

State *of the* Bay

JAMAICA BAY, NYC

JUNE 15-16, 2016



Welcome

The Science and Resilience Institute at Jamaica Bay, the New York City Department of Environmental Protection, and the National Park Service welcome you to the 2016 State of the Bay Symposium. The biennial symposia series was initiated by NPS in 2004 and expanded through a strategy of the NYC Department of Environmental Protection's 2007 Jamaica Bay Watershed Protection Plan. The goal of the symposium is to bring together agencies, scientists, decision makers, and community groups to discuss relevant science knowledge and management strategies that enhance the resilience and ecological integrity of Jamaica Bay. This year's event emphasizes the intersections of human, physical and ecological components of Jamaica Bay and explores opportunities for enhanced resilience within those systems. We hope that the information presented will help continue to fuel future discussions, scientific investigation, and needed actions to keep moving forward in improving the environmental health of Jamaica Bay.

Day One

LOCATION: Aviator Sports Complex, Floyd Bennett Field

8:15–8:45 a.m.

Check-In and Breakfast

8:45–9:45 a.m.

Welcome and Opening Plenary

CHAIR: Adam Parris, *Executive Director, Science and Resilience Institute at Jamaica Bay*

Speakers

Daniel A. Zarrilli, *Senior Director, Climate Policy and Programs, and Chief Resilience Officer, NYC Office of the Mayor*

Angela Licata, *Deputy Commissioner for Sustainability, NYC Department of Environmental Protection*

Jen Nersesian, *Superintendent, Gateway National Recreation Area*

Clifford S. Jones, *Chief, Planning Division, USACE-NY District*

9:45–11:05 a.m.

Session 1: Management Perspectives and Decision-Making
Context for Healthy Ecosystems

CO-CHAIRS: **Robert Pirani**, *Program Director, New York – New Jersey Harbor & Estuary Program, Hudson River Foundation*; **Jennifer Greenfeld**, *Chief, Forestry, Horticulture & Natural Resources, New York City Parks & Recreation*

Speakers

John McLaughlin, *Director, Office of Ecological Services, New York City Department of Environmental Protection*; “Jamaica Bay: We’ve Done a Few Things Right, Right?”

Patti Rafferty, *Chief of Resource Stewardship, Gateway National Recreation Area*; “Managing for an Urban Natural Condition: How Science Informs National Park Service Stewardship of the Jamaica Bay System”

Marit Larson, *Director of Wetlands and Riparian Restoration, NYC Parks*; “NYC Tidal Marsh Assessment and Strategies for Restoration and Protection”

Stephen Zahn, *Acting Regional Director, Region 2, New York State Department of Environmental Conservation*; “NYSDEC Perspectives on Jamaica Bay”

Peter Weppler, *Chief, Environmental Analysis Branch, NY District, US Army Corps of Engineers*; “Coastal Restoration Activities within Jamaica Bay”

11:05–11:20 a.m.

Break

11:20 a.m.–12:40 p.m.

Session 2: Community Perspectives

CO-CHAIRS: **Marc Matsil**, *New York State Director, The Trust for Public Land*;
Michael Menser, *Assistant Professor of Philosophy, Brooklyn College*

Speakers

Dan Mundy Jr., *Jamaica Bay EcoWatchers & Broad Channel Civic President*;
“Successful Community Engagement and its Impact on Jamaica Bay Policy
and Planning”

Barbara Brown, *Eastern Queens Alliance*; “Man With Nature/Man Against
Nature in Idlewild”

Don Riepe, *American Littoral Society & Jamaica Bay Guardian*;
“Marsh madness: protecting the edge for wildlife and the community”

Silaka Cox, *Rockaway Youth Task Force*; “Transportation Equity and Resilience”

Holly Elwell, *Trust for Public Land*; “Climate-Smart NYC-Decision Support
Tool: Harnessing data for climate solutions Jamaica Bay focus”

12:40–1:40 p.m. : Lunch

Will Travis, consultant on sea level rise adaptation planning and retired
executive director, San Francisco Bay Conservation and Development
Commission: “Lessons from the Left Coast”

1:40 p.m.

Depart for the field

2:00–4:30p.m.

Jamaica Bay Guided Boat Tour

Day Two

Location: Brooklyn College Student Center, Gold and Maroon Rooms, 6th floor

8:40–9:00a.m.

Check-In and Breakfast

9:00–9:10a.m.

Welcome Address

William Tramontano, *Provost and Senior Vice President for Academic Affairs, Brooklyn College*

9:10–10:40a.m.

Session 1: Physical Systems of the Bay

CO-CHAIRS: **Marit Larson**, *Director of Wetlands and Riparian Restoration, NYC Parks*; **Brett Branco**, *Assistant Professor of Earth and Environmental Sciences, Brooklyn College*

Speakers

Radley Horton, *Associate Research Scientist, Center for Climate Systems Research, Columbia University Earth Institute*; “Linking global climate change to local hazards and opportunities”

Neil Ganju, *Research Oceanographer, US Geological Survey, Woods Hole Coastal and Marine Science Center*; “Sediment budgets and salt marshes: a zero-sum game”

Bob Chant, *Associate Professor, Institute of Marine and Coastal Sciences, Rutgers University*; “Sediment flux through Rockaway Inlet: Mechanisms and implications”

Phillip Orton, *Research Assistant Professor, Stevens Institute of Technology*; “Growing tides and surges, and possible sandy solutions”

Keith Mahoney, *Division Chief Regulatory Planning, New York City Department of Environmental Protection*; “Development and Evaluation Criteria for NYCDEP Jamaica Bay Landside Models”

Miki Urisaka, *Engineer, Office of Green Infrastructure*; “Green Infrastructure Implementation in the JB Watershed”

10:40–10:55 a.m.

Break

10:55 a.m. –12:25 p.m.

Session 2: Ecological Studies

CO-CHAIRS: **Christina Kaunzinger**, *Senior Ecologist, Center for Urban Restoration Ecology at Rutgers University*; **Patti Rafferty**, *Chief of Resource Stewardship, Gateway National Recreation Area*

Speakers

Christopher Gobler, *Professor, School of Marine and Atmospheric Sciences, Stony Brook University*; “Acidification and hypoxia in Jamaica Bay: Implications for bivalve populations”

Chester Zarnoch, *Assistant Professor of Environmental Studies, Department of Natural Science, Baruch College*; “Assessing ecosystem processes and services in Jamaica Bay’s restored salt marshes”

Jim Vasslides, *Program Scientist, Barnegat Bay Partnership*; “Using ecosystem models to understand complex estuarine interactions”

Russell Burke, *Professor of Biology, Hofstra University*; “Long term population trends in Jamaica Bay terrapins: Comparison with regional trends”

Christina Colon, *Assistant Professor of Biological Sciences, Kingsborough Community College, CUNY*; “Beach Nourishment and Restoration of Horseshoe Crab Spawning Habitat in Jamaica Bay”

12:25–1:25 p.m.: Lunch

Eric Sanderson, *Senior Conservation Ecologist, Wildlife Conservation Society*; “The historical ecology of Jamaica Bay: a context for the future”

1:25–2:55p.m.

Session 3: So What IS the State of the Bay? Small Discussion Groups

CO-CHAIRS: **Lesley Patrick**, *Program Director for Assessment and Modeling, The Science and Resilience Institute at Jamaica Bay*; **Jessica Fain**, *Program Director for Policy, Planning, and Engagement, The Science and Resilience Institute at Jamaica Bay*

2:55–3:10 p.m.

Break

3:10–4:40p.m.

Session 4: People, Place and Social Meaning

CO-CHAIRS: *Erika Svendsen, Research Social Scientist, US Forest Service, New York City Urban Field Station; Helen Cheng, Coastal Resilience Specialist, New York Sea Grant in partnership with the Science and Resilience Institute at Jamaica Bay*

Speakers

Gretchen Ferenz, *Partner, Tom Fox & Associates; retired Senior Extension Associate, Urban Environment, Cornell University Cooperative Extension — NYC; “Community Resilience in Jamaica Bay: Understanding Research and Extension Needs”*

Malgosia Madajewicz, *Associate Research Scientist at Columbia University; “Resilience to coastal storms in urban neighborhoods”*

Heather McMillen, *Postdoctoral Research Social Scientist, US Forest Service, New York City Urban Field Station; “The nature of social resilience: psycho-social-spiritual benefits of Jamaica Bay”*

Justin Bowers, *Public Engagement and Restoration Manager, Natural Areas Conservancy; “Changing public perception and improving access: Marine Park, Brooklyn”*

4:40–5:00p.m.

Closing Remarks: Adam Parris

5:00–7:00p.m.

Reception and Poster Session

LOCATION: Brooklyn College Student Center, Occidental Room, 5th floor

Gateway National Recreation Area

Established in 1972, Gateway National Recreation Area is one of America's first urban national parks. Located within the NYC Metropolitan area, this 27,000 acre park extends from Brooklyn, Queens, and Staten Island in NYC to Sandy Hook in New Jersey. Gateway NRA contains significant cultural and natural resources and provides numerous recreational opportunities, including maritime and successional forests, grasslands, habitat for 300+ species of birds along the Atlantic Flyway, campgrounds, trails, beaches, historic landscapes, important coastal defense works, and the oldest continuously operating lighthouse in the United States. Protection and restoration of resilient ecosystems that provide for the park's natural, cultural, and recreational missions require sound science, shared stewardship, and collaborative management.

Gateway is one of the ten most visited national parks in the country. The National Park Service will celebrate its 100th birthday on August 25, 2016. Gateway will be offering a number of events intended to invite people into the park and encourage our visitors be a part of the NPS's next 100 years. For information about Gateway's upcoming public programs, see the park's website at <http://www.nps.gov/gate/index.htm>.

New York City Department of Environmental Protection

In addition to protecting public health and the environment by supplying clean drinking water, collecting and treating wastewater, and reducing air, noise, and hazardous materials pollution, the New York City Department of Environmental Protection has committed billions of dollars to reduce discharges into New York Harbor, which is the cleanest since monitoring began over a century ago, and is pursuing an ambitious watershed protection plan to restore and protect water quality and ecological health in Jamaica Bay, engaging environmental stakeholder groups and the Science and Resilience Institute at Jamaica Bay. Visit the DEP's website at <http://www.nyc.gov/html/dep>.

Science and Resilience Institute at Jamaica Bay

Founded in 2011, The Science and Resilience Institute at Jamaica Bay advances innovative thinking and learning about the resilience of urban coastal regions through programs of research and engagement in New York City's Jamaica Bay. Our mission is to produce integrated knowledge through research projects and public engagement that increases biodiversity, human well-being, and adaptive capacity in communities and waters surrounding Jamaica Bay and New York City. For information about our research and engagement initiatives please visit our website: <http://www.srijb.org/>