



Photo: AP Photo/Wally Santana

## It's Either Adapt or Move



“The initiative HSBC in the Community created with the Earth Institute is a good example of our long-standing commitment to issues like climate change.

We hope it will inspire more young people to be responsible stewards of the environment while contributing to New York’s climate needs now.”

HEATHER NESLE, HSBC IN THE COMMUNITY

What will climate change mean for New York City? Earth Institute researchers, and now student interns as well, are studying the potential impacts and ways we can prepare and adapt.

Rising sea levels, warmer temperatures and storm-related coastal flooding are posing challenges to New York City’s future. Portions of the five boroughs are on low-lying coastal land, already at risk. As the climate changes, what will be our collective response?

Helping to prepare the city for the effects of climate change is a topic Earth Institute scientists have spent a good amount of time addressing. They have been analyzing satellite imagery and precipitation data and helping to produce the “New York City Panel on Climate Change Report,” for instance. A two-year grant from HSBC in the Community (USA) Inc. helped get students involved in work with Earth Institute scientists and a broad range of external partners, ranging from city planners to local nonprofits, to understand the impacts of climate change on the city and find ways we can prepare for them.

“Two things are fundamental,” said Steve Cohen, executive director of the Earth Institute, when the first group of student interns gathered to present their projects. “Climate change is happening, and we’re not moving, and so we have to figure out a way to adjust the infrastructure and to adjust the city to these changes. . . . The hope that we have for solving these problems is not with people my age, but with the next generation.”

Thirty interns participated in climate projects in the spring of 2009, teaming up with Earth Institute researchers to perform a broad range of projects such as analyzing the likelihood of hurricanes impacting the city, monitoring levels of carbon dioxide—the main driver of climate change—in the air at various points around the region, investigating the buffering potential of wetlands against sea level change, and exploring the capacity for soils in the agricultural lands around the city to absorb carbon dioxide.

School of International and Public Affairs (SIPA) student Emmanuelle Humblet worked with the New York City Mayor’s Long Term Planning and Sustainability Office to identify critical infrastructure in New York City that could be at risk from the effects of climate change and to develop coordinated adaptation strategies to secure these assets. “New York City has implemented a unique approach to climate change adaptation by integrating the private sector and city agencies into the adaptation process,” says Humblet.

Gabe Cowles, also a SIPA graduate student, worked with the New York City Panel on Climate Change and with CLIMAID and the New York State Energy Research and Development Authority (NYSERDA). He found the internship helped him develop the skills to work with both researchers and policymakers. “The skill is to be able to speak both languages and understand where both groups are coming from and then ultimately create a report that speaks to everyone,” he says.

Chikara Onda, an undergraduate student in environmental science and economics, teamed up with Harlem’s WE ACT for Environmental Justice to assess what health threats may be faced by New York City residents as a result of climate change and recommended steps planners could take to prepare and “make sure that vulnerable communities have access to information during potential health emergencies.” ■



Photo: Alan O'Neil

One of 30 interns focused on climate issues, Diana Hsueh worked with researcher Wade McGillis on the measurement of atmospheric carbon dioxide levels at various sites in New York City.