

# Jamaica Bay Science and Resilience Center City of New York and National Park Service Request for Expressions of Interest

**Q&A October 10, 2012**

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**Please note that responses are due by 5:00 pm on November 2, 2012.**

Responses and further questions should be submitted to [JamaicaBayRFEI@HappoldConsulting.com](mailto:JamaicaBayRFEI@HappoldConsulting.com).

Q: How will this effort be connected to the other projects underway for the Jamaica Bay parklands?

*A: Several other projects are under consideration for the Jamaica Bay parklands, at a similar stage of envisioning as the science center; we are developing ideas, evaluating partners, and considering feasibility. Many of these possible future projects are being assessed through the National Park Service's General Management Plan (GMP) process. Unlike the science and resilience center – which can be established under the existing GMP – many of the other potential projects, such as a wetlands education center, will not proceed until the new GMP is finalized by fall of 2013. The partners selected to develop and operate the science center will be made aware of any opportunities for future collaborations (such as the wetlands education center) and other projects as they move forward.*

Q: When will the RFP be released?

*A: A decision about an RFP will be made based upon an evaluation of the proposals. A formal RFP may or may not be released, depending on the responses received during the RFEI process. NPS and the City will evaluate the groups that express interest, and evaluate potential partnerships among respondents. After responses have been reviewed, NPS and the City will make a decision on whether to issue a formal RFP or engage in more informal conversations with one or more potential partners. Therefore, we strongly encourage all parties interested in developing and coordinating all or portions of the new center to submit Proposals in response to this RFEI.*

Q: In considering our responses to the RFEI, are you looking for more emphasis on what skills the partners would provide, or what research questions we would prioritize, or how much funding we would bring to the institute?

*A: A wide variety of expertise and resources will be required in the establishment of the new science and resilience center. We will review all submissions against the evaluation criteria, including but not limited to financial support, expertise in appropriate research areas, institutional expertise and management capacity in developing and coordinating all or portions of the new center. The RFEI is purposely open-ended to allow respondents to identify their own strengths, and let us know what they would be able to bring to a potential partnership.*

Q: Should responses include proposed budgets?

*A: As noted in the RFEI, responses should include a list of potential funding sources that would support the proposed partnership structure, including assumptions, precedents, and financial comparables as applicable. In addition, these projections should indicate what support, if any, your organization would ask of the public agency partners and what direct support you will be able to provide.*

Q: Can you share the list of participants for the September site visit?

*A: Yes, the names are provided below as a means of examining potential partnerships in order to establish the new center as a collaborative, world class institution. We believe it is likely that the entity which ultimately operates the new center will include some combination of different institutions that bring different specializations to the effort.*

### Site Visit Participants

|                                     |                   |
|-------------------------------------|-------------------|
| Brooklyn Botanic Garden             | Jenny DeBower     |
| Brooklyn Botanic Garden             | Marilyn Smith     |
| Brooklyn Botanic Garden             | Alex Enriquez     |
| Columbia - Earth Institute          | Flora Moir        |
| Columbia - Goddard Institute        | Vivien Gornitz    |
| Columbia - Goddard Institute        | Dorothy Peteet    |
| Columbia - LD Earth Observatory     | Chris Zappa       |
| Columbia - LD Earth Observatory     | Andy Juhl         |
| Columbia - LD Earth Observatory     | Minosca Alcantara |
| Columbia - LD Earth Observatory     | John Scialdone    |
| Cornell University                  | Shorna Allred     |
| Cornell University - Coop Extension | Gretchen Ferenz   |
| CUNY - Baruch                       | Alan Evelyn       |
| CUNY - Brooklyn College             | John Marra        |
| CUNY - City College                 | Reza Khanbilvardi |
| CUNY - City College                 | Yael Wyner        |
| CUNY - City College                 | Shakila Merchant  |
| CUNY - Hunter                       | Bill Solecki      |
| CUNY - Kingsborough                 | Christina Colon   |
| CUNY - Kingsborough                 | Regina Alvarez    |
| CUNY - Kingsborough                 | Jacob Mey         |
| CUNY - LaGuardia                    | Sarah Durand      |
| CUNY - Technology                   | Peter Spellane    |
| CUNY - York                         | Liz Alter         |
| CUNY - York                         | Ratan Dhar        |
| NOAA/NEFSC/JJ Howard Lab            | Jennifer Samson   |
| NY Hall of Science                  | Steve Uzzo        |
| NYC Audubon                         | Glen Phillips     |
| NYC Audubon                         | Susan Elbin       |
| Stevens Institute of Technology     | Philip Orton      |

Stony Brook University  
Stony Brook University  
SUNY - ESF  
US Forest Service  
US Forest Service  
Weston Solutions  
Wildlife Conservation Society  
Wildlife Conservation Society/NY Aquarium

Cornelia Schlenk  
Bill Wise  
Neil Ringler  
David Maddox  
Nancy Faxla-Raymond  
Mark Jaworski  
Eric Sanderson  
Jon Dohlin

## Q&A September 10, 2012

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Q: What types of partnerships are envisioned, and what kind of roles would these partners undertake?

*A: The creation of the new center will ultimately incorporate partners who collectively bring a range of expertise in a variety of complementary areas, including (but not limited to) management and organizational expertise, marine and estuary research capabilities, wetlands ecosystem restoration experience/expertise, and climate change and resilience research and modeling. At the outset we are looking for institutions or groups which have strong track records in one or more of these areas and can work together under the umbrella of the center.*

Q: Can different functions, for example education and community engagement, be split among different parties?

*A: Yes; it is possible that different organizations will undertake different specialties, or multiple organizations could divide these responsibilities based on the expertise and experience of each. As a hypothetical example, a successful team might consist of an institution of higher education that has existing international expertise with marine research in other parts of the world and a local civic organization with an existing network of "citizen scientists" in New York City. Even as different components of the partnership may bring different functional strengths, it is expected that those efforts will be fused into a cohesive and mutually-supportive program.*

Q: Is it anticipated that partners would bring their own project-specific resources to work at the new center?

*A: One premise of the center is that as the federal and city governments are the sponsoring organizations, both would endeavor to channel and better coordinate their existing research and restoration initiatives via the center. A similar premise would apply to other entities involved in the partnership: that they would see mutual benefit in bringing existing projects and related resources to the center. Clearly, significant additional resources will be required, and it is expected that partner institutions will be responsible for identifying and securing funding streams to support their research and programming. At this time, no government funding has been identified for this project. However a number of potential philanthropic donors have expressed interest in the ongoing work around the Bay.*

Q: Once the partner(s) are selected and an organization is established, how quickly can research activities and other programming begin?

*A: It is anticipated that research activities can begin once a legal contractual relationship exists.*

Q: Would the new science institute be housed in an existing structure near the Bay, or would a new facility be constructed specifically for the Science and Resilience Center and its partners?

*A: Existing structures at Floyd Bennett Field and/or Fort Tilden could be rehabilitated for use. New construction is also a possibility.*

## **Q&A August 10, 2012**

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### **Organizational structure:**

Q: Are you looking for someone to set up logistics and coordinate others' research, or to initiate its own research?

*A: We are looking for all of the above, and are open to a variety of organizational structures.*

Q: How much analytical research is expected to be done entirely on site, or, conversely, to what extent could this Center function as a "field" station for an institution whose major labs and highly specialized technical equipment are located elsewhere?

*A: We are open to any type of operational structure and invite creative proposals.*

Q: Has a scientific advisory board or group been established?

*A: No scientific advisory board has been established. However, we would anticipate exploring the creation of a board with the new partner entity.*

Q: Will existing research in the bay continue independently, or be integrated into the work of the new entity?

*A: We make no assumptions as to existing research. While we do not anticipate that all organizations and individuals currently working in the bay will participate in the activities of the center, the goal of the center is to monitor, track and coordinate efforts to the greatest extent possible in order to maximize funding and leverage available opportunities.*

Q: In the RFEI, what entities are considered 'public' and 'private' sector? Does 'public' refer to government (City, Federal) only? I work at a 'public' university. I'm thinking, given the examples for

partnership structures that we would be considered part of the 'private' sector. (Scripps is connected to a public university, for example.)

*A: The public sector refers to the public agencies involved in the creation of the institute. The "private partner" could be, among others, a private or public educational institution or a non-profit organization, as well as individuals, and private or public companies.*

## **1. Financial:**

Q: What is the budget/funding stream for the center?

*A: Funding for the center will likely come from a variety of sources, including grants and philanthropic contributions. We have been approached by funders who are interested in potentially contributing to the establishment and ongoing support of the center, but who do not have the capacity to operate the institution. In addition to any resources provided by a private or non-profit partner, because most research being done today is grant-supported we assume that will continue; however we are exploring other public funding mechanisms. One premise of the center is its ability to better leverage the significant public and academic expenditures already being made in the basin today. In addition, the NPS is expecting to fund some staff and administrative support for educational activities and community outreach related to the research and science program.*

Q: Is there a pre-determined/preferred business model? (long-term grant funding, public-private partnership, other?)

*A: All business models will be considered.*

Q: What is being spent on research, monitoring and restoration in Jamaica Bay now by all parties?

*A: Since 2002, the Bloomberg Administration has invested over one billion dollars to improve water quality, enhance parklands, and restore natural areas in the Jamaica Bay area. In the next ten years, the City is poised to invest an additional half billion dollars to continue to improve the environmental quality of the Bay.*

*In the last five years, the Army Corps of Engineers has managed and provided the majority of funding for a series of wetland restoration projects in Jamaica Bay at Gerritsen Creek in Marine Park and at the salt marsh islands of Elders East and West, Yellow Bar, Black Wall, and Rulers Bar. These projects, totaling nearly \$60 million, have been conducted in collaboration with and utilizing funding from the City, NPS, the State Department of Environmental Conservation, and the Port Authority. More specifically, in Jamaica Bay during 2012, about \$20 million is being spent on restoration, \$6 million is being spent on monitoring, and about \$1 million is being spent on research.*

*More than 99% of the restoration funding comes from government agencies. Monitoring is funded about 60% by government agencies, 30% by grants through universities, and 10% from volunteered time by amateurs and professionals. Research is funded about 30% by government agencies, 65% by grants through universities, and 5% by volunteer professionals.*

Q: Will the existing Jamaica Bay Institute budget still be available to support this new center?

A: See the first response in 2 above; this reflects the current NPS Jamaica Bay Institute budget.

## 2. Project Logistics:

Q: What is the timeline expected for post-RFEI and the establishment of the organization?

A: Timing depends on the nature of responses and interest.

## 3. Science and research:

Q: What are the research projects currently underway in Jamaica Bay?

A: A wide range of scientists and academics are conducting research projects in Jamaica Bay. Examples of projects underway include: Sediment nitrogen cycling (Baruch College CUNY); sea level rise (NPS, the NYC Mayor's Office, & Columbia University); eelgrass and oyster experimental restoration (NYCDEP, Cornell Cooperative Extension & NPS); bathymetry of Jamaica Bay (Stony Brook SUNY); and use of ribbed mussels for water quality enhancement, converting algae to biofuel, and building green infrastructure to manage stormwater runoff and reduce combined sewer overflows (NYCDECP).

Monitoring projects presently underway in Jamaica Bay include: Water circulation and retention modeling (NYCDEP); salt marsh restoration monitoring (USACE & NPS); effects of contaminants on fishes and invertebrates (Stony Brook SUNY & College of Staten Island CUNY); triggers of phytoplankton blooms (Stony Brook SUNY); Horseshoe Crab nesting areas (NYSDEC, NPS, & Cornell University); Harbor Herons nest colonies (NYC Audubon & NPS); and Diamondback Terrapins (Hofstra University & NPS).

Information about research projects by NPS, other government agencies, and academic institutions can be found at the Jamaica Bay Research and Management Information Network at: <http://nbii-nin.ciesin.columbia.edu/jamaicabay/index.jsp>. Additional background materials and presentations on ongoing studies are available at the website for the October 2011 State of the Bay symposium at: <http://www.nps.gov/gate/naturescience/stateofthebaysymposium.htm>

In addition, descriptions of a broad variety of pilot project can be found in the New York City Department of Environmental Protection's Jamaica Bay Watershed Protection Plan Update at: [http://www.nyc.gov/html/dep/pdf/jamaica\\_bay/jbwpp\\_update\\_10012010.pdf](http://www.nyc.gov/html/dep/pdf/jamaica_bay/jbwpp_update_10012010.pdf).

Q: In particular what are the efforts pertaining to nitrogen reduction?

A: The City is seeking to reduce the nitrogen discharged into Jamaica Bay by nearly 50% over the next 10 years. In February 2010, the City reached an agreement with State DEC, the Natural Resources Defense Council, and other environmental groups to invest \$100 million to install new nitrogen control technologies at certain wastewater treatment plants in Jamaica Bay and another \$15 million for marshland restoration projects (some of which has already been invested in the Yellow Bar, Black Wall, and Rulers Bar restoration projects). These investments, made in concert with \$95 million the City had already committed for nitrogen control upgrades in Jamaica Bay, will significantly improve the health of one of New York City's most valuable ecological areas.

Q: Is the whole basin a combined sewer area, and how big is the “sewer shed”?

*A: The Jamaica Bay Watershed is 142 square miles, and includes parts of Kings, Queens, and Nassau Counties. The "sewer shed" is only several percent larger. More than two-thirds of the NPS Jamaica Bay Unit is estuarine water and saltmarshes; the other third is uplands. In the past three centuries, urbanization caused Jamaica Bay to lose more than 90% of its saltmarshes and more than 95% of its freshwater wetlands.*

*Multiple CSO outfalls flow into Jamaica Bay from the combined sewer areas of Paerdegat Basin, Bergen and Thurston Basins, and Jamaica Bay & Tributaries. For CSO area maps, see PlaNYC (page 67 of <http://bit.ly/eFy6Xf>) and the NYC Green Infrastructure Plan (starting on page 65 of <http://on.nyc.gov/9U8ZnY>). The areas directly upland from the Bay, including most of the Rockaway Peninsula, are served by separate sewers or direct discharge stormwater infrastructure. For a map of the wastewater treatment plant drainage areas, see page 16 of the NYC Green Infrastructure Plan.*

Q: Is the EPA involved in this effort?

*A: Yes, EPA has been involved in several of the meetings leading up to the issuance of this RFEI.*

Q: Will there be a citizen-scientist program?

*A: We would actively encourage the formation of such a program.*

Q: Is there an interest in supporting basic, process level studies?

*A: Yes, but particularly if these studies contribute to the core research agenda defined for the center and also provide the basis for further applied science research and solutions.*

Q: What are the expected proportions of:

- i. Original research
- ii. Monitoring of existing conditions
- iii. Outreach and education?

*A: The institute’s initial emphasis is envisioned to be on research and monitoring in the Bay, with less emphasis on education and outreach. No proportions have been set and we invite creative proposals.*

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