









JAMES M. & CATHLEEN D. STONE FOUNDATION

Resilience Through Research

The Stone Living Lab

The Stone Living Lab conducts transformative research and outreach to make vulnerable coastal regions adaptive to climate change while enhancing natural and built environments. The goal is to engage researchers, students, and the public in testing innovative, adaptive, nature-based approaches to climate adaptation, coastal resilience, and ecological restoration in a variety of coastal locations in and around Boston Harbor.

As coastal communities face increasing climate-related threats, a new innovative and collaborative ecosystem has launched that aims to become a global hub for testing and scaling up nature-based solutions in the high-energy environment of the Boston Harbor Islands National and State Park.

The Stone Living Lab is a partnership of the City of Boston, UMass Boston School for the Environment, Boston Harbor Now, the National Parks of Boston and the James M. and Cathleen D. Stone Foundation that engages

scientists and the community in research, education, and the promotion of equity.

During the summer of 2020, they announced the founding of the Stone Living Lab for nature-based adaptive solutions to be tested and scaled in the Boston Harbor Islands parks. The project, which will include a community outreach and education component, is funded by a \$5 million grant from the Stone Foundation. It will write the next chapter in Boston's climate resiliency efforts.



As a coastal city, Boston is on the front lines of climate change. By making our coastline more resilient, we can protect vulnerable populations and neighborhoods from climate impacts, while improving quality of life and expanding waterfront access for everyone who lives, works, and plays in Boston. The Stone Living Lab is an important step forward in this work, and we are grateful to UMass Boston School for the Environment, Boston Harbor Now, the National Parks of Boston, and the James M. and Cathleen D. Stone Foundation for their partnership on this exciting project."

MAYOR MARTIN J. WALSH



Philanthropy can play an important role in helping drive innovation in the non-profit sector. The Stone Foundation is proud to be working with UMass Boston, Boston Harbor Now, the City of Boston and the National Parks of Boston to develop a living laboratory for climate resilience and adaptation that puts biodiversity and climate justice in the foreground. The challenges we face are urgent and unprecedented. It is going to take government and the private and public sectors working together to develop thoughtful and bold solutions."

CATHY STONE, President of the James M. and Cathleen D. Stone Foundation

The Four Core Priorities



Research

Conducting experiments in science and engineering to increase the resiliency of natural and developed coastal systems while maximizing co-benefits and promoting ecological restoration.



Climate Preparedness

Promoting creative, equitable, and flexible coastal adaptation while preparing for and responding to climate change.



Education

Engaging our communities in education and outreach programs that promote innovation and environmental justice, and facilitate hands-on research activities inclusive to all.



Policy

Collaborating broadly to conduct research on policy and planning, disseminate scientific findings, inform policy development, and implement the lessons learned from the Stone Living Lab.

The Stone Living Lab will operate at a collection of outdoor spaces in and around Boston Harbor, beginning with baseline monitoring at Rainsford Island and a pilot project at Fallon Pier at UMass Boston, to answer critical questions such as:

- How can we ensure nature-based solutions will work in weather conditions that are more volatile and unpredictable than we've ever experienced?
- How can the public help lead in implementing resilience solutions, and how can we ensure these solutions help address issues of climate justice and inequality?
- What are the best next-generation solutions we should start investing in across the world?
- How do we engage and collaborate with the regulatory and development community to streamline permitting and financing so that we solve these problems before it's too late?

As a living lab, the partnership will also engage the larger community—including students, civic organizations, and advocates—to co-develop solutions to problems alongside scientists, including challenges related to permitting, financing, and community benefits necessary for implementing the solutions we need.

Because the harbor islands are historically and culturally significant areas, the lab is working with multiple



The Stone Living Laboratory will be a jewel in the crown of UMass Boston. It will serve as a critical vehicle for translating powerful research on the impact of climate change into actionable strategies that will improve resiliency for this great coastal city."

KATHERINE S. NEWMAN
System Chancellor of Academic Programs
University of Massachuestts

stakeholders to determine the best site for their facilities.

The Lab is governed by a Steering Committee that also includes key partners and representatives from the Massachusett Tribe at Ponkapoag, the Woods Hole Group, and others involved in the operation of the Lab. The Lab takes guidance from a larger multidisciplinary Advisory Board made up of over 40 members representing a host of disciplines and backgrounds including engineering, planning, regulatory, and environmental justice; Native American Tribes; municipalities; environmental groups; and many others. The Lab is also guided by a Scientific Advisory Committee of globally-recognized experts who will review and advise on all research goals, projects, and results as well as the educational program.

The Lab initial support has come through a \$5 million investment from the James M. and Cathleen D. Stone Foundation. The Cabot Corporation has contributed an additional \$375,000 for place based education and community science programing.





Steering Committee

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Boston Harbor Now

Marc Albert

National Park Service

Joe Bagley

City of Boston

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School for the Environment UMass Boston

Kirk Bosma

Woods Hole Group

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City of Boston

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