGBTQ+ community into STEM. Celebrations culminated with an annual Pride party on the Quad, open to the Woods Hole community.
- *Shared community efforts:* In addition to including the other institutions in our weeklong Juneteenth celebration, MBL participates in general regional events:
 - MBL-WHOI library staff provided support to Falmouth and Mashpee High Schools’ STEMfest Film Festival: A celebration of African American & Caribbean STEM Professionals. Students created video interviews with African American STEM professionals in a variety of careers including epidemiology, primatology, biology, landscape architecture, engineering, fisheries management, and science education.
 - MBL supported a local effort to change the name of Agassiz Rd to Jewel Cobb Rd.
 - MBL joined in the URGE project, a nation-wide network of geoscientists who participated in an intensive anti-racism journal reading and institutional policy assessment.

Actions to Increase Participation in MBL Research and Education.

- *Fellowships for Visiting Scientists.* MBL increased its support for the EE Just Fellowship in 2022. This fellowship honors the memory and recognizes the breakthrough research of one of the early Black scientists at MBL, Ernest Everett Just. The fellowship supports visiting scientists at MBL with funds to support the Fellow’s stay at MBL. MBL recently expanded the program to include two Fellows per year and we aim to grow the program in the future through targeted philanthropy.
- *PAIR-UP Workshop for Black Imaging Scientists.* This new workshop held at MBL is led by former trustee and MBL council member George Langford, and Imaging Scientist Abhishek Kumar. The workshop hosted 20 Black scientists for a hands-on workshop on light sheet microscopy and other imaging techniques. Supported by foundations and professional societies, an ongoing effort is to identify mechanisms and support structures

to bring participants back to the MBL for continued research and education experiences with MBL faculty.

- *Support for the WHDI Partnership Education Program (PEP)*: The MBL is an enthusiastic supporter of this impactful education program. An average of two students per summer are hosted and mentored in MBL labs. We aim to increase financial support for this program through federal and philanthropic funds for MBL faculty and thereby augment the WHDI effort.
- *Blue Economy Internship Program*: MBL secured state funding for the Blue Economy Internship Program for 2022 and 2024. The program offers paid experiential learning opportunities for Massachusetts public high school, state college & university, and community college students. The emphasis is to build their professional experience, skills, and knowledge in the life sciences, technology, and the Blue Economy.
- *Undergraduate Opportunities*: The MBL hosts ~40 undergraduates on the campus each summer. In addition to PEP students, this includes students from Dartmouth's EE Just Scholars program and MBL's NSF REU Program, which brings in ~10 undergraduates from all over the country from lower-resourced schools including – but not limited to – Minority Serving Institutions. This group constitutes a robust cohort of students who have the shared experience of a Woods Hole summer and often meet again at national meetings, such as SACNAS and ABRMCS where they present their research to their colleagues and mentors. The MBL is represented at these events every year.
- *Advanced Research Training Courses (ARTC) Admissions and Scholarship*: MBL reviewed its admission processes and now challenges reviewers and admission committees to consider attributes of candidates that go beyond quantitatively measured academic performance, such as transcripts and standardized test scores and value motivation, leadership, and other qualities. A high proportion of students are admitted on scholarships to minimize financial constraints to participation. Ongoing fundraising efforts focus on increasing these support capabilities.
- *Building Innovation Through Diversity (BID) Workshop*: Launched in 2022, BID is an annual five-day workshop held during the ARTC summer season. BID Scholars are diverse postdoctoral fellows and early career faculty from Minority Serving Institutions who participate in course lectures, hands-on lab work, research discussions and professional development activities. The goal is to develop a reciprocal relationship between the courses and new communities of research scientists, to facilitate research and networking opportunities, and to provide course directors with an introduction to new faculty candidates who can be role models to diverse students.
- *Alumni ROCS (Regional Outreach and Communication in STEM)*: This new program provides funding for alumni of the ARTCs to bring their research back to their local communities. These alumni are supported to create and deploy outreach projects to increase science literacy and connection, with an emphasis on sharing science with under-resourced K-12 schools.
- *Virtual Faculty Workshop to Expand Hiring Practices*: MBL, Cold Spring Harbor Laboratory, and the Jackson Laboratory collaborated to host an annual virtual Instructors Workshop for a half day of online learning and training in: Best Practices in Admissions; Creating and Sustaining Inclusive Learning Environments; and Equipping and Preparing Instructors for a Diverse Cohort. MBL aims to increase availability of workshops, coaching and training resources in the future.

In summary, MBL has focused on recruitment and retention by specific actions to expand the reach of our programs. As part of this effort, we've worked toward making our campus and environment more welcoming and inclusive. Our specific areas of focus in the coming years are to reach out directly to HBCUs, MSIs, other groups and scientific societies with strong diversity engagement to develop strategies to recruit new participants. We need to expand ways to bring scientists from diverse backgrounds back to MBL, through providing support and by ensuring a welcoming and relevant environment for all people.

NOAA Fisheries Northeast Fisheries Science Center

The Northeast Fisheries Science Center's (NEFSC) focus in the reporting period (2021-2024) has been on:

- building networks with a diverse array of institutions (especially Historically Black Colleges and Universities and Minority Serving Institutions)
- promoting the use of alternate hiring tools
- changing the institutional culture

In Dr. Livingston's first session with the Woods Hole Diversity Initiative (WHDI) in 2017, he asked the institutional leaders "What are you willing to do differently? And what are you willing to pay to achieve your diversity goals?" Remembering Dr. Livingston's questions, the NEFSC has dedicated funding to the Diversity, Equity & Inclusion (DEI) effort, both in terms of staff time and of direct funding for the institution's flagship programs, the Woods Hole Partnership Education Program (PEP) and IN FISH (Inclusive NOAA Fisheries Internship Program). NEFSC Deputy Director Nicole Cabana lists "*Building a more diverse and equitable organization*" as one of her five career goals. She co-chairs the WHDI, which brings institutional leaders together monthly. Other NEFSC staff devote much of their time to DEI issues and activities. The NEFSC's Academic Programs Office is staffed by two expert program builders who focus almost exclusively on workforce development programs and events that contribute to DEI goals. Additionally, in late 2023, the NEFSC hired a Human Resources professional with expertise in federal hiring and a commitment to diversity and inclusion. Beyond funding staff who focus on DEI efforts, the NEFSC secured NOAA funding that has been foundational for PEP and for IN FISH, currently covering between half and ninety percent of the direct costs of these intern programs.

PEP and IN FISH were the major activities in the reporting period. Both are undergraduate intern programs focused on building the workforce of the future, which also addresses DEIA objectives. Both programs have dual goals:

- providing opportunity to talented undergraduates from groups under-represented in STEM
- providing host staff the opportunity to learn how to become more culturally competent, more inclusive and welcoming of diversity

The NEFSC co-led the effort to develop a new PEP funding model that resulted in the Woods Hole institutions committing to more sustainable funding for the program. The NEFSC also launched IN FISH (modeled on PEP) to serve other NOAA Fisheries labs and offices around the country. One element of IN FISH is the involvement of NOAA level-HR professionals who are committed to the use of hiring mechanisms that will encourage the hiring of graduates of PEP and IN FISH.

The NEFSC's DEI efforts thus have focused on inclusive program building in Woods Hole and nationally, and on changing hiring practices. In 2023 two PEP graduates were hired as full-time NEFSC employees, and other PEP graduates are employed or doing graduate and postgraduate work at Woods Hole member institutions. We recognize this hiring success is an order of magnitude too small, and we are engaged in a process to encourage hiring managers in NEFSC and throughout NOAA Fisheries to use special hiring mechanisms to bring significant numbers of PEP and IN FISH graduates into our workforce in the next two years.

One challenge the NEFSC faces in 2024 is the re-building of our office culture in the Woods Hole laboratory. Almost all our employees worked virtually during COVID years (2020-2021) and we have not yet succeeded in rebuilding a vibrant office culture. The need to rebuild an office culture can be viewed as both a difficulty and an opportunity in the effort to be a diverse, inclusive culture. It is a difficulty in that it may be hard to be supportive and inclusive when there is little common culture to begin with. On the other hand, the need to be thoughtful about rebuilding an office culture presents opportunities to be mindful about building a culture that is inclusive.

Two other challenges facing the NEFSC in 2024 are: rebuilding a NEFSC DEI team and finding a way to measure the extent to which the NEFSC is becoming a more inclusive community. Pre-COVID, the Woods Hole NEFSC lab had an active DEI team. For a number of reasons, that team has fallen dormant while NEFSC employees have focused on village-wide efforts and/or national efforts. The NEFSC leadership is committed to re-constituting and re-energizing that working group.

Finally, there is the interesting and important question of whether NEFSC (and the larger Woods Hole science community) is more or less inclusive than it was when Dr. Livingston wrote his report in 2018. It is an open question whether we need a DEI Climate Survey; we note that the Livingston Report was anecdotal and yet was arguably the single most important event in galvanizing the Woods Hole DEI effort. The IN FISH program is working to develop an evaluation tool that can measure the impact a program has on the hosting community. If the IN FISH team is successful in developing that evaluation tool, it could potentially be used to measure the impact of some of our DEI activities and programs.

Sea Education Association

The approach to DEI work at SEA begins with the recognition that the geoscience and environmental studies communities lack diversity, particularly in, but not limited to, race and ethnicity. Furthermore, there is increasing recognition for the need to avoid parachute science by

including and amplifying local voices in marine conservation through collaborations. For the past 52 years, Sea Education Association, a non-profit 501(c)(3) corporation, has been educating the next generation of ocean scholars through interdisciplinary study abroad programs that combine classroom instruction with experiential learning aboard a sailing research vessel or in field research settings. Thus, we are positioned very well to continue offering invaluable field training in open ocean and coastal oceanography research, data visualization and communication, leadership and teamwork, and maritime studies for underrepresented groups in the geosciences and environmental studies.

Utilizing guidance from the Unlearning Racism in the Geosciences curriculum (urgeoscience.org) and the experiences of our team, SEA's DEI Committee works to assess the needs of our organization and plan for the achievement of our belonging, accessibility, justice, equity, diversity, and inclusion (BAJEDI) goals. Taking a phased approach, the DEI Committee members anticipate that, over the next few years, much of our time, effort, and resources will be focused on the creation of an environment that can support and empower a more diverse community in our ocean science and conservation programming. At the same time that we are doing this work on BAJEDI competencies, our efforts to enroll more diverse students, with a focus on cohort recruitment to provide a degree of mutual support and empowerment, will continue with scholarships that reduce our tuition by half for HBCU and Tribal College students, a Coastal Communities scholarship for students from the communities and regions where we do shipboard and coastal research, and the creation of shorter, specialized programs for minority-serving institutions. We anticipate that these recruitment efforts for our undergraduate programs will expand considerably as we continue to work on and receive positive assessments of our BAJEDI competencies.

In our shorter-duration high school programs, offered throughout the summer months, we are also moving ahead with recruitment of students from underrepresented groups. For instance, in 2024 we expanded our partnerships that began in 2020 with the support of individual donors, and we now expect, based on successful applications, to welcome even more students with diverse backgrounds. Many of these students are coming from our partners at the New York Harbor School and the community-based organizations that include Rocking the Boat and STEP: Student Expedition Program. The financial needs of this pool of students are met with the expansion of donor-funded full scholarships which also includes support of local students from the Wampanoag tribe. This "All Aboard: High School Access Initiative" and subsequent recruitment efforts were initiated by our enrollment and development teams, and the scholarships support the recruitment of diverse students in cohorts of three or more per program, thereby allowing a system of mutual support and an increased sense of belonging for underrepresented students within these high school summer programs. Particularly for summer 2024 programs, a significant number of underrepresented students have applied outside of these existing partnerships, likely a result of increased high school recruitment efforts. In most cases, SEA has been able to meet full financial need of these students through the general financial aid budget or existing donor funds

Anticipating the success of our recruitment initiatives, the DEI Committee has planned a series of DEI-focused sessions for the ship's crew during the March/April training and, beginning in June but then recurring over the subsequent months, organization-wide training with PowerPlay

Interactive Development and Inclusion Works (<https://speakingupworkshop.com/>). This combined consulting and training program will cater to SEA's specific needs and funded through the DEI Committee's annual budget.

Finally, in the recruitment of personnel, the DEI Committee continues to pursue grant support for pilot programs to help us increase diversity in our science staffing. Specifically, in a recent grant proposal, we outlined a "SEA Ocean Science Fellowship" program for the recruitment and support of three or more fellows from underrepresented groups in regions, such as small island developing states, overseas territories, and other small island and coastal communities, where SEA operates. These fellows would work together, as a cohort, in an SEA program. With such a program and other staff recruitment initiatives, SEA will build capacity in the field and create a more inclusive, welcoming environment that can properly support increased diversity in our early career scientific staff. Our long-term goal is to expand our recruitment across a variety of ocean disciplines in the regions, worldwide, where we currently operate and complement our programs that already work with local experts in the field work portions of our programming.

The DEI Committee recognizes that systemic issues related to BAJEDI must be addressed to broaden participation in ocean sciences and ocean conservation and retain a more diverse body of ocean scientists and conservation experts. We are committed to change within the organization that involves both assessment and improvement of our practices to support a more diverse student body and staff. We are confident that SEA's community, incorporating students, faculty, professional crew/teaching fellows, and staff, can achieve significant and lasting diversity and serve as a model in the areas of ocean science, ocean education, and ocean conservation.

U.S. Geological Survey Woods Hole Coastal and Marine Science Center

Over the past two years, the WHCMSC advanced several of the recommendations in the 2018 Livingston Report, with a focus on the following: *Widening the Net*, *Building Bridges*, *Capturing the School*, *Fueling the Pipeline*, *Bring people to Woods Hole*, and *Diversity Training*.

Local Efforts

WHCMSC staff have been making connections with local and out-of-state schools for over 30 years. Locally, WHCMSC staff work with multiple K-12 schools through after school activities, presentations about local science, and working with students advising and judging science fair projects. Locally, these engagements are done in concert with the Woods Hole Science and Technology Education Partnership (WHSTEP) and the more recently established Falmouth Public Schools-Woods Hole (FPS-WH) Partnership. The USGS also has a booth at the well-attended annual science stroll in Woods Hole to promote awareness of the USGS mission and STEM education opportunities. Local efforts also include a long-standing partnership with the Mashpee Wampanoag Tribe on both education and research activities. WHCMSC hosts a day of the Tribe's Preserving Our Homeland summer camp to highlight USGS science and how it relates to Tribal lands and interests.

At the college level, the Center has continued its lecture series and internship program at the City College of New York established in 2005. Center staff also give regular virtual lectures at Tennessee State University and the University of Florida. WHCMSC staff participate in several USGS internship programs, as well as local programs such as WHOI's [Summer Student Fellowship](#) and the [Woods Hole Partnership Education Program](#) (PEP). Through these programs, students to work on USGS projects each summer. In coordination with PEP, WHCMSC organizes and implements the Woods Hole Diversity Advisory Committee's annual summer student barbeque, which provides an opportunity for summer students from all Woods Hole institutions to engage with each other and the scientists who are mentoring summer students over great food and good fun. During the summer of 2023, WHCMSC hosted additional events geared towards summer interns, including:

- a USAJobs workshop to help those interested in learning how to navigate the USAJobs website through which federal jobs are advertised; and
- a Federal Jobs Panel discussion (also hosted in 2022).

These two events expose students to careers and the pathways early graduates can take to get a job in the federal government. Student feedback reflected an appreciation of guidance in working with the difficulties of navigating USAJobs, a hurdle that many students say dissuade them for applying for federal jobs. Many students also expressed surprise at the range of federal science careers as an option outside of traditional academic research.

Several WHCMSC staff have been participating in the Building Resilient Alliances for Inclusion and Diversity (BRAID) project, an effort to develop an ecosystem of diverse partner institutions focused on increasing the entry, inclusion, and success of underrepresented students and faculty in the geosciences. In May 2023, the USGS hosted the 1st BRAID workshop, bringing together 40 partners from eight US minority-serving institutions (MSIs) and six predominantly white institutions (PWIs), all of which conduct research and/or education in climate and marine science.

Internal Efforts

Since the previous Livingston Report update, WHCMSC has offered several types of diversity training events and workshops, and has worked to make the Center more inclusive. Bystander intervention and unconscious bias workshops were held and ~20 WHCMSC employees participated in URGE ([USGS – Woods Hole URGE Pod](#)). The findings of this effort are reported in USGS Open File Report “[Unlearning Racism in Geoscience \(URGE\): Summary of U.S. Geological Survey URGE Pod Deliverables](#)” and directly informed the agency-wide [DEIA Strategic Plan for 2023-2028](#). These products are important for holding ourselves accountable for progress in meeting DEIA goals and providing resources and support for these efforts.

The Center continued its investment in local staff who participate in the USGS Peer Support Worker (PSW) program, which promotes awareness and provides outreach and education on topics and policies related to anti-harassment, discrimination, biases, and scientific integrity. Since it's establishment at the Center in 2020, six WHCMSC staff have served in the PSW role and have received annual training through the national USGS PSW program.

Between summer student project mentors, PSWs, DAC representatives, and other Center staff engaged in DEIA activities and support, we have created a more cohesive network of individuals who have experience in advancing Livingston Report recommendations. Within this pool of people, (1) we have contributed to the planning and execution of local special emphasis activities (Black History Month, Native American History Month, Hispanic Heritage Month, Juneteenth) and (2) increased attendance at the annual [Society for Advancement of Chicanos/Hispanics & Native Americans in Science](#) (SACNAS) conference to represent the WHCMSC and bring back ideas to our Center. SACNAS provides a venue for professional scientists to give back through mentoring, engagement, and networking with undergraduate and graduate students as they embark on career paths in STEM. SACNAS plays a crucial role in fostering and promoting DEIA and provides valuable resources and support to scientists from underrepresented backgrounds.

Federal and Regional Efforts

Several DEIA accomplishments have occurred at the national USGS level since the previous Livingston Report Update. In 2021, the USGS Executive Leadership Team created the Workplace Equity, Engagement, and Excellence (WE3) Council to serve as the executive body that provides guidance for policies and procedures that address USGS workplace culture. The WE3 Council developed the [USGS DEIA Strategic Plan for 2023-2028](#). Approved by the Director of the USGS, this forward-looking document addresses all of the principal recommendations in the Livingston Report. The plan has five main goals: (1) *Demonstrate Leadership Commitment and Accountability*, (2) *Build a Diverse Workforce*, (3) *Cultivate an Inclusive and Civil Workplace*, (4) *Expand Partnerships and Engagement with Underserved Communities*, and (5) *Maximize Communication and Transparency*. An Action Items Working Group has been formed and is already working on several of the objectives within the five goals.

Another major achievement since the 2021 Livingston Report Update was the significant influence that local USGS Science Centers had on national USGS policy. Over 120 USGS employees, from across the country participated in URGE (Unlearning Racism in Geoscience) in 2021. Upon completing each two-week URGE session, members of the six URGE pods created deliverables that included specific recommendations for making the USGS workforce more diverse and inclusive. The new USGS DEIA Strategic Plan includes many of the recommendations from the USGS URGE pods (several of which came specifically from the Woods Hole pod). Furthermore, the USGS URGE recommendations were published in early 2024 as a USGS Circular: [Unlearning Racism in Geoscience \(URGE\): Summary of U.S. Geological Survey URGE Pod Deliverable](#). Three of the circular's authors are WHCMSC staff.

In addition to the achievements described above, USGS is involved in several DEIA initiatives at the federal and regional levels, many of which are new since 2021, and several of which include WHCMSC involvement (*WHCMSC staff directly involved):

- *USGS Northeast Region DEIA Council
- * Annual DEIA Grassroots Symposium since 2021
- *Advertising positions with SACNAS, AISES, and other groups
- *USGS Virtual Classroom Visit program

- *Broad and active Employee Resource Groups that provide a sense of belonging and community to employees and improve retention of diverse workforce.
- A new MSI dashboard (a catalog of MSIs that includes contact information and specifies whether USGS has a formal or informal relationship with the school; it can be searched by name or location)
- Cluster hiring in the USGS Northeast Region in response to a DOI's efforts to implement hiring practices that can improve diversity. The effort has two components: one based on outreach, advertisement, and training in MSIs; and the second, based on improving the hiring process and the creation of cohorts to enhance retention.
- Gender inclusivity training conducted at the regional level during 2023 with multiple workshops to improve awareness, reduce discrimination and harassment, and foster cultural competence.

Opportunities for steps forward

As a bureau within the U.S. Department of the Interior, USGS follows federal policy, guidelines, and procedures, and leverages opportunities to extend our influence and impact beyond WHCMSC. Employees from the Center are part of USGS national and regional DEIA committees, councils, and supporting groups, which provide environments to effect change at all levels of the bureau. The speed at which local change can be achieved, and steps toward addressing the Livingston Report's findings and action may not always proceed as quickly as desired or in concert with other Woods Hole institutions. Opportunities for change associated with initiatives being undertaken as part of the bureau's five-year DEIA Strategic Plan enable the Center to move in a positive direction. For example, by connecting Livingston Report priorities with USGS Strategic Plan initiatives, we hope to leverage USGS resources to increase engagement, improve the pace of meaningful change, and develop meaningful metrics that track our progress. We continue to be committed, open, and hopeful for change as we move forward to address longstanding issues in diversity, equity, and inclusion in STEM education, and to develop a workforce and scientific community that better represents the society we serve.

Woods Hole Oceanographic Institution

WHOI believes that all members of society should have equal access to shaping our ocean and climate futures. In 2021, WHOI established the Office of Diversity, Equity, and Inclusion under Dr. Natalie Nevarez (CDEIO) to cultivate an inclusive environment for all community members. The office functions at the strategic and organizational level, implementing policies to increase equity at the institution and the programmatic level hosting community-building activities and cultural exchange opportunities. These include a WHOI-Wide hiring initiative launched in 2021, with the implementation of rubrics, a conflict of interest policy, and the presence of trained Search Advocates in academic search committee meetings. We have also launched a DEI Speaker Series open to the public, a Conversation Starters Series on YouTube, and the Humans of WHOI campaign which serve to amplify diverse voices and experiences within the institution. Mentorship and community building is fostered through various employee resource and affinity groups including Black in Woods Hole, Women and Gender Minorities Group (WoGeMs), Latinx at WHOI, Mental Health Affinity Group, and the WHOI PRIDE group. We have provided

alternative conflict resolution methods in the workplace including an ombuds function and a mental health resource through an institutional Chaplain/Counselor who provides weekly 1:1 support to individuals as well as weekly meditation and grief support groups. This year, we are rolling out two new initiatives to which we'd like to pay special focus: The WHOI Indigenous Knowledge Program and WHOI Ambassadors.

WHOI Indigenous Knowledge Program (IKP): In collaboration with a donor, Woods Hole Oceanographic Institution has launched a new pilot program that will accelerate educational opportunities for individuals engaging with Indigenous Knowledge in ocean sciences. The program includes initiatives from K-12 all the way through to the postdoc level. In particular, the project will fund: 2 postdoctoral positions (open to STEM and Social Scientists), training for postdoc advisors on cultural sensitivity, recruitment funds that will launch an ocean sciences social at SACNAS, as well as visits to AISES, a postbaccalaureate scholarship for a college graduate seeking additional experience in their chosen field, a Blue Economy Internship position at WHOI for students from UMASS-Dartmouth or Cape Cod Community College, and an extension to our work with the Mashpee Wampanoag Preserving Our Homelands Camp. We are delighted to launch this work and continue to build mutually beneficial partnerships.

WHOI Ambassadors: The WHOI ambassadors program is an initiative aimed at broadening our recruitment efforts and creating a more equitable environment for all individuals interested in pursuing careers in marine science. This program funds individuals at all levels at WHOI to visit institutions across the country to engage in targeted recruitment. Through this program we leverage individual connections that already exist among members of the WHOI community and various institutions across the country to develop authentic and engaging recruitment experiences. Recruitment visits begin fall 2024.

Looking ahead, as we continue to expand our efforts through initiatives like the WHOI Indigenous Knowledge Program and the WHOI Ambassadors program, we are excited to foster deeper connections, broaden opportunities, and cultivate a more inclusive environment for all. Together with the DI, we look forward to the transformative impact of our collective efforts.

Woodwell Climate Research Center

In the period 2022-2024, support of diverse student and early career groups continued to be a focus for the Center through the Polaris and PEP programs.

Funded by the National Science Foundation (NSF) since 2008, the Polaris Project has earned global recognition for its leadership in training future leaders in Arctic research, education, and outreach. During a field expedition to the Yukon Kuskokwim Delta, Alaska, undergraduate URM students conduct cutting-edge investigations that advance scientific understanding of the ecological impacts of climate change on tundra ecosystems.

During this reporting period, Woodwell Climate welcomed 20 total URM students to the Polaris Project, 10 each during the summers of 2022 and 2023. In addition, four Polaris alumni pursuing higher degrees received \$5K scholarships through the John Schade Memorial Fund. Polaris

alumni have a successful record of following career paths in science and five Polaris Project alumni were employed at the Center over the two-year reporting period.

In the Polaris Program, career-building experiences are not limited to the field. While in Alaska program participants engaged with Alaskan Native Youth in reciprocal knowledge exchange activities and conducted decolonization training with Native Movement. In addition, students participated in the annual meetings of the Society for Advancement of Chicanos/Hispanics & Native Americans in Science in 2022 and 2023.

The Center continues to support the Woods Hole Partnership Education Program (PEP) through mentorship and related professional development activities. Center staff mentored one PEP student in 2022 and three in 2023. In addition, PEP alumni were represented in both the 2022 and 2023 Polaris Program cohorts, allowing for continued career-building experiences and professional development.

The Center has been systematically incorporating DEI into its internal operations and processes in recent years. In 2022, a new hire survey was developed to assess interview and hiring experiences and better understand early impressions and experiences at Woodwell. Likewise, a peer-to-peer buddy system was launched to help new staff transition smoothly into the Center. In support of our institutional value of transparency, processes for Research Assistant promotions were published on the Woodwell intranet, along with the pay grade scale for research staff. In addition, a hiring rubric to minimize implicit bias in hiring managers was implemented. Woodwell Climate strives to cultivate collaboration, community, and belonging within all levels of our organization. In October 2022, the Board of Directors changed its bylaws to add a fifth officer (Officer-at-Large) to its Executive Committee to oversee special projects or initiatives as prioritized by the Board Chair. The role of the current Officer-at-Large is focused on DEIJ issues for the next one to two years. In June 2023 the Board and senior leadership participated in a workshop designed to holistically deepen the vision of DEIJ at the Board level. Attendees explored why DEIJ is important both personally and to Woodwell and participated in large-group activities to picture Woodwell's DEIJ vision and long-term goals, and discussed what has been accomplished so far towards this vision, what is left to do, and who needs to do it. The Center's long standing DIRE (Diversity, Inclusion, Retention and Equity) committee was reviewed and restructured in 2023 with increased funds allocated from the Center. The result being two committees: DEIJ and Climate Justice. The DEIJ Committee will work to identify, prioritize, and embed DEI initiatives through all employment life cycles with a focus on addressing inequalities in organizational systems, policies, processes and practices, as well as people's conscious and unconscious biases and behaviors. They will work closely with the Climate Justice Committee who will work to integrate climate justice principles into the Center's work, including policy advocacy, partnerships, and staff education, and creating recommendations for future action. The Center is funding 50% salary for a research staff member to Chair and lead the Climate Justice Committee. An all-staff Forum, facilitated by the committees, will meet quarterly to connect and provide updates to all staff. Also in 2023, a land acknowledgement working group was formed and recommendations for potential trainings/workshops and expanded practices beyond the Woodwell campus were drafted and shared with management.

The Center offers several community-building activities designed to engage and connect our staff to new experiences and to each other. These include a bi-monthly ‘Climate Café’ where employees volunteer to present on a specific expertise or interest area/experience, weekly yoga, and breakout groups for all staff meetings where they gather in small groups to discuss organizational values.

Externally, two Center staff serve on the Woods Hole Diversity Advisory Committee (DAC), helping to not only plan, staff, and host annual events open to the entire Woods Hole scientific community (e.g. Black History Month, Juneteenth, and Indigenous People’s Month, Woods Hole Science Stroll), but also bring their experiences back to Woodwell colleagues for discussion and reflection. An example includes leading an internal roundtable discussion with Dr. Brian Chad Starks at Woodwell Climate about his work with organizations, non-profits, and businesses to increase racial equity and promote social justice. In addition, Center staff provided their expertise to visiting groups such as faculty members and students from St. Augustine's University, a private HBCU located in Raleigh, NC. The group received a campus tour and met with Center scientists and staff with the goal of presenting various career paths that the STEM students could pursue post graduate.

In May 2023, Woodwell staff participated in a planning workshop designed to foster new research and educational partnerships between eight minority-serving institutions that have programs in marine and climate science and the six Woods Hole marine and climate science research institutions. The effort, Building Resilient Alliances for Inclusion and Diversity (BRAID), aims to create a network of collaboration and partnerships within the BRAID alliance to initiate specific efforts to develop NSF proposals.

In September 2023, five BRAID members received a NSF grant for “Advancing Collaborations for Equity in Marine and Climate Sciences,” a three-year project to examine what processes are employed for developing equity-driven educational collaborations, infrastructures, and pathways through an investigation of the Woods Hole scientific community. Woodwell staff Nigel Golden and Jacqueline Hung were selected to serve in both an evaluative and advisory capacity for the project. They will provide advice about partner organizations, people, history, and what Woods Hole is doing about anti-racism and will meet with the research team quarterly to share suggestions on the project, review progress reports twice a year, test interview questions, help with data analysis and share the project’s findings.

Conclusion

Each member institution has remained committed to our diversity, equity and inclusion goals and has committed time, energy and resources to these efforts. We are also committed to continuing the work to reduce barriers, build bridges, and shape a 21st century workforce that is as diverse as the nation in which we live and work.

Acknowledgments

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