



H₂O9 FORUM

Water Challenges for Coastal Cities
- From the Dutch Delta to New York Harbor

Liberty Science Center, September 9 - 10, 2009

*Then we anchored and saw that it was
a very good harbour for all winds, and
rode all night.*

From the ship's log of Half Moon, Henry Hudson's ship, September 11, 1609.

FINAL REPORT



TABLE OF CONTENTS

INTRODUCTIONS	3
by Tracy Metz – journalist NRC Handelsblad	4
by Roland Lewis – President and CEO Metropolitan Waterfront Alliance	5
REPORTS FROM ELEVEN H209 SESSIONS	7
Alternative Financing Opportunities: Public-Private Partnerships for Water Projects	8
Against the Storm: a Report Card, Implementing Waterfront Protective Systems	8
Maintaining Drinking Water Quality	9
The Green Brain: Driving the Environmental Message Home	10
Decentralized and Self Sufficient Water Systems	10
Moving from Defense to Accommodation in Coastal Regions	11
Disaster and Emergency Management	12
The Future of Ports and Port Cities: Positioning for the Global Economy	12
Spatial Planning and Water Management for New Waterfronts	13
How Transportation Drives Development; Access to Our Waterfront – The New York Waterfront Experience	14
Innovative (green) Stormwater Management, Success Stories from Amsterdam and New York	14
PROGRAM H209 FORUM	17
LIST OF DELEGATES	29
H209 IN THE MEDIA	37
Wall Street Journal	38
Het Parool	39
On the Internet	40
NEW GENERATION COMPETITION	51
EXHIBITION AT THE LIBERTY SCIENCE CENTER	55

INTRODUCTIONS



Of course a conference called ‘H209: Water Challenges for Coastal Cities’ is about water. In September 2009, on the occasion of Henry Hudson’s arrival on Manhattan four centuries ago, some 500 experts from the Netherlands and the United States gather in the Liberty Science Center to discuss new ways of dealing with water in times of climate change. During two full days of plenary sessions, workshops and design roundtables all the modern-day usual suspects make an appearance: seepage and leakage and sea level rise, adaptation and regulation, the snail syndrome and the day-after-tomorrow syndrome. But below all these timely and urgent matters runs a more profound theme: the way we deal with water is a manifestation of our culture, of our mentality, and more specifically, our willingness to accept risk. Risk to land, risk to life.

To the amazement of many American delegates, the Dutch have taken prevention to such a degree of perfection that the country has no evacuation plans, and less than 5 percent of the households have flood insurance. (by the way, the Dutch do see American disaster management as a leading example). To the amazement of the Dutch, the 180 multi-million dollar homes that were swept out to sea from the coast of Long Island, have all been rebuilt on the same vulnerable spot. Paul Farmer, executive director of the American Planning Association and one of H209’s moderators, notes that there is no planning or governmental body with the power to say that that land will not be redeveloped. „In the US people are more used to the idea of loss and to living in a state of flux.” Cees Veerman, chairman of H209 and of the second Delta Commission in the Netherlands, says it simply and elegantly: „Value is based on values.”

Delegates of both countries are united in their dismay about the lack of public awareness of water issues, be it the price of the drinking water in this morning’s coffee or the long-term consequences of climate change. In a panel comparing the approaches of Rotterdam and New York, Arnoud Molenaar of the Rotterdam Climate Initiative describes the Dutch dilemma succinctly: „The Netherlands have invested so long and so well in protection that there is now very little awareness of risk.” Drinking water is a given; floodwater is, for the most part, a remote threat. In stark contrast to the beef industry (‘Beef, it’s what’s for dinner’) and the milk processors (‘Got milk?’), there is no slogan for a national awareness campaign in the US that gets people talking about water, its availability and its cost. Jud Hill of Summit Global Management quips in the opening session about the different attitudes to water rights within the United States: „Offer a drink of water to a westerner and he’ll say, ‘Whisky is what we drink, water is what we fight over’.

Is water too cheap? Yes, many say. Drinking water is subsidized and cheap in the US, one speaker states - „In this country we pay 5 to 6 times more for cable entertainment than we do for our water!” - and as a result the system is overused and under-

maintained. Mayor Aboutaleb of Rotterdam notes that drinking water is also cheap in the Netherlands, and although the system is well maintained, „that makes it hard to explain that there is a problem”. However, price is not the only way to manage constrained goods, says Rohit Aggarwala of the New York Mayor’s Office for Long-Term Planning and Sustainability. „Government can impose prices and regulate access.”

An American mayor, no doubt speaking from experience, remarks that taxpayers are of course reluctant to pay more for their water „because that money will disappear in a big hole and you’ll never know what you got for it”. „Take community relations seriously,” urges a member of the audience. „Do tours of waste water plants, design attractive websites with pie charts to show people where their money is going.” The mayor of Atlanta is held up as a shining exception: she campaigned as ‘the sewer mayor’, saying: ‘I will raise your rates and with that money I will clean up the river’. As we all know, people want progress but fear change (especially if they think they have to pay for it). But many speakers point out the cost of doing nothing: 15 billion dollars of damage from flooding from the Mississippi in 1993, for example, and 80 billion dollars’ worth of damage and over 1800 dead in Katrina in 2005.

But where is the money going to come from? In the US, certainly in the present economic crisis, many municipalities are already ‘maxed out’ on what they can borrow from their residents. Ideas are floated for a water infrastructure bank and a national water tax. Another speaker wonders whether a water tax doesn’t actually hide the real cost of infrastructure: „Ratepayers pay back loans, but they don’t see or appreciate the real costs of a bridge or a waste water treatment plant.”

The Dutch water boards use a different model, explains Johan de Bondt, director of the waterboard Amstel Gooi and Vecht: „The water boards are independent and invest in long term planning. 40 percent of our budget goes to maintaining and renewing the water management system.” And Harrie Noy, CEO of Arcadis, points out that in the Netherlands, beneficiaries pay for their drinking water through tax, but protection against protection against flooding is a national issue financed by the government. For the Netherlands flood protection is a life-or-death issue, but various Dutch participants hastened to emphasize that there is no one right answer: „The Dutch have a model, not a solution.”

Planners in both the US and the Netherlands can play an important role in long-range thinking and integration of disciplines. „We know we can build dikes,” says Jeroen Aerts, professor at the Institute for Environmental Studies at the Free University in Amsterdam, „now we need to think further ahead to the long term gain.” Planning for climate change has moved from hard-line defense to living with water, an approach which is particularly relevant for New York, which with its 522 miles of coastline is the American city the most susceptible to coastal flooding. Rotterdam is also moving toward integrating more water in the

existing city with measures such as roofparks and waterplazas, explains Paula Verhoeven, director of the Rotterdam Climate Initiative. „We still need to find space to store 800,000 cubic meters of water in the city.” There is admiration for the Dutch regulatory framework and focus on prevention – while at the same time the Dutch are seeking ways to simplify those regulations.

But planners are powerless unless there is political will to back them up. In the US there is a sense of alarm that America’s infrastructure is falling apart – see the bridge in Minneapolis, see New Orleans. „We need reinvestment, but do we have the political will?” one speaker asked with pressing urgency. In the plenary session at the start of H209, Jud Hill of Summit Global Management describes water as „the unfortunate stepchild for government that also has to pay for schools, police, potholes – all of which do more for a politician’s image than the replacement of an invisible waterpipe underground.” Another delegate wonders aloud: „Where is the initiative for elected officials to take this on? They are dependent on campaign contributions and therefore on development.”

In the aftermath of disaster much is possible, as governor of the Dutch province of Zeeland, Karla Peijs, points out. She calls Katrina „a second wake-up call” for the Netherlands after the 1953 flood in Zeeland which left over 1100 dead in one night. Zeeland and Louisiana have signed a joint memorandum of understanding to work together on water management and crisis control. Within Europe, Rotterdam Mayor Aboutaleb sees a need for a different kind of coalition: „50 to 60 percent of all the American goods shipped to Europe pass through Rotterdam and on to European rivers. River cities need to forge new coalitions to inspire national governments and the EU with a sense of urgency.” A final pointed observation comes from David Waggoner, architect in New Orleans and co-author of the book ‘Dutch Dialogues’: „Local + regional + international governance would be a better approach to dealing with global issues like climate change than local + state + national. The structures don’t match the problems.”

Tracy Metz, a native of California, lives in the Netherlands, where she is a writer and a journalist at the quality daily newspaper NRC Handelsblad. She is an international correspondent for Architectural Record and a visiting fellow at the Harvard Graduate School of Design, where she was a Loeb Fellow of ’07. She is working on a book with the title ‘Sweet&Salt’, on water, climate change and adaptation in the Netherlands.

The Quadricentennial year is ebbing and it is time take stock of a year of celebration and commemoration. Of the many and varied events that marked the milestone of Henry Hudson’s arrival to our shores 400 years ago, few matched the intellectual depth, the robust Dutch and American cultural and intellectual exchange and the topical importance of the H209 Water Conference held at the Liberty Science Center in September 09.

The conference began with a sobering look at examples of the destructive power water can bring with discussion of the famous 1955 Netherlands flood when the dykes were breached and much of the country was ravaged and the more recent American example of Hurricane Katrina. From there Dutch and American water experts, governmental leaders, activists and academics took a long and unflinching look at a great variety of water challenges that face our respective nations. The challenges facing the Dutch Delta and the New York Harbor are daunting; but the spirited discussion that was a signature of the event was positive.

The 500 attendees were split almost evenly amongst Dutch and Americans and each of the sessions kept the flavor of a bi-lateral exchange. The designers of the Dutch engineering marvels that protect their population from the North Sea shared their expertise. American activists that have forced their government to enact and enforce environmental water laws shared their stories. And planners from both sides of the Atlantic rolled up their sleeves to work collaboratively and imaginatively on water and waterfront solutions that might be applied to the New York Harbor.

The Metropolitan Waterfront Alliance was proud to be a sponsor of the H209 conference. Our Alliance Partners attended in great numbers both as presenters and as audience. We exchanged vital information with our Dutch counter-parts. The hard part is now before us as we work to take the Dutch/American water lessons gleaned from the H209 conference in New Jersey and translate them into water policy that will protect and enhance our respective regions for decades to come. That is a Quadricentennial legacy that the participants in that long ago cultural exchange between the original Americans, the Lenape, and the Dutch representatives on the Half Moon would be amazed at and proud of.

Roland Lewis is President and CEO of Metropolitan Waterfront Alliance.

*REPORTS
FROM ELEVEN
H209 SESSIONS*

SESSION

ALTERNATIVE FINANCING OPPORTUNITIES: PUBLIC-PRIVATE PARTNERSHIPS FOR WATER PROJECTS

By Richard Roper, Director of Planning Department, Port Authority, NY/NJ

Leaders in the field of water-related financing addressed the role of private capital in the construction, operations and maintenance of water-related projects. They discussed the benefits and challenges associated with public-private partnerships and shared their first-hand experience with the audience on new opportunities for future collaboration.

Each of the panellists addressed three key themes established by the moderator: the role of private financing in the public sector (i.e., how to maintain quality of services while securing the appropriate return on investments), the structure of public-private partnerships (i.e., decision-making and risk-taking models) and the role of future water capacity and climate change.

SPEAKERS

Larry Chertoff, Director, Alinda Capital Partners

Robinson Kupchak, Macquarie Group

Walter Lynch, President of Regulated Operations, American Water

Dennis Ciemniecki, President, Regulated Business, United Water

RESULTS OR MOST IMPORTANT CONCLUSIONS – THOUGHTS

In response to the themes listed above, speakers' talking points included the following:

- Water companies are for-profit organizations with public shareholders. Industry benchmarks for water delivery do not exist, but public utility commissions require certain standards of customer service (although these standards vary by state).
- Private companies can compete with tax-free bonding agencies because they have good relationships with builders and implement more innovative technology.
- If design-build contracts were allowed in New York City, there would be more savings. Currently, the municipal code prevents design-build projects.

Desalination projects and the reuse of wastewater effluent are some of the key environmental efforts that are being pursued by water companies.

INDICATION OF POSSIBLE FOLLOW-UP

None.

SESSION

AGAINST THE STORM: A REPORT CARD, IMPLEMENTING WATERFRONT PROTECTIVE SYSTEMS

by Douglas Hill, Consulting Engineer, SUNY Stony Brook

The topography of the New York metropolitan region makes it possible to protect the inner city and much of nearby New Jersey from coastal flooding with three – or possibly two – storm surge barriers. Large barriers have taken 4 to 10 years to construct; the similar Inner Harbor Navigation Canal at New Orleans is scheduled to take 3 years. However, the preliminaries – authorization, design, impact assessment, hearings, lawsuits, etc. – have typically taken two or more decades, even though most of the needed information may be readily available.

SPEAKERS

Douglas Hill, Consulting engineer, SUNY Stony Brook

Steven Bennett

Dennis V. Padron, Executive Vice President, Halcrow

Charles M. Hess, Senior Program Director, The Shaw Group

Colonel John Boulé, District Engineer, USACE, New York District

Timothy Dunne, President, Fugro West

RESULTS OR MOST IMPORTANT CONCLUSIONS – THOUGHTS

The hydrologic feasibility of storm surge barriers to protect the metropolitan region has been demonstrated with meteorological-hydrodynamic models, and conceptual designs by four top engineering firms have established their technical feasibility. Considering the long lead time to put barriers in place, the development process should be started immediately. Those in authority who have failed to initiate this process deserve an F on their report cards.

INDICATION OF POSSIBLE FOLLOW-UP

- A comprehensive risk assessment is needed to evaluate the threat of coastal flooding to the metropolitan region and various protective measures.
- Alternatives should include the present evacuation plan, individual local protective measures, and possible “soft” regional measures as well as storm surge barriers.
- With accelerating sea level rise and the inevitability of the metropolitan region being struck by a major hurricane, this initial step should be taken immediately.

SESSION

MAINTAINING DRINKING WATER QUALITY

by Doug Oven, Vice President and Chief Technology Officer Malcolm Pirnie, Inc.

A roundtable to discuss the issues associated with maintaining drinking water quality under the pressures of increased urbanization, rising population, changing consumer patterns, increasing industrial activity, and climate change. Speakers representing an array of stakeholders who are active in the water profession discussed how they are connected to drinking water, what they consider are the most important issues, and how they take action to address these concerns.

SPEAKERS

Carter Strickland, Senior Policy Advisor for Air and Water, New York City Mayor's Office of Long-Term Planning and Sustainability

David Warne, Assistant Commissioner, Bureau of Water Supply, New York City Dept of Environmental Protection

Michele Putnam, Director, Division of Water Supply, New Jersey Dept of Environmental Protection

Don Fusco, Vice President of Operations, Skanska Construction, USA

Alex Matthiessen, President, Hudson Riverkeeper

RESULTS OR MOST IMPORTANT CONCLUSIONS – THOUGHTS

There are many stresses on our watersheds, particularly in urbanized areas, and it is critical to identify the interaction between various needs, including drinking water/human health, agriculture, and environmental preservation. In the New York area, very forward looking approaches – some implemented more than a century ago - allowed the tri-state area to flourish. But climate change and development continue to challenge the sustainability of that plan. Significant investment is ongoing to thoughtfully preserve our water resources and to ensure a sustainable supply into the future.

INDICATION OF POSSIBLE FOLLOW-UP

- How is climate change affecting the distribution and availability of drinking water resources?
- What is the balance between watershed protection and downstream treatment in meeting customer demands and regulatory compliance for drinking water?
- What kinds of pressures on drinking water quality are being exerted by agricultural and industrial uses? What approaches can address these pressures while maintaining economic growth and societal benefit?
- What options are available in public and private entities to accelerate infrastructure implementation and replacement?

SESSION

THE GREEN BRAIN: DRIVING THE ENVIRONMENTAL MESSAGE HOME

by Wendy Gordon, founder of Green Guide, Consultant to NRDC

We had an excellent set of panelists - from academia, journalism, industry and government – who brought their unique professional and personal perspective on the matter of effectively communicating with the public about, and engaging them in addressing, the water challenges coastal cities face now and in the future.

SPEAKERS

Elke Weber, Columbia Professor, Director Center for Research in Env Decision-Making
 Suzanne Mattei, DEC, Regional Director, Region 2
 Jeanette Brown, Stamford Water Pollution Control Authority
 Tom Brennan, Nestle

RESULTS OR MOST IMPORTANT CONCLUSIONS – THOUGHTS

Interesting discussion around how to convey risk to people that have not experienced it first hand - use of visualization, pricing and other means by which to make long term costs real. Also learned from government leaders about programs underway to modify behaviors, retrofit city so as to be prepared for global warming related impacts to water supply and management systems.

INDICATION OF POSSIBLE FOLLOW-UP

In my capacity as communications consultant to NRDC, I have already followed up with CRED, and intend to look further into the work being done in Stamford and by DEC.

SESSION

DECENTRALIZED AND SELF SUFFICIENT WATER SYSTEMS

by Hans van Meerendonk, Coordinator International Projects, Province of Fryslan

Due to climate change and in relation to safety and sustainability aspects there is a growing need in society to look for new solutions in the field of water and energy. In this workshop innovative approaches like decentralized waste water treatment and water reuse were discussed in respect to the environment and benefits of society. Besides policy aspects regarding the present situation and the global need for change the workshop was concentrated on innovative solutions.

SPEAKERS

Tineke Schokker-Strampel, Vice-Governor, Province of Fryslân
 Cortney Worrall, Director of Programs, Metropolitan Waterfront Alliance
 Ferd Crone, Mayor of the City of Leeuwarden
 Ed Clerico, President, Alliance Environmental LLC
 Han Brezet, Professor Design for Sustainability, Technical University of Delft
 Cees Buisman, Professor and Scientific Director Wetsus - Centre of Excellence for Sustainable Water Technology
 Paul Mankiewicz, Executive Director, The Gaia Institute
 Hans van Meerendonk, Coordinator International Projects, Province of Fryslan
 Michael Fishman, Founder/Principal at Urban Answers

RESULTS OR MOST IMPORTANT CONCLUSIONS – THOUGHTS

- The increasing interest and need for more innovative and intelligent water treatment and reuse solutions on decentralized level was confirmed;
- Environmental, social, economical and risk aspects play an important role regarding conclusion 1;
- Interest for further knowledge exchange and possible cooperation in pilot projects.

INDICATION OF POSSIBLE FOLLOW-UP

- Further information exchange with NY (via Michael Fishman/Urban Answers) has been started in the framework of the Cradle to Cradle Islands project (Interreg North Sea project, Lead Partner Province of Fryslân);
- Focus will be on possible involvement of Roosevelt Island in C2CI
- Preparations have been started to invite a NY delegation (NY speakers workshop and Roosevelt Island contacts) to visit Fryslân and possible other Dutch stakeholders;
- Dutch participants in this follow-up among others: Province of Fryslân, Municipality of Leeuwarden, Wetsus, TU-Delft;
- Possible American participants in this follow-up: Urban Answers, Metropolitan Waterfront Alliance, The Gaia Institute, Alliance Environmental LLC, Roosevelt Island authorities.

SESSION

MOVING FROM DEFENSE TO ACCOMMODATION IN COASTAL REGIONS

by Emlyn Koster, President and CEO Liberty Science Center

Commissioner Grannis and Vice Governor Krusinga began with regional-scale perspectives of how New York City and The Netherlands view their respective challenges of inevitable further inland flooding from major storm events, only to be exacerbated by sea-level rise, that will potentially breach coastal defences in the Dutch case or that result in unimpeded inundation across the lower Hudson region. In response, Senator Landrieu gave a gripping firsthand account of the Hurricane Katrina experience and its lessons learned, stressing that integrated government approaches must now overcome the earlier evident shortcomings. Also in response, Commissioner Peijs provided an overview of how the Dutch coastal protection approach is experimenting by working more synergistically with nature through the construction of off-shore islands.

SPEAKERS

Alexander Grannis, Commissioner, Department of Environmental Conservation, State of New York
 Emlyn Koster, President and CEO, Liberty Science Center (Moderator)
 Rinske Krusinga, Vice Governor, Province of Noord Holland
 Mary Landrieu, US Senator, Louisiana
 Karla Peijs, Queen's Commissioner, Province of Zeeland

RESULTS OR MOST IMPORTANT CONCLUSIONS – THOUGHTS

The salient conclusions were the acceptance in both regions of the loud wake-up call by Hurricane Katrina and therefore of the need for much bolder risk mitigation policies and planning. This session, like many others, served to emphasize the quantum scale of difference in planning values and timeframes between The Netherlands that plans in 1,000+ year future spans and the New York region which works primarily within a 5-10-100 year horizon.

INDICATION OF POSSIBLE FOLLOW-UP

Greater exchange of policy and planning documents, and of actions and results accomplished

SESSION

DISASTER AND EMERGENCY MANAGEMENT

by Emlyn Koster, President and CEO Liberty Science Center

This session focused on aftermath disaster scenarios from coastal flooding. For New York City, Commissioner Bruno gave sample details of elaborate preparations to move residents by the tens of thousands to emergency shelter venues on adequately high ground. For the Dutch delta, Karen Engel emphasized the need for more rigorous preparedness planning than had been thought to be relatively adequate before Hurricane Katrina. The timeframes of forecast warnings and flooding in relation to normal office hours and to those during vacation, and the availability and prudence of using, or not, tall buildings, were discussed. Edward Saade illustrated advanced technologies for prompt mapping of aftermath features for use by emergency and recovery authorities. Theresa Bischoff described the major service role of the American Red Cross but stressed the serious shortage of trained volunteers to serve the needs of a disaster in the NY-NJ region.

SPEAKERS

Theresa Bischoff, CEO, Greater New York Chapter, American Red Cross

Joseph Bruno, Commissioner, Mayor's Office of Emergency Management, New York City

Karen Engel, Consultant and Researcher, COT Institute of Safety, Security and Crisis Management

Emlyn Koster, President and CEO, Liberty Science Center (Moderator)

Edward Saade, President and Managing Director, Fugro Earth Data, Inc.

RESULTS OR MOST IMPORTANT CONCLUSIONS – THOUGHTS

New York City has yet to face the scale of hurricane and surge disaster that will be a severe test on its preparedness plans, and from The Netherlands where coastal protections have a global best case comes the warning sign that the current preparations need extra approaches. The potential scales of property destruction and long-term damage, business discontinuity, as well of loss of and long-term displacement of life, could all reach economically catastrophic proportions. Lack of adequate rescue and service personnel will only exacerbate the aftermath situations.

INDICATION OF POSSIBLE FOLLOW-UP

Ongoing exchange of emergency planning approaches, results and lessons learned.

SESSION

THE FUTURE OF PORTS AND PORT CITIES: POSITIONING FOR THE GLOBAL ECONOMY

by Michael Della Rocca, President and Regional Managing Director, North America, Halcrow.

Seaports continue their historic role of driving international development and urbanization and bringing goods and services to a global market. Ports generate trillions of dollars of economic activity each year, but modernization, security and future prosperity raises many issues.

Among them are new technology; deepwater dredging; homeland security; public access; pollution and climate change, sea level rise and waterfront revitalization. All are critical issues that will inform and shape the 21st century evolution of ports.

SPEAKERS

Michael Della Rocca, President and Regional Managing Director, North America, Halcrow.

Chris Ward, Executive Director, PANYNJ.

Michael Christensen, Deputy Executive Director of Development, Port of LA.

James Serino, Director of Coastal, Natural Resources and Sustainability Programs, Shaw Group.

Piet Van Helvoort, President, DHV WaterGroup

Dennis Padron, Executive Vice President, Halcrow.

RESULTS OR MOST IMPORTANT CONCLUSIONS – THOUGHTS

We are in a period of significant change for ports and port authorities, but there are peaks of growth across the world. While container traffic is down 25 per cent this year, there has been huge investment in the Panama Canal, opening up new channels of opportunity.

Against this backdrop, the industry is looking at more sustainable solutions to the challenges of sea level rise, climate change, and growth in vessel size. Ports are engines of economic growth on a regional, national, and global basis. They have been drivers of the past and they will continue to be drivers of the future.

INDICATION OF POSSIBLE FOLLOW-UP

- Study of expected rate of sea level rise in New York Harbor
- Study of economic impact of sea level rise
- Storm surge probability analysis and the economic impact of potential storm surge levels
- Study of economic channel depths for various areas of New York Harbor

SESSION

SPATIAL PLANNING AND WATER MANAGEMENT FOR NEW WATERFRONTS

by Jan Elzinga, Dutch Ministry of Spatial Planning

Presentation of the best practices in NL and NY/NJ

Design workshop for specialists to produce specific planning and design proposals for 3 selected sites in the New York Harbor that incorporate the themes:

- **New York Harbor as the Blue Heart**
- **Climate change/sea level rise adaptation**
- **Living with water**

Teams of approximately 10 NL and US participants produce diagrams, plans, sketches and specific action items for the 3 sites Greenpoint and Sunset Park in Brooklyn and the Northern shore of Staten Island.

SPEAKERS

Robert Pirani, RPA

Han Meyer, TU Delft

Presentations of the results by the leaders of the sessions of the 3 sites.

RESULTS OR MOST IMPORTANT CONCLUSIONS – THOUGHTS

Recommendations:

- Use the need for flood protection for making connection with the water
- Combine the geographical position and new local identity
- Use “the Blue Heart” as a new public space and area for public transport.
- Conclusions:
- The concept of the Blue Heart gives opportunities, but at first make it worth while to connect the different areas
- Climate change gives opportunities to make these areas more attractive
- Make a good balance between the short and the long term; in spite of uncertainty think in the future 100 years, but action for adaptation and mitigation is needed now
- Combine prevention, integrated planning and risk management.

INDICATION OF POSSIBLE FOLLOW-UP

No concrete appointments. We can explore the possibilities to keep in contact using Connecting Delta Cities with the City of Rotterdam.

SESSION

**HOW TRANSPORTATION DRIVES DEVELOPMENT;
ACCESS TO OUR WATERFRONT – THE NEW YORK WATERFRONT EXPERIENCE**

by Howard Sackel, Deputy Chief
Access to the Region's Core/Trans-Hudson Express Tunnel Project
NJ Transit/PA NYNJ

This session focussed on the New York waterfront and the evolution of the transportation infrastructure that supported its growth. The various speakers focussed on how transportation and development were interdependent and how the waterfront is again being rediscovered for new uses and reconnected by new transportation systems. The speakers also discussed the challenges of maintaining transportation infrastructure in a water-bound city, and what new infrastructure is planned for the future to keep the Port of New York competitive.

SPEAKERS

Howard Sackel, Deputy Chief, ARC Tunnel Project, PANYNJ (Moderator)
Vivian Baker, Assistant Director Transit Friendly Land Use and Development, NJ Transit
Connie Crawford, Sr. Vice Pres. and Chief Engineer Capital Programs, MTA New York City Transit
Veronique Hakim, Sr. Vice Pres. and General Counsel, MTA Capital Construction
Robert Gottheim, District Director, Office of Congressman Jerrold Nadler
Richard Mudge, Sr. Vice President Delcan
Peter Zantal, General Manager, Analysis & Industry Relations, Port Commerce, Port Authority of NY and NJ

RESULTS OR MOST IMPORTANT CONCLUSIONS – THOUGHTS

Transportation provides the access that drives development of an area, and the NY waterfront developed because of its “access” to the world. As transportation improved in other areas, development occurred and the NY waterfront became less important as a business center. Transit lines preceded development and the shift of the port to NJ is the result of improved connections via rail and highway.

The waterfront is being re-connected with new lines bringing new development. Partnerships between the city and the transit agency for the No.7 Line extension, and for transit villages in NJ are good examples of this relationship. New projects at the Port to provide additional clearance for larger ships, build a freight tunnel under the river, and to extend transit lines to the waterfront have made these areas more desirable again for new uses.

Keeping water out of transportation infrastructure is a challenge.

INDICATION OF POSSIBLE FOLLOW-UP

- Follow new developments on the NY waterfront to measure their success.
- Follow port improvements to see the effect on commerce and economic growth

SESSION

INNOVATIVE (GREEN) STORMWATER MANAGEMENT, SUCCES STORIES FROM AMSTERDAM AND NEW YORK

by Pauline Hartog, Waternet Amsterdam Region

New York City and the City of Amsterdam are both implementing innovative concepts of stormwater management. In spite of the very different physical, cultural and political settings of our countries, both cities must adapt their existing stormwater system to an increasingly extreme climate. This workshop aimed to exchange positive results and ideas to optimize the implementation of innovative and sustainable stormwater management through the discussion of site-specific case studies.

SPEAKERS

Aaron Koch, Policy Advisor for Water, NYC Mayor's Office of Long-term Planning and Sustainability
Roelof Kruize, CEO of Waternet Amsterdam region and chairman of the specialist group on Climate change of the International Water Association (IWA)
Nette Compton, Senior Project Manager for Design, NYC Department of Parks and Recreation

RESULTS OR MOST IMPORTANT CONCLUSIONS – THOUGHTS

In this session New York City and the City of Amsterdam exchanged their best practices and challenges. In New York City stormwater management is an important part of PlaNYC 2030. In NYC, a mostly mixed sewerage system has a major capacity shortage. Better source control is being implemented by enlarging the green infrastructure as the most cost-effective and feasible strategy for the highly urbanized NYC. In contrast, Amsterdam has a very robust stormwater system. Their biggest challenge is the alignment of all components of the system with urban design and public acceptance of temporarily flooding of public areas. The example in New York of Printer's Park, which combines stormwater solutions with enhancing the liveability of a public playground, was inspiring for both cities.

INDICATION OF POSSIBLE FOLLOW-UP

- Further knowledge exchange of implementing green infrastructure
- Idea of an article with our learning points from the comparison of NYC and Amsterdam for a journal of an international water society.

***PROGRAM
H209 FORUM***



PROGRAM

version 09-03-09
go to our website for updates

Liberty Science Center, New Jersey • September 9-10, 2009

In 1609, Captain Henry Hudson arrived in New York Harbor and discovered the majesty of the Hudson River. Four hundred years later, on September 9 and 10, H2o9 Forum will commemorate this pioneering voyage by exploring water challenges facing coastal cities in the 21st century with experts from both sides of the Atlantic. While the focus will be on The Netherlands and the New York/New Jersey metropolitan region, solutions and ideas arising from the conference will benefit coastal cities worldwide. The venue for H2o9 is the Liberty Science Center, across from the Statue of Liberty.

CONFERENCE THEMES

- **OUR WATERFRONT: BALANCING COMMERCE, NATURE, AND COMMUNITIES**
- **CHANGING PERSPECTIVES: NEW OPPORTUNITIES FOR URBAN PLANNING**
- **THE POLITICS AND FINANCING OF INFRASTRUCTURE**
- **SOLUTIONS OUTSIDE THE BOX: APPLYING NEW TECHNOLOGIES TO WATER**
- **GREEN BRAINS: DRIVING THE ENVIRONMENTAL MESSAGE HOME**
- **RECRUITING THE NEW GENERATION OF WATER PROFESSIONALS**

SESSIONS

PLENARY SESSIONS

for a full audience with a panel of high-level speakers leading a discussion. Speakers give statements, after which they discuss their perspectives with co-panelists

ROUNDTABLE DISCUSSIONS

featuring prominent panelists, led by a selected moderator who will also answer questions at the end from the audience

SHIRTSLEEVE SESSIONS

smaller, focused, more intensive discussions with experts on specific topics of interest. These will provide rich exchange between leaders in the field

www.henryhudson400.com/h2o9

for more information, outlines of sessions and registration



H2o9 is organized by the Henry Hudson 400 Foundation in partnership with Liberty Science Center, Metropolitan Waterfront Alliance and Netherlands Water Partnership. It is part of the NY400 week, which celebrates the 400th anniversary of Henry Hudson's voyage from Amsterdam to New York.



PROGRAM WEDNESDAY, SEPTEMBER 9, 2009

8:00 am **REGISTRATION AND CONTINENTAL BREAKFAST** – Liberty Science Center

9:00 am **WELCOME**
H2o9 Co-Chair, **EMLYN KOSTER**, President and CEO, Liberty Science Center
H2o9 Co-Chair, **CEES VEERMAN**, Chairman Dutch Delta Commission and former Minister of Agriculture, Nature and Food Quality
ERIC SANDERSON, creator of *The Mannahatta Project* and author of *Mannahatta, A Natural History of New York City*

9:30 am **KEYNOTE ADDRESS**
ROBERT F. KENNEDY, JR., Chairman, Waterkeeper Alliance
TINEKE HUIZINGA, Dutch Vice Minister for Transport, Public Affairs, and Water Management

BREAK

10:30 am **INTRODUCTION TO WATER CHALLENGES FACING COASTAL CITIES**

Moderator **FELICITY BARRINGER**, National Environmental Correspondent, The New York Times
Panelists **AHMED ABOUTALEB**, Mayor, City of Rotterdam
ROHIT AGGARWALA, Director, NYC Mayor's Office of Long-term Planning and Sustainability
JUD HILL, Managing Partner, Summit Global
STEVEN LAWITTS, Acting Commissioner, NYC Department of Environmental Protection
HARRIE NOY, CEO, ARCADIS
BERTRAND VAN EE, CEO, DHV

LUNCH

1:00 pm **MOVING FROM DEFENSE TO ACCOMMODATION IN COASTAL REGIONS**

Introduction **RINSKE KRUISINGA**, Vice-Governor, Province of Noord-Holland
ALEXANDER B. GRANNIS, Commissioner New York State Department of Environmental Conservation (NYSDEC)
Remarks **MARY LANDRIEU**, US Senator, Louisiana: *Rebuilding an Urban Delta*
KARLA PEIJS, Governor, Province of Zeeland: *How Katrina Was Our Second Wake-Up Call*

1:30 pm **ROUNDTABLES **RT** AND SHIRTSLEEVE SESSIONS **SSS****

FOR DETAILS AND TIME SCHEDULE SEE NEXT PAGES

- Shirtsleeve Sessions are smaller, focused, more intensive discussions with experts on specific topics of interest. These will provide rich exchange among leaders in the field. (Outlines for Roundtables and SSS marked with * are available on www.henryhudson400.com/h2o9. Times and Titles of sessions may change; additional speakers will be added to the program)

5:25 pm **SEND OFF**
H2o9 Co-Chair, **EMLYN KOSTER**, President and CEO, Liberty Science Center
H2o9 Co-Chair, **CEES VEERMAN**, Chairman Dutch Delta Commission and former Minister of Agriculture, Nature and Food Quality

6:30 pm **HOOPLA ON THE HUDSON** - The Future of Water Gala, (additional tickets required)

PROGRAM WEDNESDAY, SEPTEMBER 9, 2009 • RT AND SSS • AFTERNOON SESSIONS

2:00	3:00	4:00	5:00	6:00	7:00
OUR WATERFRONT: BALANCING COMMERCE, NATURE AND COMMUNITIES					
The Mannahatta Project	Decentralized and Self Sufficient Water Systems				
The Future of Ports and Port Cities	Maintaining Drinking Water Quality				
Innovative (green) Stormwater Management Success Stories from Amsterdam and NY					
CHANGING PERSPECTIVES: NEW OPPORTUNITIES FOR URBAN PLANNING					
The Dutch Integrated Design Approach	A Systems Approach to Flood Protection				
	New Opportunities for Blue/Green Development				
	Coastal Development in a Changing Climate – Part 1	Coastal Development in a Changing Climate – Part 2			
	Spatial Planning and Water Management – Part 1	Spatial Planning and Water Management – Part 2			

OUR WATERFRONT: BALANCING COMMERCE, NATURE AND COMMUNITIES
1:45-2:45 THE MANNAHATTA PROJECT

ERIC SANDERSON, Creator of *The Mannahatta Project*, author of *Mannahatta: A Natural History of New York City*

2:00-5:00 SSS DECENTRALIZED AND SELF SUFFICIENT WATER SYSTEMS *

TINEKE SCHOKKER, Vice-Governor, Province of Fryslân
CORTNEY WORRALL, Director of Programs, Metropolitan Waterfront Alliance
FERD CRONE, Mayor of the City of Leeuwarden
HAN BREZET, Professor Design for Sustainability, Technical University Delft
MICHAEL FISHMAN, Founder-Principal Urban Answers
CEES BUISMAN, Professor and Scientific director Wetsus - Centre of Excellence for Sustainable Water Technology
PAUL MANKIEWICZ, Executive Director, The Gaia Institute
ED CLERICO, President, Alliance Environmental LLC
HANS VAN MEERENDONK, Coordinator International Projects, Province of Fryslân
SIMON GRUBER, Consultant for Hudson Valley Regional Council (HVRC)

1:45-2:45 RT THE FUTURE OF PORTS AND PORT CITIES: POSITIONING FOR THE GLOBAL ECONOMY

Moderator: **MICHAEL DELLA ROCCA**, President and Regional Managing Director, North America, Halcrow
JAMIE SERINO, Director of Coastal, Natural Resources, and Sustainability Programs, Shaw Group
CHRISTOPHER WARD, Executive Director, Port Authority of New York/New Jersey
MICHAEL CHRISTENSEN, Deputy Executive Director of Development, Port of LA
PIET VAN HELVOORT, President, DHV WaterGroup
DENNIS PADRON, Executive Vice President, Halcrow

3:00-4:30 RT MAINTAINING DRINKING WATER QUALITY

Moderator: **DOUGLAS OWEN**, Vice-President, Chief Technology Officer, Malcolm Pirnie
CARTER STRICKLAND, Senior Policy Advisor for Air and Water, NYC Mayor's Office of Long-term Planning and Sustainability
ALEX MATTHIESSEN, Hudson Riverkeeper
DON FUSCO, VP Operations, Skanska USA
DAVID WARNE, Assistant Commissioner, Bureau of Water Supply, NYC DEP
MICHELE M. PUTNAM, Director, Division of Water Supply, NJDEP
 Merck & Co., (invited)

(CONTINUED)

(CONTINUED: OUR WATERFRONT: BALANCING COMMERCE, NATURE AND COMMUNITIES)
1:30-3:00 SSS OVERCOMING OBSTACLES IN THE IMPLEMENTATION OF INNOVATIVE (GREEN) STORMWATER MANAGEMENT – SUCCESS STORIES FROM AMSTERDAM AND NYC *

Moderator: **ANNETTE OTTOLINI**, COO Waternet, the Public Water Cycle company of the Amsterdam region
ROELOF KRUIZE, CEO of Waternet Amsterdam and Chairman of the specialist group on Climate Change of the International Water Association (IWA)
AARON KOCH, Policy Advisor for Water, NYC Mayor's Office of Long-term Planning and Sustainability
NETTE COMPTON, Senior Project Manager for Design, NYC Department of Parks and Recreation

CHANGING PERSPECTIVES: NEW OPPORTUNITIES FOR URBAN PLANNING
1:45-2:45 RT DUTCH DIALOGUES, PRESENTING THE DUTCH INTEGRATED DESIGN APPROACH *

DALE MORRIS, Senior Advisor Economic Affairs, Embassy of the Kingdom of the Netherlands,
BRUCE KNIGHT, President of the American Planning Association (APA)
DAVID WAGGONNER, Principal, Waggonner & Ball Architects
PAULA VERHOEVEN, Director Climate Office, City of Rotterdam

3:00-5:00 RT A SYSTEMS APPROACH TO FLOOD PROTECTION: COMPARING THE HUDSON ESTUARY BASIN AND THE DUTCH DELTA *

PIET DIRCKE, Director, Global Water Management, ARCADIS
MALCOLM BOWMAN, Professor of Oceanography, State University of New York, Stony Brook
ALAN BLUMBERG, Director, Center for Maritime Systems, Stevens Institute of Technology, Hoboken NJ (invited)
EDWIN WELLES, Deltares USA
MARTIN VAN DER MEER, Technical Director, Fugro Water Services
FRANCES F. DUNWELL, Hudson River Estuary Coordinator New York State DEC
ALAN SPRINGETT, Senior Engineer Region II, FEMA, Mitigation Risk Analysis Branch
ROB KLOMP, Senior Consultant, Deltares

3:00-4:00 RT COASTAL DEVELOPMENT IN A CHANGING CLIMATE: REGULATION AND RESILIENCE – PART 1 *

Moderator: **ROBIN SHLAFF**, Senior Counsel, New York State Department of Environmental Conservation (NYSDEC)
ALEXANDER B. GRANNIS, Commissioner, NYSDEC
SUZANNE Y. MATTEI, Regional Director, NYSDEC
SARAH NEWKIRK, Coastal Program Director, The Nature Conservancy, New York State
RINSKE KRUISINGA, Vice-Governor of Noord-Holland
RENSKE PETERS, Director Water, Ministry of Transport, Public Works and Water Management
VINCENT SAPIENZA, Acting Deputy Commissioner, Bureau of Wastewater Treatment, NYC DEP
WILLIAM F. SLEZAK, Harbor Program Manager, USACE
MRS. A.W. BOM-LEMSTRA, Member executive board, Delfland Water Board

3:00-4:00 RT SPATIAL PLANNING AND WATER MANAGEMENT FOR NEW WATERFRONTS – PART 1 *

ROBERT PIRANI, Director Environmental Programs, Regional Plan Association
HAN MEYER, Chair Urban Design - Theory & Methods Delft University, Faculty of Architecture
 More speakers to be announced.

(CONTINUED)

(CONTINUED: CHANGING PERSPECTIVES: NEW OPPORTUNITIES FOR URBAN PLANNING)

- 4:00-5:00 **SSS** **COASTAL ZONE MANAGEMENT IN A CHANGING CLIMATE: REGULATION AND RESILIENCE – PART 2 * (EXPERT DIALOGUES)**
 An Examination of the Coasts of Long Island and Noord-Holland and a Comparative Presentation on Coney Island and the Town of Zandvoort
KEN SMITH, Assistant Bureau Chief, New York State Department of State
ROB STEIJN, Director, Coasts and Marine Systems, Alkyon- Arcadis
JAMES GILMORE, Marine Program Director, NYSDEC
STEVEN SLABBERS, Managing Director, Bosch Slabbers Landscape Architects
JASPER FISELIER, Strategic Advisor Land and Water, DHV Consultancy and Engineering
- 3:30-5:00 **RT** **NEW OPPORTUNITIES FOR BLUE/GREEN DEVELOPMENT**
 Moderator: **RICHARD ANDERSON**, President, New York Building Congress
JONATHAN ROSE, President, Jonathan Rose Companies
ANNEKE DE VRIES, CEO, ING Real Estate NL
RICK BELL, Executive Director American Institute of Architects, NY Chapter
TRENT LETHCO, Associate Principal, Transportation Planning Group, Arup
LAURIE KERR, Senior Policy Advisor for Buildings, NYC Mayor's Office of Long-term Planning and Sustainability
- 4:00-7:00 **SSS** **SPATIAL PLANNING AND WATER MANAGEMENT FOR NEW WATERFRONTS – PART 2 * (DESIGN WORKSHOP FOR SPECIALISTS)**
MARTIN ZOGRAN, Assistant Professor of Urban Design at Harvard University Graduate School of Design
HAN MEYER, Professor of Urban Design, Technical University Delft

PROGRAM THURSDAY, SEPTEMBER 10, 20098:30 am **CONTINENTAL BREAKFAST**9:00 am **ROUNDTABLES RT AND SHIRTSLEEVE SESSIONS SSS****FOR DETAILS AND TIME SCHEDULE SEE NEXT PAGES**

- Roundtable Discussions feature prominent panelists who will be led by a selected moderator and will answer questions at the end from the audience.
- Shirtsleeve Sessions are smaller, focused, more intensive discussions with experts on specific topics of interest. These will provide rich exchange among leaders in the field.

(Outlines for Roundtables and SSS marked with * are available on www.henryhudson400.com/h209. Times and Titles of sessions may change; additional speakers will be added to the program)

LUNCH2:00 pm **ROUNDTABLES RT AND SHIRTSLEEVE SESSIONS SSS****FOR DETAILS AND TIME SCHEDULE SEE NEXT PAGES****BREAK**3:50 pm **CLOSING SESSIONS****RAPID RECAP OF DAY 2**

TRACY METZ, NRC Handelsblad and Dutch Delta Commission,
LENIE DWARSHUIS, Vice-Governor of Zuid-Holland

followed by two closing sessions:

GREEN BRAINS: DRIVING THE ENVIRONMENTAL MESSAGE HOME**RECRUITING THE NEW GENERATION OF WATER PROFESSIONALS**5:30 pm **SEND OFF REMARKS**

H209 Co-Chair, **EMLYN KOSTER**, President and CEO, Liberty Science Center
 H209 Co-Chair, **CEES VEERMAN**, Chairman Dutch Delta Commission and former Minister of Agriculture, Nature and Food Quality

5:45 - 6:45 pm **COCKTAIL RECEPTION**

PROGRAM THURSDAY, SEPTEMBER 10, 2009 • RT AND SSS • MORNING SESSIONS

9:00	10:00	11:00	12:00	1:00
OUR WATERFRONT: BALANCING COMMERCE, NATURE AND COMMUNITIES				
How can Maritime Structures and Ecological Systems co-exist		Disaster and Emergency Management		
Against the Storm: A Report Card				
CHANGING PERSPECTIVES: NEW OPPORTUNITIES FOR URBAN PLANNING				
Spatial Planning and Water Management – Part 3		Spatial Planning and Water Management – Part 4		
Waterfront Development for the 21st Century		A Tale of Two Cities: Climate Adaptation Challenges and Strategies		
THE POLITICS AND FINANCING OF INFRASTRUCTURE				
Financing Mechanisms for Water Governance		Alternative Financing Opportunities		

OUR WATERFRONT: BALANCING COMMERCE, NATURE AND COMMUNITIES
9:00-10:30 SSS HOW CAN MARITIME STRUCTURES AND ECOLOGICAL SYSTEMS CO-EXIST *

ANDREW GENN, Vice President, New York City Economic Development Corporation
ROBERT PIRANI, Director Environmental Programs, Regional Plan Association
DICK KEVELAM, Senior Advisor Coastal Development, DHV Consultancy and Engineering
MINDERT DE VRIES, Senior Researcher, Deltares, Institute for Delta research
ROLAND LEWIS, President and CEO, Metropolitan Waterfront Alliance
STEVE ZAHN, Natural Resources Supervisor, NYSDEC

9:00-10:15 RT AGAINST THE STORM: A REPORT CARD. IMPLEMENTING WATERFRONT PROTECTION SYSTEMS

Moderator: **DOUGLAS HILL**, Consulting engineer, SUNY Stony Brook
MICHAEL ABRAHAMS, Principal Professional Associate and Board Chairman, Parsons Brinckerhoff Americas, Inc.
CHARLIE HESS, Senior Program Director, The Shaw Group
TIMOTHY DUNNE, President, Fugro West
DENNIS PADRON, Executive Vice President, Halcrow
COLONEL JOHN BOULÉ, District Engineer, USACE, New York District

11:00-12:30 RT DISASTER AND EMERGENCY MANAGEMENT

Moderator: **EMLYN KOSTER**, President and CEO, Liberty Science Center
JOSEPH BRUNO, Commissioner, NYC Mayor's Office of Emergency Management (invited)
THERESA BISCHOFF, CEO Greater New York Chapter, American Red Cross
EDWARD J. SAADE, President and Managing Director, Fugro EarthData, Inc.
KAREN ENGEL, Consultant and Researcher, COT Institute for Safety, Security and Crisis Management

CHANGING PERSPECTIVES: NEW OPPORTUNITIES FOR URBAN PLANNING
9:00-10:30 SSS SPATIAL PLANNING AND WATER MANAGEMENT FOR NEW WATERFRONTS – PART 3 (DESIGN WORKSHOP FOR SPECIALISTS) *

MARTIN ZOGRAN, Assistant Professor of Urban Design at Harvard University Graduate School of Design,
HAN MEYER, Professor Urban Design, Technical University Delft

9:00-10:15 RT WATERFRONT DEVELOPMENT FOR THE 21ST CENTURY: REVISIONING VALUES

Moderator: **RICHARD MAITINO**, VP, Parsons
CAMERON THOMSON, Senior Sustainability Consultant, Arup
THOMAS FOX, President New York Water Taxi
RICHARD MILLER, Director, Energy Markets Power Group, Con Ed
BERT HOOIJER, Dean of the Faculty of Building, Construction, Architecture and Urban Design, Rotterdam University
DOUGLAS MCCOACH, Vice President, Urban Design / Planning, RTKL Associates Inc.
CONNIE FISHMAN, President of Hudson River Park Trust
LAURIE HAWKINSON, Principal Smith-Miller+Hawkinson, Professor, Columbia University (Graduate School of Architecture)

10:45-12:15 RT A TALE OF TWO CITIES: CLIMATE ADAPTATION CHALLENGES AND STRATEGIES IN NYC AND ROTTERDAM *

ADAM FREED, Deputy Director, Mayor's Office of Long-Term Planning and Sustainability, City of New York
ARNOUD MOLENAAR, Program Manager, Rotterdam Climate Proof, City of Rotterdam
JEROEN AERTS, Professor Water Management & Risk, Amsterdam University
TOM SAWYER, Senior Editor, Engineering News-Record, New York.
ELKE WEBER, Professor, Columbia University Department of Psychology and Graduate School of Business
TRACY METZ, journalist NRC Handelsblad and member of the Dutch Delta Commission II
PIET DIRCKE, Professor Urban Water Management, Rotterdam University of Applied Sciences

11:00-12:30 RT SPATIAL PLANNING AND WATER MANAGEMENT FOR NEW WATERFRONTS – PART 4 *

Speakers to be announced.

POLITICS AND FINANCING OF INFRASTRUCTURE
9:00-10:30 RT FINANCING MECHANISMS FOR WATER GOVERNANCE: BALANCING PUBLIC INTERESTS AND CAPITAL COSTS

Moderator: **MICHAEL DEANE**, Director, National Association of Water Companies (invited)
WAYNE KLOTZ, President, American Society of Civil Engineers
MATT MILLEA, Acting President, NYS Economic Facilities Corporation
JOHAN DE BONDT, Chairman, Regional Public Water Authority Amstel, Gooi en Vecht (Amsterdam Region)
DENNIS HART, Executive Director, New Jersey Environmental Infrastructure Trust
FREDERICK BUTLER, President, National Association of Regulatory Utility Commissioners

11:00-12:30 RT ALTERNATIVE FINANCING OPPORTUNITIES: PUBLIC-PRIVATE PARTNERSHIPS FOR WATER PROJECTS

Moderator: **RICHARD ROPER**, Director of Planning Department, Port Authority, NY/NJ
ROBINSON KUPCHAK, Senior Managing Director, Macquarie Capital USA
LARRY CHERTOFF, Director, Alinda Capital Partners
DEBRA COY, Managing Director, Janney Montgomery Scott
WALTER LYNCH, President of Regulated Operations, American Water
ADAM MULLER, Vice-President Infrastructure Advisory Group, Goldman Sachs
DENNIS CIEMNIECKI, President, Regulated Business, United Water

PROGRAM THURSDAY, SEPTEMBER 10, 2009 • RT AND SSS • AFTERNOON SESSIONS

2:00	3:00	4:00	5:00	6:00
OUR WATERFRONT: BALANCING COMMERCE, NATURE AND ...		CLOSING SESSIONS		
Solutions Outside the Box: Applying New Technologies for Water		Green Brains: Driving the Environmental Message Home		
Building with Nature as a Coastal Protection and Maintenance Strategy		Recruiting the New Generation of Water Professionals		
CHANGING PERSPECTIVES: NEW OPPORTUNITIES FOR URBAN ...				
Dutch Dialogues NY: Results from Design Workshops				
How Public Transportation drives Development				
THE POLITICS AND FINANCING OF INFRASTRUCTURE				
The Organization of Watermanagement in Amsterdam and NYC				

OUR WATERFRONT: BALANCING COMMERCE, NATURE AND COMMUNITIES
2:00-3:30 RT SOLUTIONS OUTSIDE THE BOX: APPLYING NEW TECHNOLOGIES FOR WATER

Moderator: **F. HENRY HABICHT II**, Managing Partner SAIL Venture Partners
JEFF FULGHAM, Chief Marketing Officer, GE Water and Process Technology
CAMERON BROOKS, Director, IBM Big Green Innovations
PETER JOHANSSON, Director, Strategy & Business Development, ITT Corporation
KEN STEDMAN, President, MicroMedia Filtration
JOSEPH OATES, Vice President of Energy Management Con Ed
DENNIS CIEMNIECKI, President, Regulated Business, United Water
DIANNE MAUGHON, Global Business Development Director, Dow Water and Process Solutions

2:00-3:30 SSS BUILDING WITH NATURE AS A COASTAL PROTECTION AND MAINTENANCE STRATEGY *

MINDERT DE VRIES, Senior Researcher, Deltares
JOHN MCLAUGHIN, New City Department of Environmental Protection
LYNN M. BOCAMAZO, USACE
JASPER FISELIER, Strategic Advisor, DHV Consultancy and Engineering

CHANGING PERSPECTIVES: NEW OPPORTUNITIES FOR URBAN PLANNING
2:00-3:30 RT DUTCH DIALOGUES NY: RESULTS FROM THE WATERFRONT AND COASTAL DESIGN WORKSHOPS

Moderator: **PAUL FARMER**, Executive Director, American Planning Association,
JEROLD KAYDEN, Professor of Urban Design and Planning, Harvard University
ALEXANDROS WASHBURN, Chief Urban Designer, NYC Department of City Planning
YTTJE FEDDES, Netherlands National Landscape Architect
RENSKE PETERS, Director of Water Affairs, Netherlands Ministry of Transport, Public Works and Water Management

2:00-3:30 RT HOW PUBLIC TRANSPORTATION DRIVES DEVELOPMENT: ACCESS TO OUR WATERFRONT

Moderator: **HOWARD SACKEL**, Director of ARC, Port Authority of New York/New Jersey
VIVIAN E. BAKER, Assistant Director, Transit Friendly Land Use & Development NJ Transit
RICHARD MUDGE, Senior Vice President, Delcan
ROBERT GOTTHEIM, District Director, Office of Congressman, Jerrold Nadler
RONNIE HAKIM, Senior Vice President and General Counsel, MTA Capital Construction
CONNIE CRAWFORD, Senior Vice President and Chief Engineer, MTA NYC Transit, Capital Program Management
PETER ZANTAL, General Manger, Analysis and Industry Relations, Port Authority of New York, New Jersey

THE POLITICS AND FINANCING OF INFRASTRUCTURE
2:00-3:30 RT SUSTAINABLE WATER GOVERNANCE: THE ORGANIZATION OF WATER MANAGEMENT IN AMSTERDAM AND NYC *

Moderator: **ROELOF KRUIZE**, CEO of the Regional Public Water authority of the Amsterdam region, Waternet, and Chairman of the specialist group on Climate change of the International Water Association (IWA)
CARTER STRICKLAND, Senior Policy Advisor for Air and Water, NYC Mayor's Office of Long-term Planning and Sustainability
JOHAN DE BONDT, Chairman, Regional Public Water Authority Amstel, Gooi en Vecht (Amsterdam Region)

CLOSING SESSIONS
3:50 - 4:00 RAPID RECAP OF DAY 2

TRACY METZ, NRC Handelsblad and Dutch Delta Commission
LENIE DWARSHUIS, Vice-Governor of Zuid-Holland

4:00-5:30 GREEN BRAINS: DRIVING THE ENVIRONMENTAL MESSAGE HOME

Moderator: **WENDY R. GORDON**, founder of Green Guide, consultant to NRDC
ELKE WEBER, Professor, Columbia University Department of Psychology and Graduate School of Business School
THOMAS BRENNAN, Senior Natural Resource Manager, Nestle Waters, North America
JAMES TIERNEY, Assistant Commissioner, NY State DEC
JEANETTE BROWN, Executive Director Stamford Water Pollution Control Authority
ANDREW REVKIN, NY Times, Environmental Correspondent

4:00-5:30 RECRUITING THE NEW GENERATION OF WATER PROFESSIONALS

Moderator: **PAUL RUSH**, Deputy Commissioner, NYC Department of Environmental Protection
MURRAY FISHER, Principal and Founder of New York Harbor School
WILLIAM SOLECKI, Director of the Cuny Institute for Sustainable Cities; Co-Chair NYC Panel on Climate Change.
TARA GALLAGHER, Private infrastructure consultant; former VP Infrastructure, Arcadis
LENIE DWARSHUIS, Vice Governor of Zuid-Holland
ARIE KRAAIJEVELD, Chairman Netherlands Water Partnership
MARGARET DAVIDSON, Director, NOAA, Coastal Services Center

***LIST OF
DELEGATES***

A

Aboutaleb, Ahmed	City of Rotterdam
Adon, Saudo	rural wateaid focus
Aerts, Jeroen	VU University Amsterdam
Albucher, Chelsea	City of Newark
Amine, Dima	Fugro Airborne Surveys
Anderson, Eugene	United Water
Anderson, Richard	New York Building Congress
Andreyko, Helena	
Anttila-Hughes, Jesse	
Aranda, Esther	
Armstrong, Winifred	Ecological Economist
Auburger, Roland	The province of Zuid-Holland
Azaroff, Illya	AIA New York
B	
Bahen, Bill	
Baker, Vivian	NJ TRANSIT
Bakker, Wiebe	Waternet, Public Watercycle organization of the Amsterdam region
Balder, Robert	Gensler
Balfort, Hans	Min. Transport, Public Works and Water Management
Ballard, Christine	Borough of Red Bank
Barringer, Felicity	New York Times
Barwick, Kent	NYS Quad Commission
Bass Levin, Susan	Port Authority of NY and NJ
Beelaerts van Blokla, Pieter	
Beirne, Desmond	Center for Environmental Research and Conservation, Columbia University
Bell, Rick	AIA New York
Bennett, Steven	Parsons Brinckerhoff
Benslimane, Aomar	amazigh Cultural Association in North America
Bentz, Linda	The Port Authority of New York and New Jersey
Berat, Bert	Bert Berat Images
Berat, Gilbert	
Bernhardi, Lilian	Province of Noord-Holland
Bersee, Henriëtte	Royal Netherlands Embassy
Bijlsma, Oeds	Province fo Fryslân
Binnekamp, J.	Province of Utrecht
Bissetta, Carol	NYS Quadracentennial
Blackford, David	Macquarie Capital
Blatt, Jeanna	ARCADIS US
Blumberg, Alan	Stevens Institute of Technology
Bocamazo, Lynn	
Bogoslaw, David	
Bokma, Desiree	Ministry of Housing, Spatial Planning, and the Environment
Bom-Lemstra, A.W.	Hoogheemraadschap Midden-Delftland
Boonstra, Johannes	Wetsus Centre for Sustainable Water Technology
Bos, John	Province of Flevoland
Bosch van Rosenthal, Eelco	NOS Dutch Public Broadcasting

Boulé, John	U.S. Army Corps of Engineers
Boutros, Monique	Netherland-America Foundation
Bowman, Malcolm	State Univerisy of New York at Stony Brook
Bowman, Erinna	London School of Hygiene & Tropical Medicine
Brayé, Baptist	
Brazaitis, Peter	
Brennan, Thomas	Nestle Waters North America Inc.
Brewster, Marcia	Nautilus International
Brezet, J.C.	University of Delft
Bronson, Stan	Florida Earth Foundation
Brooks, Cameron	IBM
Broome, Devin	FirstCall Emergency Notification
Brous, Nancy	Hudson River Watertrail Association
Brown, Hillary	New Civic Works
Brown, Jeanette	Stamford WPCA
Brunzema, Meta	Pratt Institute
Buchanan, Rob	village community boathouse
Buisman, Rianne	Wetsus
Buisman, Cees	Wetsus Centre for Sustainable Water Technology
Butler, Frederick	New Jersey Board of Public Utilities
C	
Cabrera, Reggina	NOAA, NWS, ERH
Campbell, Jane	
Capone, Edward	NOAA, NWS, Northeast RFC
Carnahan, Kerry	NYC DDC Office of Sustainable Design
Carroll, Mike	ARCADIS US
Case, Elizabeth	Regional Plan Association
Castillo, Margaret	AIA New York
Chandrasekhar, Manju	Halcrow, Inc.
Chen, Betty	GIPEC
Chertoff, Lawrence	
Cho, Renee	Henry Hudson 400
Chouinard, Keith	
Christensen, Michael	Port of Los Angeles
Chytalo, Karen	NYS Department of Environmental Conservation
Cicalo, Patrick	Raven Moon Images
Ciemniecki, Dennis	United Water
Cisterna, Richard	
Claman, Connie	Liberty Science Center
Clark, Harold	Liberty Science Center
Clerico, Ed	Alliance Environmental, LLC.
Cloud, Jaimie	
Coffee, Sidney	America's WETLAND Foundation
Colangelo-Bryan, Jeremy	NJ TRANSIT
Compton, Nette	NYC Department of Parks & Recreation
Connor, Hannah	Waterkeeper Alliance
Cossey, Dennis	ThermoEnergy Corporation

Cox, Linda	Bronx River Alliance & NYC Parks & Rec.
Cox, Jan	
Coy, Debra	Janney Montgomery Scott
Crandell, Jim	ARCADIS US
Crawford, Cosema	New York City Transit
Craytor, Miquela	sustainable south bronx
Creamer, Thomas	U.S. Army Corps of Engineers
Crone, Ferd	City of Leeuwarden
Cryan, John	NYSDEC
Curtis, Liane	Waterkeeper Alliance
D	
Dalen, Joost	Province of Noord-Holland
Dalmijn, W.L.	Delft Cluster
Davidson, Joan	Hudson-Fulton-Champlain Quadracentennial Commission
Davidson, Margaret	NOAA Coastal Services Center
De Bondt, Johan	Regional Public Water-Authority Amstel, Gooi and Vecht
De Groene, Pieter	Regional Public Water-Authority Amstel, Gooi and Vecht
De Jong, Michiel	DHV
De Vries, Mindert	Deltares
De Vries, Tineke	Consulate General of the Netherlands
Deane, Michael	National Association of Water Companies
Dee, Bill	Malcolm Pirnie
Degnan, John	
Deinum, Henk	City of Leeuwarden
Dell, David	Sustainable Hudson Valley
Della Rocca, Michael	Halcrow Inc.
Demmers, Ivo	Netherlands Water Partnership (NWP)
DeMocker, Susan	Columbia University
Denes, Tom	URS Corporation
DePorte, Tara	Lower East Side Ecology Center
Diks, Isabelle	City of Leeuwarden
Dillingham, Tim	American Littoral Society
DiLorenzo, Jennifer	Urban Coast Institute, Monmouth Univ.
Dircke, Piet	ARCADIS
Donehoo, Rick	Fluor
Donehoo, Marga	DHV
Doran McBean, Michelle	Future City Inc
Doswell, John	Working Harbor Committee
Douglas, Ian	Metropolitan Waterfront Alliance
Downs, David	Hoboken Cove Community Boat-house
Doyle, Noreen	Hudson River Park Trust
Dral, Gert	The province of Zuid-Holland
Dral, Gert	Grontmij Nederland Holding B.V.
Duffy, Maureen	American Water
Duhon, Kevil	New Jersey Senate Democratic Office
Duinen, Gryt	City of Leeuwarden

Dukker, Martin	City of Rotterdam
Duncan, Skye	New York City Department of City Planning
Dunlap, Katy	Hudson River Watershed Alliance
Dunne, Timothy	Fugro West
Dunwell, Fran	NYS Department of Environmental Conservation
DuPont, Jeanne	Rockaway Waterfront Alliance
Dutt, Memusi	Arup
Dwarshuis, Lenie	The province of Zuid-Holland
E	
Eby, Matt	
Edwards, Scott	Waterkeeper Alliance
Efstathiou, Jim	Bloomberg News
Eisenman, Theodore	OurHudson.org
Elburn, Robert	NYS Department of Environmental Conservation
Elliott, Robert	
Elsinga, Jan	Ministry of Environment and Spatial Planning
Englert, Robert	Staten Island Borough President
Ericson, Chris	Glenview Capital
Eskenas, Linda	North Shore Waterfront Greenbelt and Community Board I Greenway Waterfront Park Chair
Everett, Melissa	Sustainable Hudson Valley
F	
Facciolo, Frank	Shaw Environmental, Inc.
Farmer, William	American Planning Association
Feddes, Yttje	Ministry of Environment and Spatial Planning
Ferenz, Gretchen	Cornell University Cooperative Extension - NYC
Ferracane, Patrick	NYSDEC
Figuroa, Crist	Hudson River Park Trust
Finch, Darlene	NOAA Coastal Services Center
Fiselier, Jasper	DHV
Fisher, Murray	New York Harbor School
Fishman, Michael	Urban Answers
Fishman, Connie	Hudson River Park Trust
Flanagan, Margaret	South Street Seaport Museum
Florio, Kate	Liberty Science Center
Fox, Tom	Harbor Experience Companies
Frank, Matthew	
Fратиanni, Barbara	NYS Quadracentennial
Freudenberg, Robert	Regional Plan Association
Fusco, Donald	
G	
Gailes, Gary	Water Discovery Center
Gailes, Martie	Water Discovery Center
Galema, S.H.	Province of Fryslân
Gallagher, Tom	Consolidated Edison
Gallagher, Tara	MBS
Gallagher, Frank	Liberty State Park

Gallagher, Zach	Alliance Environmental, LLC.
Ganucheau, Jeanne-Marie	US Senator Mary Landrieu
Garcia, Melissa	Partnerships for Parks
Garcia-Costas, Arturo	NYS Department of Environmental Conservation
Garcia-Duran, Leonard	NYC Dept of City Planning
Gardner, Katie	Liberty Science Center
Garin, James	New York City Department of Environmental Protection
Garkavyi, Sergii	National O.Bohomolets Medical University
Geiger, Adena	NY@NITE
Genzer, Stephen	Saul Ewing LLP
Georgas, Nickitas	Stevens Institute of Technology
Gerrity, Daniel	CDM
Gill, Huntley	Guardia Architects
Gleis, Chelsea	Nautilus International
Goddard, Kurt	Shaw Environmental & Infrastructure
Goossensen, Frank	
Gordon, Wendy	NRDC
Gosline, Matthew	Pratt Institute
Gottheim, Robert	US Rep. Jerrold Nadler
Gouw, Arend	Netherlands Consulate General, Miami
Graham, Lauren	
Grannis, Alexander	NYS Department of Environmental Conservation
Graves, Garret	State of Louisiana
Greeley, Doug	Malcolm Pirnie
Gronewold, Nate	E&E Publishing
Gross, Walter	Shaw Environmental, Inc.
Gumb, Dana	New York City Department of Environmental Protection
H	
Habicht, Hank	SAIL Venture Partners
Haines, Nicholas	
Haines, Angela	Henry Hudson 400
Hakim, Veronique	MTA Capital Construction
Ham, Ad	City of Leeuwarden
Hamelink, Frans	Province of Zeeland
Hamlin, Abby	Van Alen Institute
Hand, Jamie	Van Alen Institute
Harken, Avery	Nautilus International
Harken, Bonnie	Nautilus International
Hart, Dennis	NJ Environmental Infrastructure Trust
Hartemink, Sander	Netherlands Embassy
Hartigan, Joe	Chamber of Commerce (Rockaway Queens)
Hartmann, Jens	
Hartog, Paulien	Waternet, Public Watercycle Organization of the Amsterdam region
Harvey, Rose	Trust for Public Land
Hawkinson, Laurie	Smith-Miller + Hawkinson Architects LLP

Helbrecht, Karen	FEMA
Heller, Sharon	The Port Authority of NY & NJ
Herasme, Claudia	NYC Department of City Planning
Hereijgers, Ad	NADC Brooklyn/Rotterdam
Herrmann, Andrew	Hardesty & Hanover Llp
Hess, Charles	The Shaw Group
Hiles, Clay	Hudson River Foundation
Hill, Douglas	
Hoang, Anhthu	WE ACT
Hocking, Charles	Hazen and Sawyer, P.C.
Hooijer, Bert	Hogeschoot Rotterdam
Horner, Randolph	
Hotz, Robert Lee	The Wall Street Journal
Huisman, Annet	Omrop Fryslân
I	
Imperatore, Marion	AIA New York
Inbar, Marjan	NY400 team
Irving, Tonian	
J	
Jacker, Sharon	New York Harbor School
Jain, Monika	New York City Department of City Planning
Jansen, Jolanda	Jansen Engineering, PLLC
Jaso Cumellas, Cristina	
Jayabal, Pradeep	
Johansson, Peter	ITT Corporation
Johnson, Tanner	
Jones, Lendel	American Water
Jones, Michael	Parsons Brinckerhoff
Jones, Stephen	
Jongens, Martijn	Regional Water Authority HDSR
Jongerius, Gerard	Henry Hudson 400
Jorritsma, John	Province of Fryslân
K	
Kamber, Dennis	ARCADIS US
Kapoor, Priya	Ogilvy Public Relations
Karimi, Risper	rural wateaid focus
Karlsson, Gail	Citizens Network for Sustainable Development
Kays, Elizabeth	NYC DCP
Keith, T. Bradley	US Senator Mary Landrieu
Kelderman, Jaap	Regional Public Water-Authority
Kelly, Brittney	Amstel, Gooi and Vecht
Kelly, Edward	Rutgers University
Kennedy Jr., Robert	Maritime Association of the Port of NY/Nj
Kerkhof, Heleen	City of Leeuwarden
Kerman, Keith	NYC Parks & Recreation
Kerr, Laurie	City of New York
Kevelam, Dick	DHV
Kleij, Hans	The province of Zuid-Holland
Kleinman, Louis	Metropolitan Waterfront Alliance (MWA)

Klomp, Rob	deltares
Klotz, D. Wayne	American Society of Civil Engineers
Klumper, Joke	dS+V
Knapp, Julie	
Knight, Bruce	American Planning Association
Koch, Aaron	New York City Mayor's Office
Kolk, Ad	City of Leeuwarden
Koole, Stijn	Bosch Slabbers Landscape Architects
Koren, Stephen	New York City Parks & Recreation
Koster, Emlyn	Liberty Science Center
Koster, Maryse	
Kraaijeveld, Arie	Netherlands Water Partnership (NWP)
Kraaijeveld, Riet	Netherlands Water Partnership (NWP)
Kramer, Steven	ARCADIS US
Kramer, J	City of Leeuwarden
Krol, R.W.	Province of Utrecht
Kruisinga, Rinske	Province of Noord-Holland
Kruize, Roelof	Waternet, Public Watercycle organization of the Amsterdam region
Kumer, Heather	
Kupchak, Robinson	Macquarie Capital (USA) Inc
L	
La Rocco, Barbara	Going Coastal, Inc.
Laird, Joshua	New York City Department of Parks & Recreation
Landguth, Nicole	Ogilvy 360 Digital Influence
Landrieu, Mary	
Lane, Robert	RPA
Langenberg, Pex	Embassy Netherlands
LaPorte, Widelynn	New York Harbor School
Latini, Charles	NJ TRANSIT
Lawitts, Steve	NYC Department of Environmental Protection
Lee, Vincent	Arup
Leighton, Isabelle	
Lethco, Trent	Arup
Levine, Lawrence	Natural Resources Defense Council
Leviton, Leonard	Water Discovery Center
Lewis, Roland	Metropolitan Waterfront Alliance
Lim, Esther	Google, Inc
Linker, Ron	NOS Dutch Public Broadcasting
Lodge, Jim	
Lopez, Al	ARCADIS US
López-Torrijos, Ricardo	IAGT
Lousma, Roelof	Omrop Fryslân
Lubbers, Steven	Hollandia b.v.
Lustgarten, Abraham	ProPublica
Lynch, Walter	American Water

M	
Maccabiani, Jos	Deltares
MacDonald, Tony	Urban Coast Institute, Monmouth Univ.
Macri, Kathryn	New York State Environmental Facilities Corporation
Magron, Jean-Philippe	The Louis Berger Group Inc.
Maimone, Mark	CDM
Major, David	Columbia University
Manning, William	Manning Architects
Manning-Broome, Camille	Center for Planning Excellence
Manus, Elizabeth	
Marlbrough, Oneil	Shaw Coastal, Inc.
Marmillion, Valsin	
Marshall, Doug	ARCADIS US
Marsich, Steve	Halcrow
Martin, Tricia	WE Design
Mathies, Linda	DHV, New Orleans
Mattei, Suzanne	NYS Department of Environmental Conservation
Matthiessen, Alex	Riverkeeper
Mattia, Mark	Liberty Science Center
Maughon, Dianne	The Dow Chemical Company
McCoach, Douglas	RTKL Associates Inc.
McCollum, Jonn	Liberty Science Center
McConnell, Terry	Fugro Airborne Surveys
McEnaney, Liz	Hudson-Fulton-Champlain Quadracentennial Commission
McKeon, Brendan	
McLaughlin, John	New York City Department of Environmental Protection
McLean, Mathilde	
McMillin, William	CH2M HILL
McNeil, Sue	University of Delaware
Mehrotra, Sandeep	Hazen and Sawyer, P.C.
Merriam, Jock	Shaw Environmental & Infrastructure
Metz, Tracy	
Meyer, Han	TU-Delft
Meyer, Alfred	Sam Schwartz Engineering
Middleton, Gareth	Gannett Fleming, Inc.
Miedema, B.A.	City of Leeuwarden
Mifsud, Michael	Skanska USA Civil Northeast Inc.
Mildner, Dennis	NYS Department of State
Millea, Matthew	New York State Environmental Facilities Corporation
Miller, Deidrea	New York State Environmental Facilities Corporation
Miller, Jon	Stevens Institute of Technology
Miller, Richard	Con Edison
Miller, Linda	Oculus/eOculus
Molenaar, Angela	THE NETHERLAND-AMERICA FOUNDATION, INC.
Molenaar, Arnoud	City of Rotterdam
Molinari, Nicholas	New York City Department of Parks & Recreation

Moore, Michelle NYS Department of Environmental Conservation
 Morenzi, Anthony NYS Department of Environmental Conservation
 Morris, Dale Royal Netherlands Embassy
 Mudge, Richard Delcan

N

Neilan, Thomas United Water
 Neilson, Sarah Regional Plan Association
 Nellen, Marc
 Nemens, Emily AIA New York
 Newkirk, Sarah The Nature Conservancy
 Nichols, Caitlyn Interstate Environmental Commission
 Nijman, Job Fugro Water Services
 Noy, Harrie
 Nunes, Sharon IBM Big Green Innovations
 Nyman, Robert USEPA - HEP

O

Oates, Joseph Con Edison
 O'Connor, Richard
 Oddo, William Friends of Stuyvesant Cove Pier
 O'Hara, Michael Sustainable Hudson Valley
 Olsen, Stephen Coastal Resources Center
 Ondish, Arthur CHA, INC.
 Ongoco, Kristian Columbia University
 Ooms, Mariska
 Oostland, A. City of Leeuwarden
 Op den Brouw, Paul Royal Netherlands Embassy
 O'Shea, Marie US EPA Region 2
 Ottolini, Annette Waternet, Public Watercycle organization of the Amsterdam region
 Overton, Karen Partnerships for Parks
 Owen, Douglas Malcolm Pirnie, Inc.
 Owen, Steve PERC Water

P

Padron, Dennis Halcrow Inc.
 Paino, Thomas
 Painter, Kathie Alinda Capital Partners LLC
 Paulsen, Sherida AIA New York
 Pawlowski, Thaddeus NYC DCP
 Peijs, Karla Province of Zeeland
 Pel, Eva
 Peters, Renske Ministry of Transport, Public Works and Water Management
 Peterson, Teresa Gannett Fleming, Inc
 Pidgeon, Sarah Solar One
 Piken, Stuart Parsons Brinckerhoff
 Pirani, Robert Regional Plan Association
 Platschorre, Rinus Province of Zeeland
 Platt, Rutherford Ecological Cities Project
 Poelmann, Patrick Henry Hudson 400
 Poelstra, Anke TU Delft
 Poelstra, Jan

Pool, Erik Netherlands Water Partnership (NWP)
 Porteus, Greg
 Prasarn, Andrew
 Projjal, AIA Sustainability Initiatives Metropolitan Transportation Authority
 Pronk, Dicky Henry Hudson 400
 Puryear, Milton Brooklyn Greenway Initiative
 Putnam, Michele NJDEP-Division of Water Supply

Q

Quinn, Gloria Ogilvy Public Relations
 Quinn, Bryan New York City Department of Parks & Recreation

R

Rancourt, Gary
 Reid, Robert Civil Engineering magazine
 Reinmund-Martinez, Alicia Columbia University
 Rhinehart, Charles John Chance Land Surveys, Inc./ Fugro
 Ricculi, Anne
 Rijpstra, Janneke Waternet, Public Watercycle organization of the Amsterdam region
 Roman, Angel NYC DEP
 Roper, Richard Port Authority of NY & NJ
 Rose, Jonathan Jonathan Rose Companies
 Rosenthal, Joyce
 Rudolph, Thomas NYSDEC
 Rush, Paul NYC-Dept. of Environmental Protection
 Rutten, Bart Dedux

S

Saade, Michael MWH Americas
 Saade, Edward Fugro EarthData
 Sackel, Howard Port Authority of NY and NJ
 Sama, Jeff NYSDEC
 Sama, Nicole NYS Quadricentennial
 SANDERSON, ERIC WILDLIFE CONSERVATION SOCIETY
 Sandville, Jonathan Liberty Science Center
 Sapienza, Vincent NYC Dept. of Environmental Protection
 Sasson, Jeff Liberty Science Center
 Savio, Thomas MTA
 Sawyer, Tom Engineering News-Record
 Schiferli, Djeevan IBM Global Center of Excellence for Water Management
 Schirripa, Tony AIA New York
 Schlaff, Robin NYS Department of Environmental Conservation
 Schmitz, Theo Association of Dutch Water Companies
 Schneider, Willi PEOPLE PICTURE
 Schoettle, Thomas CDM
 Schokker-Strampel, C. Province of Fryslân
 Schoolderman, Ruurd TwynstraGudde

Schultz, William Raritan Riverkeeper
 Schwartz, Jason Partnerships for Parks
 Scully, Peter NYS Department of Environmental Conservation
 Seebode, Joseph U.S. Army Corps of Engineers
 Segeren, Antonius Deltares
 Seggos, Basil Hugo Neu Corporation
 Seims, Kristofer NYC Department of City Planning
 Seliger, Susan RiverWired.com
 Serino, Jamie Shaw Environmental
 Shandling, Kathy International Private Water Association (IPWA)

Shapiro, Robert
 Sheehan, Bill Hackensack Riverkeeper
 Shostack, Hannah Port Authority of NY and NJ
 Simko, Alison Metropolitan Waterfront Alliance
 Slabbers, Steven Bosch Slabbers Landscape Architects
 Slatkin, Howard NYC Department of City Planning
 Slezak, William U.S. Army Corps of Engineers
 Sloodskin, Zhennya Going Coastal, Inc.
 Smeets, Femke Netherlands Water Partnership (NWP)

Smelt, Edwin
 Smith, Saddle Egon Zehnder International
 Smith, Jr., Daniel Consolidated Edison
 Speace, Ellen Liberty Science Center
 Spector, Sacha Rutgers University
 Springett, Alan Scenic Hudson
 Stedman, Ken FEMA Region II
 Stedman, Yolanda MicroMedia Filtration, Inc.
 Steenbakker, Arnold MicroMedia Filtration, Inc.
 Steijn, Rob Fugro N.V.
 Stinar, John Alkyon
 Stoker, Wieke Wetsus
 Stone, Andy Trust for Public Land
 Stratton, Kristine Waterkeeper Alliance
 Strickland, Carter NYC Mayor's Office of Long Term Planning and Sustainability
 Planning magazine

Stromberg, Meghan
 Stuber, Reto
 Suckle, Abby AIA New York
 Suszkowski, Dennis
 Sutherland, Willem ING Capital LLC
 Sutherland, Paige Metropolitan Waterfront Alliance
 Sutton, Amy American Red Cross

T

Tai, Bill New York City Department of Parks & Recreation
 Tanikawa, Shino New York City Soil & Water Conservation District
 Tansey, Maida
 Tansey, Bill Summit Medical Group
 Terpstra, Sas Twynstra Gudde Adviseurs en Managers BV
 Tetteroo, Gert Henry Hudson 400

Thomas, Dave ARCADIS US
 Thomson, Cameron Arup
 Thurman, Beryl The North Shore Waterfront Conservancy of Staten Island, Inc.
 Tierney, James NYS Department of Environmental Conservation
 Toro, Teresa
 Turco, Andrew Regional Plan Association

V

Valdivia, Marco NJ Board of Public Utilities
 Vallee, David NOAA, NWS, Northeast RFC
 Van, Meindert Deltares
 Van de Ven, Frans Deltares / TU Delft
 Van den Top, Gerhard Vitens-Evides International
 Van der Kolk, Peter Netherlands Water Partnership (NWP)
 Van der Kolk, Joric Netherlands Water Partnership (NWP)
 Van der Kooij, Eric Physical Planning Department City of Amsterdam
 Van der Leer, David Guggenheim Museum
 Van der Linden, Marielle
 Van der Meer, Martin Fugro Water Services
 Van der Sommen, Jeroen Netherlands Water Partnership (NWP)
 Van Dermark, Scott Fugro EarthData
 Van Drimmelen, Camiel Physical Planning Department City of Amsterdam
 Van Ee, Bertrand DHV
 Van Eijndhoven, Jeroen NOS Dutch Public Broadcasting
 Van Ellen, Tjibbe DHV
 Van Helvoort, Piet DHV
 Van Meerendonk, Hans Province of Fryslân
 Van Scheltinga, Caroline Jefferies & Company
 Van Stijn, Leo ING Bank N.V.
 Van Tassel, Kate New York City Economic Development Corporation

Van Terwisga, Rik Vitens-Evides International NV
 Van Velzen, Thijs The Engineer - Technology Magazine
 Van Vlaanderen, Louis Province of Zeeland
 Van Wesenbeeck, Bregje Deltares
 Van Zuylen, Annemieke Netherlands Water Partnership (NWP)

Vania, Natalie Arshiya Ventures
 Veerman, Jaap Dutch Consule General Los Angeles
 Veraart, Niek The Louis Berger Group, Inc.
 Verberne, Andre DHV
 Verhoeven, Paula City of Rotterdam
 Vries, Jannewietske City of Leeuwarden
 Vrolijk, Luc Urban Progress Design

W

Waggoner, David Waggoner & Ball Architects
 Wakeman, Thomas Stevens Institute of Technology

Wallace, Garrett	South Florida Water Mgmt. Dist.
Ward, Christopher	The Port Authority of NY & NJ
Warmerdam, Sander	NOS Dutch Public Broadcasting
Warmoll, Chris	Halcrow
Warne, David	NYC-Dept. of Environmental Protection
Waterman, Ronald	New Holland Foundation
Watts, John	Sequel Energy Solutions
Weaver, Julie Ann	Liberty Science Center
Webster, Nancy	Brooklyn Bridge Park Conservancy
Weintraub, Vera	
Welles, Edwin	Deltares USA
White, Julius	Consolidated Edison
Wieriks, Jacobus	AcW Water Advisory Board
Wiersma, Benno	New Holland Foundation
Wijsman, Peter	Netherlands Water Partnership
Willner, Andy	: Andrew J. Willner, Inc.
Wilson, Stephen	Hudson River Environmental Society
Winter, Annie	NAF/Fulbright
Witko, Janine	Halcrow
Wong, Gregory	The Port Authority of New York and New Jersey
Woodruff, Gregg	Langan Engineering and Environmental Services
Woods, Wilbur	New York City Department of City Planning
Worrall, Cortney	Metropolitan Waterfront Alliance
Wright, Leslie	Trust for Public Land
Y	
Yaggi, Marc	Waterkeeper Alliance
Yamada, Louise	LY Technical Research Advisors, LLC
Yeh, Daniel	University of South Florida
Young, Paddy	
Young, Tracy	
Z	
Zahn, Steve	
Zellenrath, Mark	
Zeppie, Christopher	The Port Authority of NY & NJ
Zimmerman, Rae	New York University-Wagner School
Zipprich, Edward	Borough of Red Bank
Zogran, Martin	Harvard GSD

H209 IN THE MEDIA

SCIENCE JOURNAL

SEPTEMBER 11, 2009

NEW YORK CITY BRACES FOR RISK OF HIGHER SEAS WITH OCEAN LEVELS RISING, COASTAL CITIES ASSESS COMPUTER FORECASTS AS THEY WEIGH FUTURE COSTS, EXPOSURE AND DANGERS

by ROBERT LEE HOTZ

NEW YORK -- When major ice sheets thaw, they release enough fresh water to disrupt ocean currents world-wide and make the planet wobble with the uneven weight of so much meltwater on the move. Studying these effects more closely, scientists are discovering local variations in rising sea levels -- and some signs pointing to higher seas around metropolitan New York.

Sea level may rise faster near New York than at most other densely populated ports due to local effects of gravity, water density and ocean currents, according to four new forecasts of melting ice sheets. The forecasts are the work of international research teams that included the University of Toronto, the National Center for Atmospheric Research in Boulder, Colo., Florida State University and the University of Bristol in the U.K., among others.

If global warming melts the Earth's ice caps, New York City could be awash in water. WSJ's Robert Lee Hotz reports how a possible rise in sea levels is putting New York at risk and what engineers are proposing to protect the populous city.

Scientists are laboring to make their predictions more reliable. While they do, New York has become an urban experiment in the ways that seaboard cities can adapt to climate change over the next century. For their part, the city's long-term planners are taking action but are trying to balance the cost of re-engineering the largest city in the U.S. against the uncertainties of climate forecasts.

"We can't make multibillion-dollar decisions based on the hypothetical," says Rohit Aggarwala, the city's director of long-term planning and sustainability.

Still, prompted by a possibility of floods from higher seas, some university-based marine researchers and civil engineers are debating whether New York ought to protect its low-lying financial district, port, power grid and subways with storm surge barriers like the mobile bulwarks that safeguard London, Rotterdam, Netherlands, and St. Petersburg, Russia. Engineering concepts for multibillion-dollar barriers around New York harbor were discussed here this week during the H209 Water Forum, an international conference on coastal cities and climate change, held by the Henry Hudson 400 Foundation at the Liberty Science Center.

Waves hit the jetty at Haulover Beach in Miami Beach, Fla., on Sept. 14, 1999 as Hurricane Floyd approached.

World-wide, cities in 40 countries depend on dikes or seawalls.

The seaside of the Netherlands is protected by storm surge barriers big enough to be seen from space. In Venice, Italy, engineers are completing a \$7 billion barrier to block high tides that flood the city 100 times a year. In New Orleans, construction crews have started a \$700 million barrier to help prevent hurricane floods. In California, it could cost \$14 billion to protect 1,100 miles of vulnerable urban coastline with reinforced sea walls and \$1.4 billion a year to maintain them, the Pacific Institute reported in March.

Unlike New York, though, those urban areas were built at or below sea level. Moreover, most of them also are on land that is sinking, adding to the danger posed by higher oceans.

While most of New York is above sea level, its subways, telecommunications cables, fiber-optics networks, plumbing and power mains aren't. "There is so much underground," says urban water management consultant Piet Dircke at Arcadis, one of four engineering firms that recently developed concepts for a storm surge barrier here. "The economic impact of flooding could be huge."

Indeed, some civil engineers argue the city already risks catastrophic storm flooding. "A storm surge is not really a global warming issue" for New York, says senior engineer Dennis Padron at Halcrow Inc., which helped design a 15-mile-long storm barrier in St. Petersburg. "It could happen tomorrow."

Under certain conditions, a hurricane now could generate a 30-foot-high storm surge and flood 100 square miles of New York. If ice melts and sea level rises, that risk increases. "If you have 20 inches of sea level rise, the edges of lower Manhattan would flood 20 times a year," says Douglas Hill, a consulting engineer at the School of Marine and Atmospheric Sciences at Stony Brook University. "It would look like Venice."

To be sure, the city that never sleeps is rarely dry even now. Every day, transit crews pump 14 million gallons of water from city subways. Authorities recently installed \$400 million of more powerful pumps. Last year, they started installing higher sidewalk grates -- disguised as street art, bike racks and benches -- to help keep storm water away from subway rails.

Since last summer, city planners have been persuading federal, state and regional agencies as well as private concerns to gradually upgrade vulnerable facilities here as part of routine capital upkeep. They are reassessing building codes, raising key equipment in flood zones and taking inventory of infrastructure at risk. But it can be hard to get some landlords to even move a fuse box from a damp basement to a more protected place. Any talk of storm surge barriers is premature, they say.

"Our burden of proof is somewhat higher," says the city's Mr.

13 SEPTEMBER, 2009

CRISISMANAGEMENT TIJDENS NY400

door Kristel Nijssen

NEW YORK - U denkt misschien dat NY400 vooral bestaat uit verwelkomingen, begroetingen, ontvangsten, toespraken, openingen en rondleidingen. Heel af en toe onderbroken door een boottocht over de Hudson. Dit is in feite maar een klein gedeelte van het programma.

NY400 biedt cultuur, lezingen, dialogen, job swaps, symposia en tentoonstellingen. De échte pijler van NY400 is het H209-forum met als onderliggend thema 'water challenge for coastal cities'. De casus is de toekomstige herinrichting van het havengedeelte van Manhattan en New Jersey. 'Reshaping the harbour dealing the same challenges.' U ruikt het al, dit gaat over geld.

Afgelopen vrijdag, de slotdag van H209-forum, kwamen Christopher Ward, executive Director Port Authority of New York & New Jersey, Frank Heemskerk, staatssecretaris van Economische Zaken en Ahmed Aboutaleb, burgemeester van Rotterdam tot zaken. 'We will initiate concrete steps to structure a cross-Atlantic cooperation to exchange waterfront experience and invite public and private stakeholders to participate.' Kortom, een aantal Nederlandse bedrijven, waaronder Arcadis, gaat voor de havendienst van NY een enorm gebied ontwikkelen.

Staatssecretaris Heemskerk zinspeelde in zijn toespraak op de grootte van het New Yorkse havengebied dat door Nederlandse bedrijven zal worden ontwikkeld en dat bij een volgend NY-jubileum bijvoorbeeld 'in aanwezigheid van koningin Amalia zou worden geopend'. De Rotterdamse burgemeester Ahmed Aboutaleb vertelde zijn NY'se collega's dat dankzij de hogesnelheidslijn de Randstad nu twee havens en twee vliegvelden heeft. Het forumonderwerp 'disaster management' heeft hem aan het denken gezet. Misschien moet er een verhoging komen waardoor metrostations niet zo snel onder water komen te staan.

In het kader van NY400 zijn er job swaps gaande, een uitwisseling van werkervaring, kennis en culturen van mensen met dezelfde baan in Amsterdam en in New York. De Amsterdamse vastgoedmakelaar Cor van Zadelhoff liep een paar dagen mee met de NY'se vastgoedtycoon Bill Rudin. De Inner circle van Amsterdam Zuid meets the happy few van Manhattan. Maar daarover morgen meer.

Aggarwala. "We have to be very clear that we do all the low-cost stuff first."

In their efforts, Mr. Aggarwala and his colleagues have been guided by a panel of city-appointed climate experts from NASA and Columbia University, whose report predicts that by 2080 New York will have the climate Raleigh, N.C., has today. By their estimate, it will be about seven degrees Fahrenheit warmer and sea level may be two feet higher, unless polar ice sheets do melt.

But such forecasts can be overtaken by new data. "You have to continually update plans as the models get better and the knowledge gets better and the unknowns become known," Mr. Aggarwala says.

Scientists are still trying to gauge how much of the Greenland ice sheet may melt and how quickly the West Antarctic Ice Sheet might respond to rising temperatures due to greenhouse-gas emissions. "When an ice sheet melts, sea level change is not uniform," says climatologist Jonathan Bamber at the U.K.'s University of Bristol who studies Antarctic ice sheets.

Generally, sea level today varies from place to place. The North Atlantic normally is two feet lower than the northern Pacific, because Atlantic sea water is colder, denser and saltier. This summer, weakened currents and persistent winds, for instance, caused sea level along the U.S. eastern seaboard to be two feet higher than normal, the National Oceanic and Atmospheric Administration reported last week.

By taking such factors into account, researchers earlier this year calculated that melting Greenland glaciers could shift ocean currents enough to make sea level along New York's 570 miles of shoreline an additional 20 inches higher than seas elsewhere. "It will cause the sea level along the coastal region of the Northeast U.S. to rise faster," says climate modeler Aixue Hu at the National Center for Atmospheric Research in Boulder, Colo.

So far, city planners are biding their time. "We are not planning for the worst case yet, but we are thinking about what happens if Greenland melts more quickly," says Adam Freed, the city's deputy director of long-term planning.

For Mr. Aggarwala, any changes in climate are best countered by incremental adjustments as science and circumstances demand. "If we have to shut the stock exchange for a day because water is running down Wall Street, that's not unprecedented," Mr. Aggarwala says. "A major snowstorm can do that. The key challenge is how quickly we can recover."

Robert Lee Hotz shares recommended reading on this topic and responds to reader comments at WSJ.com/Currents.

Email him at sciencejournal@wsj.com.

IN THE MEDIA
H209 ON THE INTERNET

When googling ‘H209 Forum’ you will find over 2000 direct hits, making H209 one of the most visible NY 400 projects on the internet. Here are the first 100 hits.

H209 Forum - Henry Hudson 400 | Amsterdam - New York | April ...

The H209 Forum will take place at Liberty Science Center, Jersey City, NJ, USA from September 9-10, 2009.
<http://www.henryhudson400.com/h209/>

H209 Water Forum - Henry Hudson 400 | Amsterdam - New York | April ...

Four hundred years later, the H209 Forum will commemorate this pioneering voyage by exploring the water challenges of the 21st century. ...
http://www.henryhudson400.com/hh400_project.php?id=21

H209 : Forum over watermanagement en klimaatverandering / Events ...

H209 : Forum over watermanagement en klimaatverandering.
<http://www.ny400.nl/programma-ny400/h209forumoverwatermanagementenklimaatverandering/>

H209 Waterforum in New York: Nederlands-Amerikaanse oplossingen ...

Het H209 Forum in het Liberty Science Center biedt een podium voor politieke prominenten, onder wie de door Obama aangestelde Lisa Jackson, ...
<http://water.dhv.com/NL/Nieuws/Pages/H209WaterforuminNewYork.aspx>

NY400 Week: H209 Forum - Water Challenges for Coastal Cities ...

The H209 forum will take place on September 9 and 10, at the Liberty Science Center (LSC) - across the Statue of Liberty, close to where Henry Hudson first ...
<http://www.ny400.org/events/ny400-week-h209-forum-water-challenges-for-coastal-cities>

H209 Waterforum in New York

4 aug 2009 ... Het H209 Forum in het Liberty Science Center biedt een podium voor politieke ... Maar het H209 forum gaat verder dan alleen praten. ...
<http://www.nieuwsbank.nl/inp/2009/08/04/Do11.htm>

H209 Forum

Dutch and American environmental, planning and engineering experts, and business and government decision and policy makers explore how major 21st century ...
<http://www.allconferences.com/conferences/2009/20090706155023/>

YouTube - Highlights: H209 Forum

At the H209 Forum American and Dutch experts, policy makers, and students, gathered to discuss the future of water management. At the closing of the Forum, ...
<http://www.youtube.com/watch?v=-t3EDewbLmw>

Groups: Sign in H209 Forum | LinkedIn

This group is formed to continue discussions and connections forged at H209 Forum on September 9th and 10th 2009, celebrating the 400th anniversary of Henry ...
<http://www.linkedin.com/groupInvitation?groupId=2298974&sharedKey=61BAAF426630>

QUADRICENTENNIAL CELEBRATION HIGHLIGHT: H209 Forum | Waterfront ...

27 Aug 2009 ... The H209 Forum will focus on finding solutions for all water challenges facing coastal cities. The issues include how to defend our cities ...
<http://www.waterfrontalliance.org/waterwire/2009/08/27/quadracentennial-celebration-highlight-h209-forum>

H209 Forum New York – Henry Hudson 400

Organised by the Henry Hudson Foundation, the H209 Forum is to convene on Wednesday, September 9 and Thursday, September 10, at the Liberty Science Center, ...
http://www.deltares.nl/xmlpages/page/deltares_en/newsitem/news-item/14921/h209-forum-new-york-henry-hudson

H209 Forum (Conference Alerts - academic conferences worldwide)

Dutch and American environmental, planning and engineering experts, and business and government decision and policy makers explore how major 21st century ...
<http://www.conferencealerts.com/seeconf.mv?q=ca1m3h3h>

H209 Forum | Summary | powered by RegOnline

H209 Forum. Wednesday, September 09, 2009 8:00 AM - Thursday, September 10, 2009 7:00 PM (Eastern Time). Liberty Science Center 222 Jersey City Boulevard ...
<http://www.regonline.com/builder/site/Default.aspx?eventid=752665>

H209: A WATER FORUM September 9-10, 2009

The H209 Forum is organized by the Henry Hudson 400 Foundation in cooperation with Liberty Science Center, Metropolitan Waterfront Alliance and the ...
http://www.netherlands-embassy.org/files/pdf/H209_-_Save_The_Date.pdf

The Architect's Newspaper - Diary

9 Sep 2009 ... H209 Forum Water challenges for coastal cities from the Dutch delta to New York Harbor ... H209 Forum. Jersey City, New Jersey. LECTURE ...
<http://www.archpaper.com/diary.asp?eventdate=9/9/2009&eventid=4614-38k>

NWP Weblog

Het eerste wat opvalt aan H209 Forum is de grote opkomst en het enthousiasme van de deelnemers. Om 7 uur's ochtends al staat een groep mensen te wachten ...
<http://www.waterland.net/index.cfm/site/NWP/pageid/0CE3D75A-FA14-830C-9DF1D17E5F929259/index.cfm/nwp%20weblog>

Places and Spaces: H209 competition

12 May 2009 ... the Henry Hudson 400 New York Foundation is holding the international H209 Forum on September 9-10 at Liberty Science Center where Dutch ...
<http://epd372.blogspot.com/2009/05/h209-competition.html>

THE HENRY HUDSON 400 FOUNDATION SALUTES THE QUADRICENTENNIAL ...

6 Aug 2009 ... Four hundred years later, on September 9th and 10th, the Henry Hudson 400 will host a special two-day business program entitled "H209 Forum" ...
<http://www.maximsnews.com/news20090806h209forumshandling10908060801.htm>

H209 New Generation Competition | Facebook

H209 New Generation Competition is the centerpiece of Henry Hudson 400's H209 Forum. For more info on HH400, visit: www.henryhudson400.com ...
<http://www.facebook.com/pages/H209-New-Generation-Competition/80901267311>

NWP | blog

Het eerste wat opvalt aan H209 Forum is de grote opkomst en het enthousiasme van de deelnemers. Om 7 uur's ochtends al staat een groep mensen te wachten ...
<http://www.nwp.nl/blog/index.php5>

TU Delft - Prijs voor oplossingen waterproblematiek steden

27 aug 2009 ... Op 9 en 10 september vormt het Liberty Science Center (New York City) het podium voor "H209 Forum: Water Challenges for Coastal Cities". ...
<http://www.tudelft.nl/live/pagina.jsp?id=co8ff489-b278-40d2-ad81-eeda9c0331e5&lang=nl>

DHV @ H209 Forum, September 9-10, 2009
7 Sep 2009 ... H209 Forum is part of the NY400 week, which celebrates the 400th anniversary of Henry Hudson's voyage from Amsterdam to New York. ...
<http://www2.dhv.com/Display.aspx?ID=2626>

PAROOL: ECONOMIE - Crisismanagement tijdens NY400
13 sept 2009 ... De échte pijler van NY400 is het H209-forum met als onderliggend thema ... Afgelopen vrijdag, de slotdag van H209-forum, kwamen Christopher ...
<http://www.parool.nl/parool/nl/30/ECONOMIE/article/detail/261683/2009/09/13/Crisismanagement-tijdens-NY400.dhtml>

Hans Brinker and Lady Liberty meet on the Hudson: Dutch and ...
29 Jun 2009 ... Dutch and American business, government, and policy decision makers will come together to share expertise at the H209 Forum, to be held at ...
<http://www.ny400.org/pressroom/hans-brinker-and-lady-liberty-meet-on-the-hudson-dutch-and-american-experts-face-the-water-challenges-of-the-21st-century>

Riverkeeper: Email - July News from Riverkeeper
On September 9 and 10, 2009, the H209 Forum will commemorate the 400th anniversary of ...
http://river.convio.net/site/MessageViewer?em_id=2261.o

CAD Magazine | Laatste nieuws | Studente Anke Poelstra wint New ...
3 sept 2009 ... Op 9 en 10 september vormt het Liberty Science Center (New York City) het podium voor 'H209 Forum: Water Challenges for Coastal Cities' ...
<http://www.cadmagazine.nl/blog/laatste-nieuws/studente-anke-poelstra-wint-new-generation-competition>

Prijs TU-studente voor oplossingen waterproblematiek steden ...
Op 9 en 10 september vormt het Liberty Science Center (New York City) het podium voor "H209 Forum: Water Challenges for Coastal Cities". ...
<http://www.vromtotaal.nl/milieu-magazine/nieuws/prijs-tu-studente-voor-oplossingen-waterproblematiek-steden/>

=> American Water President of Regulated Operations to Speak at ...
American Water President of Regulated Operations to Speak at H209 Forum ... Presented by Henry Hudson 400, the H209 Forum is a two-day conference of Dutch ...
<http://www.finanznachrichten.de/nachrichten-2009-09/14861703-american-water-president-of-regulated-operations-to-speak-at-h209-forum-004.htm>

WaterWire 06-03-09
18 Jul 2009 ... Dutch Planners Visit NYC to Prepare for H209 Forum ... Stay tuned to future editions of WaterWire for more details about H209 Forum. ...
<http://archive.constantcontact.com/fs021/1102224464492/archive/1102591167586.html>

WATER CHALLENGES FOR COASTAL CITIES - FROM THE DUTCH DELTA TO NEW ...
Four hundred years later, the H209 Forum will commemorate ... The H209 Forum is organized by the Henry Hudson 400 Foundation in cooperation with Liberty ...
http://www.avbr.nl/blog/media/Actueel/files/hh_brochureh209_1_1_1.pdf

Ladies and gentleman,
H209 Forum, New York, September 10th 2009. Water Challenges for Coastal Cities – From the Dutch Delta to New York Harbor. Ladies and gentlemen, ...
<http://www.zuid-holland.nl/documenten/opendocument.htm?lpos=138208981&llvol=0>

SPTS #1
3 juni 2009 ... De Stichting Henry Hudson 400 organiseert een sprankelende waterconferentie in het Liberty Science Center in New Jersey: H209 Forum, ...
http://www.van-vugt.com/HH400/new_page_1.htm

Climate Change News July 17, 2009 | Environmental and Energy Study ...
... government, and policy decision makers will come together to share expertise at the H209 Forum, ...
http://www.eesi.org/ccn_071709 - 48k

Calendar: Past Meetup list - Metropolitan Waterfront Alliance ...
Four hundred years later, on September 9 and 10, the H209 Forum will commemorate this pioneering voyage by exploring the water challenges of the 21st ...
http://www.meetup.com/WaterfrontAlliance/calendar/past_list/

Dag van de Duurzaamheid - Rotterdam Climate initiative
9 sept 2009 ... Op het speciale "H209 Forum: Water Challenges for Coastal Cities" komt ook de Rotterdamse klimaataanpak aan bod. ...
http://www.rotterdamclimateinitiative.nl/NL/Nieuws/9_9_/_Dag_van_de_Duurzaamheid/?cid=29&news_id=345&catid=1

AD Rotterdam - Aboutaleb ook in New York (429149)
10 sept 2009 ... De burgemeester opent in New York het H209 Forum. Daar wordt gesproken over klimaatproblemen van deltagebieden als New York en Rotterdam. ...
<http://www.ad.nl/ad/nl/1038/Rotterdam/article/detail/429149/2009/09/10/Aboutaleb-ook-in-New-York.dhtml>

Zeeburg Nieuws / Klimaatverandering / Nederland onder water?
De burgemeester opende daar het H209 Forum. Tijdens de waterconferentie presenteerde de burgemeester het boek 'Connecting Delta Cities' aan Robert Kennedy ...
http://www.zeeburgnieuws.nl/nieuws/kv_nederland_onder_water.html

YouTube - DutchNY400's Channel
13 Sep 2009 ... At the H209 Forum American and Dutch experts, policy makers, ... H209 Forum was part of NY400 week, celebrating Dutch and American ...
<http://www.youtube.com/user/DutchNY400>

New Media Blog » Internships
All expenses paid invitation to international H209 Forum on September 9-10 at ... New Generation Competition is the centerpiece of the H209 Forum for ...
<http://newmedia.purchase.edu/?cat=8>

2009 | 36 Burgemeester Wethouder Jeugd, Gezin, Onderwijs en Sport ...
29 sept 2009 ... burgemeester opende daar ondermeer het H209 Forum. Nederlandse en Amerikaanse milieu- en water-professionals kwamen daar bijeen om - in het ...
<http://www.bds.rotterdam.nl/dsc?c=getobject&s=obj&!sessionid=1dvl5Ulyp3M4aGBFhXOqKEX@lWdpDcXH5lf8xG1nm b51BNDacGa19bs1WzcV!js3&objectid=205040&!dsname=bsdzi>

Google Directory - Science > Environment > Conferences

H209 Forum: Water Challenges for Coastal Cities from the Dutch Delta to New ...
The H209 Forum will take place at Liberty Science Center, Jersey City, NJ, ...
<http://www.google.com/Top/Science/Environment/Conferences/>

Henry Hudson 400 H209 Forum | Climate Week
Four hundred years later, on September 9 and 10, H209 Forum will commemorate this pioneering voyage by exploding water challenges facing coastal cities in ...
<http://www.climateweeknyc.org/events/2009-09-09/henry-hudson-400-h209-forum>

Nederlands-Amerikaanse oplossingen voor wateruitdagingen | Water ...
Het H209 Forum in het Liberty Science Center biedt een podium voor politieke prominenten, onder wie de door Obama aangestelde Lisa Jackson, ...
<http://www.milieufocus.nl/nieuws/water/nederlands-amerikaanse-oplossingen-voor-wateruitdagingen.html>

Spektakel op R'Uitmarkt

9 sept 2009 ... ter opent daar het H209 Forum. Daar wordt gesproken over de. (klimaat-)problemen van delta- gebieden als New York en Rot- terdam. ...

http://www.deweekkrant.nl/files/pdfarchief/HZU/20090909/HZU_HZY-1-01_090909_1.pdf

Atlantische Oceaan een stukje smaller

18 september 2009 - Tijdens het H209 Forum van vorige week, een congres in New ... Op het H209 Forum hebben we de tijd gehad om onze benadering eens goed op ...

<http://www2.dhv.com/Display.aspx?ID=2646>

Water Research & News

17 Mar 2009 ... All expenses paid invitation to international H209 Forum on ... New Generation Competition is the centerpiece of the H209 Forum for business ...

<http://waterresearch.blogspot.com/>

H209 Forum

TAGS: Tags: Amsterdam, conference, Events, H209 Forum, henry hudson, Netherlands, New York City, NY400, Rotterdam, social media, sustainable future, ...

<http://blog.ogilvypr.com/tag/h209-forum/>

Spotlight Vol. 8, No. 17: Water In, Water Out: Learning From The ...

... RPA recently hosted a delegation of Dutch designers, planners, and engineers on their own journey of discovery as part of the two-day H209 Forum: Water ...

<http://www.rpa.org/2009/10/spotlight-vol-8-no-17-water-in-water-out-learning-from-the-dutch.html>

Water Forum to Celebrate Henry Hudson's Discovery - American ...

28 Aug 2009 ... This fall, Dutch and American water experts will team up to host the H209 Forum celebrating the 400th Anniversary of Henry Hudson's ...

http://www.asce.org/pressroom/news/grwk/event_release.cfm?uid=5974

H209 Forum 9

Herramientas. ¿Sabes de un evento? Inicio · Boletín de eventos técnicos H209

Forum 9. H209 Forum 9. 9 - 10 September 2009. On September 9-10, ...

http://cenca.imta.mx/index.php?option=com_content&view=article&id=245:h209-forum-9-&catid=46:eventos&Itemid=105

Het Melkmeisje, powergirl van NY400

Donderdag is de tweede dag van het H209-forum, georganiseerd door onder meer het Netherlands Water Partnership (NWP) en de stichting. Henry Hudson 400. ...

http://www.nwp.nl/_docs/NWP_in_de_media/20090911-Parool-Het-Melkmeisje-powergirl-van-NY400.pdf

PAROOL: BINNENLAND - Het Melkmeisje, powergirl van NY400

10 sept 2009 ... Donderdag is de tweede dag van het H209-forum, georganiseerd door onder meer het Netherlands Water Partnership (NWP) en de stichting Henry ...

<http://www.parool.nl/parool/nl/224/BINNENLAND/article/detail/261455/2009/09/10/Het-Melkmeisje-powergirl-van-NY400.dhtml>

Open Directory - Science: Environment: Conferences

15 Oct 2009 ... H209 Forum: Water Challenges for Coastal Cities from the Dutch Delta to New York Harbor - The H209 Forum will take place at Liberty Science ...

<http://www.dmoz.org/Science/Environment/Conferences/>

Nautilus International Development Consulting: Who We Are - News ...

At the H209 Forum: Water Challenges for Coastal Cities - From the Dutch Delta ... For information about the H209 Forum, please visit www.henryhudson400.com. ...

<http://www.nautilus-international.com/news.html>

PROGRAMMA

Het internationale H209 Forum From the Dutch Delta to NY Harbor, Water Challenges ... H209 Forum is een niet-traditionele conferentie die gericht is op het ...

<http://www.ny400.nl/files/brochure-NY400.pdf>

Prins van Oranje en Prinses Máxima bij viering New York 400

11 aug 2009 ... H209: Forum over Watermanagement en Klimaatverandering · Harbor Day · Hudson River Museum · Job Swap · Light on New ...

<http://www.stichtingmilieunet.nl/andersbekekenblog/agenda/prins-van-oranje-en-prinses-maxima-bij-vinger-new-york-400.html>

Learning to Battle Rising Seas from the Dutch - Last News from ...

Held by the Henry Hudson 400 Foundation, the H209 Forum will bring together leaders from both the U.S. and the Netherlands, a country that has long battled ...

http://www.earth-stream.com/Earth/Continents/Europe/Learning-to-Battle-Rising-Seas-from-the-Dutch_18_197_666_200876.html

Andrew Willner (fishandships) on Twitter

... please mark your calendars for the H209 Forum Set 9-10 <http://www.henryhudson400.com>...5:55 AM Jul 16th from web; <http://bit.ly/nBroj> Please vote for Deb ...

<http://twitter.com/fishandships>

QUADRICENTENNIAL CELEBRATION HIGHLIGHT: New Generation Competition ...

27 Aug 2009 ... These talented students will join the top planners, engineers, designers and government leaders at the H209 Forum on September 9 and 10. ...

<http://www.waterwire.net/waterwire/2009/08/27/quadricentennial-celebration-highlight-new-generation-competition>

forum

Shapiro announced the guide today at the H209 Forum in Jersey ... 102. Munsys, Inc. Announces the Release of Munsys 10.1.1 Service Pack ...

<http://www.vectormedia.com/component/taxonomy/forum?start=100>

Water Online: Digital Marketplace for the water, wastewater, and ...

H209 Forum – Water Challenges for Coastal Cities From the Dutch Delta to New York Harbor. Liberty Science Center, Jersey City, NJ. September 9-10, 2009. ...

<http://www.wateronline.com/EventsCalendar.mvc/EventDetail/31592>

Forum to Consider Water Challenges Facing Coastal Cities

On September 9 and 10, the H209 Forum in New York City will celebrate the 400th Anniversary of Henry Hudson's discovery of New York Harbor and the Hudson ...

<http://199.73.36.165/ConferencesTraining/ConferencesEvents/ForumWaterChallenges/>

News and new resources for GEMI members

28 Jul 2009 ... H209 Forum: September 9-10, 2009, New York, NY. Finding Solutions for Coastal Cities is the main theme of H209. ...

<http://www.gemi.org/resources/GEMINews-July09-public.htm>

e-Oculus » Search Results » holl

The H209 Forum commemorated Henry Hudson's pioneering voyage by exploring the water challenges of the 21st century. Courtesy Henry Hudson 400 ...

<http://www.aiany.org/eOCULUS/newsletter/index.php?s=holl>

NY400 Week Overview English

H209: Forum on water management and climate change. The H209 International Water Forum will bring today's water experts together with tomorrow's engineers ...

<http://www.scribd.com/doc/19142963/NY400-Week-Overview-English>

09/09/2009: Smart Growth Solutions Can Help Coastal, Waterfront ...

9 Sep 2009 ... Shapiro announced the guide today at the H209 Forum in Jersey City, N.J. The Forum celebrates the 400th anniversary of Henry Hudson's ...

<http://yosemite.epa.gov/opa/admpress.nsf/doc6618525a9efb85257359003fb69d/a64af232d78277108525762c004e3f88!OpenDocument>

Water Research & News: April 2009

All expenses paid invitation to international H209 Forum on September 9-10 at ... New Generation Competition is the centerpiece of the H209 Forum for ...

http://waterresearch.blogspot.com/2009_04_01_archive.html

Smart Growth Targets Waterfront Communities, Climate Change ...

11 Sep 2009 ... Shapiro announced the guide at the H209 Forum in Jersey City, N.J. The forum celebrates the 400th anniversary of Henry Hudson's exploration ...

<http://www-online.com/Articles/2009/09/11/Smart-Growth-Targets-Waterfront-Communities-Climate-Change.aspx>

EarthNews » Archive » New EPA guide helps coastal cities prep for ...

10 Sep 2009 ... the remaining problem really is closely interrelated with our patterns of development," Shapiro said at the opening of the H209 Forum. ...

<http://www.earthportal.org/news/?p=2736>

Ogilvy PR 360 Digital Influence Blog

TAGS: Tags: Amsterdam, conference, Events, H209 Forum, henry hudson, Netherlands, New York City, NY400, Rotterdam, social media, sustainable future, ...

<http://blog.ogilvypr.com/page/4/>

Finance and Investment Conference Archived | conferences legal ...

H209 Forum Dutch and American environmental, planning and engineering experts, and business and government decision and policy makers explore how major 21st ...

<http://www.econference.com.au/Category/archived-conferences-in-australia/Finance-and-Investment-Conferences-Archived/17.html>

WaterWire 04-08-09

4 Aug 2009 ... Present your ideas for an innovative coastline project in the Sustainability for Coastal Cities Competition at the H209 Forum this September ...

<http://archive.constantcontact.com/fs021/1102224464492/archive/1102527141833.html>

Clean Battery Technology, Bio Fuel, & Low Electricity Motors ...

Hank Habicht Moderates H209 Forum, Global Water Conference in New York City. Thomas Cain announced as a Panelist at the DTE Electrical Vehicle Conference in ...

<http://www.sailvc.com/portfolio-energy>

Water Conference Bridges Atlantic | ENR: Engineering News Record ...

16 Sep 2009 ... ride across New York Harbor from Manhattan—the H209 Forum, "Water Challenges for Coastal Cities," struck an aquatic note from the start.

http://enr.ecnext.com/coms2/article_inwd090916H209WaterCon-1

What the Netherlands can teach Florida - Other Views - MiamiHerald.com

29 Jul 2009 ... Recognizing this urgency, the Netherlands is hosting water experts from around the world at an H209 Forum in New York City Sept. ...

<http://www.miamiherald.com/opinion/other-views/story/1161672.html>

Deltares - Enabling Delta Life

Rijkswaterstaat. News. 07-09-2009. H209 Forum New York – Henry Hudson 400. Organised by the Henry Hudson Foundation, the H209 Forum ... 14-07-2009 ...

http://www.deltares.nl/xmlpages/page/deltares_en/

SMART GROWTH SOLUTIONS CAN HELP COASTAL, WATERFRONT COMMUNITIES ...

Shapiro announced the guide today at the H209 Forum in Jersey City, N.J. The Forum celebrates the 400th anniversary of Henry Hudson's exploration of the ...

<http://www.allbusiness.com/science-technology/earth-atmospheric-science-meteorology/12889714-1.html>

Events - UseWater.NET - Portable Water Filters, Stainless Steel ...

09 H209 Forum Jersey City NJ 12 American Rainwater Catchment Systems Association National Conference Decatur GA 14 The Second International Environmental ...

<http://www.usewater.net/events.aspx>

Waterfront Alliance | Your waterfront. Your voice.

9 Sep 2009 ... Four hundred years later, on September 9 and 10, the H209 Forum will commemorate this pioneering voyage by exploring the water challenges of ...

<http://www.waterwire.net/calendar/2009-09-09>

IWA Publishing - 2009/07/07 global news digest

7 Jul 2009 ... The H209 forum will bring together Dutch and American businesses, city, government and other leaders to discuss key water issues such as ...

<http://www.iwapublishing.com/template.cfm?name=gndjulo709>

Quarterly Newsletter

H209 Forum in Jersey City, N.J. The Forum celebrates the 400th anniversary of Henry Hudson's exploration of the Hudson River Valley ...

<http://www.abcep.org/NL/October2009.pdf>

GreenTech Venture Capital Firms, Green Innovation - SAIL Venture ...

Hank Habicht Moderates H209 Forum, Global Water Conference in New York City - 09/10/09. Download PDF. Walter Schindler, Environmental Investment ...

<http://www.sailvc.com/events>

Mannahatta » Blog Archive » Upcoming Mannahatta events in and ...

10 Jul 2009 ... At the H209 Forum at Liberty State Park, Eric Sanderson will speak about the waterways around Manhattan Island 400 years ago. ...

<http://themannahattaproject.org/news/upcoming-mannahatta-events-in-new-york-city/>

Received Project Proposals NY400

The H209 Forum will highlight water issues of the 21st Project description: In addition to the H209 Forum, a fleet of Dutch traditional – flat bottom ...

<http://biodata.asp4all.nl/andreas/2008/09012f978050f857/09012f978050f857.pdf>

The Future of Open Spaces in Downtown LA - The Architect's ...

Los Angeles, California. SYMPOSIUM. H209 Forum. Jersey City, New Jersey. LECTURE. Why Projects Fail - How to Avoid the Pitfalls. New Haven, Connecticut ...

<http://www.archpaper.com/diary.asp?eventdate=9/9/2009&eventid=4567>

General | River Network

Pacific Northwest Cooperators' Roundtable, Event. Geomorphic and Ecological Fundamentals for River and Stream Restoration, Event. H209 Forum, Event ...

<http://www.rivernetwork.org/category/programs/general?page=5>

Working With Water - 09 SEP 2009

9 Sep 2009 ... H209 Forum, New York, USA. Geographic focus – Middle East: Greening the golden desert Norrie Hunter takes a look at recent developments and ...

<http://www.scribd.com/doc/18988918/Working-With-Water-09-SEP-2009>

Laura Shin's Climate Chronicles | SolveClimate.com

Held by the Henry Hudson 400 Foundation, the H209 Forum will bring together leaders from both the U.S. and the Netherlands, a country that has long battled ...

<http://solveclimate.com/blog/laura-shin>

MaximsNewsWATER (MaximsNewsNetwork)

THE HENRY HUDSON 400 FOUNDATION SALUTES THE QUADRICENTENNIAL VOYAGE OF HENRY HUDSON WITH A TWO-DAY WATER PROGRAM ENTITLED 'H209 FORUM', by KATHY SHANDLING: ...

<http://www.maximsnews.com/water.htm>

TWIW - September 4, 2009

On September 9 -10, the H209 Forum in New York City will celebrate the 400th Anniversary of Henry Hudson's discovery of New York Harbor and the Hudson River ...

<http://199.73.36.165/GovernmentAffairs/TWIW/TWIW09042009.htm>

Maroc ahmed aboutaleb - AffaireMaroc.com

The Future on International Water Policy- US and Dutch leaders meet at H209 Forum Here Ahmed Aboutaleb (M · Tege-naanval ingezet tegen Burgemeester van ...

<http://www.affairemaroc.com/maroc-ahmed-aboutaleb.html>

A View From The Hook: EPA Announces Guide: Smart Growth for ...

16 Oct 2009 ... As Waterwire states, "the guide was announced at the H209 Forum on September 9 and 10 that celebrated the 400th anniversary of the arrival ...

<http://aviewfromthehook.blogspot.com/2009/10/epa-announces-guide-smart-growth-for.html>

NJ Conferences, Conventions, Trade Shows and Meetings

Event, H209 Forum. Begins, September 9, 2009. City, Jersey City. Country, USA. Event, Emerging Principles and Practices of Computer Science and Information ...

<http://www.allconferences.com/Regional/NJ/>

- 206k - In cache - Gelijkwaardige pagina's

Learning to Battle Rising Seas from the Dutch | SolveClimate.com 27 Aug 2009 ... Held by the Henry Hudson 400 Foundation, the H209 Forum will bring together leaders from both the U.S. and the Netherlands, a country that ...

<http://solveclimate.com/blog/20090827/learning-battle-rising-seas-dutch>

Deltares - News

H209 Forum New York – Henry Hudson 400. 19-10-2009. Several Deltares experts are involved in the organisation of a number of sessions > Read more ...

<http://www.deltares.com/en/news?page=2>

Waterfront Alliance Presents | Waterfront Alliance

18 Jul 2009 ... H209 Forum (Henry Hudson 400) (Event). Wed, 09/09/2009 - 8:00am - Thu, 09/10/2009 - 7:00pm. HENRY HUDSON 400 In 1609, Captain Henry Hudson ...

<http://www.waterfrontalliance.org/category/event-type/waterfront-alliance-presents>

Regional Plan Association (Twitter) - Cyburbia - urban planning ...

RegionalPlan: Learning from the Dutch for the NY-NJ harbor: designing with water at the H209 Forum workshops <http://bit.ly/AQEyU>. Categories: Twitter ...

<http://www.cyburbia.org/aggregator/sources/148?page=2>

e-Oculus » Search Results » panelists

Event: H209 Forum Location: Liberty Science Center, NJ, 09.09-10.09. Organizers: Henry Hudson 400; Liberty Science Center; Metropolitan Waterfront Alliance; ...

<http://www.aiany.org/eOCULUS/newsletter/index.php?s=panelists>

All Types -- bijeenkomst - meeting Climate changes Spatial ...

Four hundred years later, the H209 Forum will commemorate this pioneering voyage. Finding Solutions for Coastal Cities is the main theme of H209. ...

http://programmabureauklimaat.nl/proz/workspaces/calendar/event_list.asp?wid=1&actual=0

Places and Spaces: May 2009

... the Henry Hudson 400 New York Foundation is holding the international H209 Forum on September 9-10 at Liberty Science Center where Dutch and American ...

http://epd372.blogspot.com/2009_05_01_archive.html

Eventos

H209 Forum 9 - 17th Congress of the Asia and Pacific Division of the International Association of Hydraulic Engineering and Research · CERIE2010 ...

http://cenca.imta.mx/index.php?option=com_content&view=category&layout=blog&id=46&Itemid=78&limitstart=9

Water Sings by HMP (watersings) on Twitter

Report from World Water Week at Stockholm <http://bit.ly/IHvOs9>:40 AM Aug 27th from web; RT @columbiawater Check out the H209 Forum about water challenges ...

<http://twitter.com/watersings>

See more issues - Water Environment Federation: The Water Quality ...

On September 9 -10, the H209 Forum in New York City will celebrate the 400th Anniversary of Henry Hudson's discovery of New York Harbor and the Hudson River ...

http://www.wef.org/GovernmentAffairs/page_archives.aspx?fid=552

A View From The Hook

As Waterwire states, "the guide was announced at the H209 Forum on September 9 and 10 that celebrated the 400th anniversary of the arrival of Henry Hudson ...

<http://aviewfromthehook.blogspot.com/>

New Orleans Ladder: Vendredi

H209 Forum - Water Challenges for Coastal Cities~NY400 · Report: N.O. flood controls unreliable, Public still waiting for Obama Administration response 3 ...

<http://noladder.blogspot.com/2009/09/vendredi.html>

Archive News & Video for Thursday, 03 Sep, 2009 | Reuters.com

3 Sep 2009 ... American Water President of Regulated Operations to Speak at H209 Forum 11:00 AM EDT. Research and Markets: High Performance Trading: 50 ...

<http://www.reuters.com/resources/archive/us/20090903.html>

Water bills may be pared by \$7,50 a month in Saxonburg area

... American Water Chief Financial Officer to Speak at SEC Hot Topic Institute · American Water President of Regulated Operations to Speak at H209 Forum ...

<http://www.istockanalyst.com/article/viewiStockNews/articleid/3615521>

Calendar of Events

October 2009. October 26: 9th Annual Port Industry Day The Port of New York-New Jersey Intrepid at Pier 86, New York, NY ...

<http://www.nymar.org/calendar.html>

***NEW GENERATION
COMPETITION***

NEW GENERATION COMPETITION

To encourage the water managers of the future, Henry Hudson 400 created a competition for undergraduates in universities in New York, New Jersey and The Netherlands. The goal for students was to create an innovative solution to the water challenges facing coastal cities. The competition consisted of two rounds. For the 1st stage, students were asked to submit a one page proposal describing the problem and the solution. Their submissions were judged by a committee of 5 consisting of three professors and two business persons.

Stage one produced 11 finalists. For stage two, students were required to submit more detailed proposals, providing quantitative evidence and demonstrating awareness of economic realities.

A point system was based on 4 criteria: Creativity, Viability, Methodology and Presentation.

FIRST PRIZE

Anke Poelstra, Technical University Delft:

Rain Water for the Rest Room - To use rainwater collected on roofs for flushing toilets to conserve water, reduce runoff and raise public awareness of a more sustainable water cycle.

SECOND PRIZE

Ellen Speace, Rutgers University

Green Infrastructure and Stormwater Management - To manage stormwater runoff through green infrastructure and the use of hydrodynamic separators to store water during peak rainfall and release it during dry weather.

THIRD PRIZE

Brendan McKeon, Columbia University:

Private Infrastructure as Source Control: Green Roofs - To control excessive rainwater runoff through building green roofs combined with an incentive program to encourage private investment in green roofs.

NGC COMMITTEE MEMBERS:

Alan Blumberg, Director of the Center for Maritime Studies at Stevens Institute

Malcolm Bowman, Professor of Oceanography at SUNY Stony Brook

William Solecki, Director of the CUNY Institute for Sustainable Cities and co-chair of the NYC Panel on Climate Change

Tara Gallagher, a private consultant on infrastructure and former vice president of infrastructure at Arcadis and Parsons Brinckerhoff

Gary Rancourt, Business Development, Big Green Innovations at IBM.

THE NEW YORK HARBOR SCHOOL SCHOLARSHIP

The Urban Assembly New York Harbor School, located in Brooklyn, bases its college preparatory curriculum on maritime experience: science, economics, literature, art, technology, culture and history. It also instills in its students the ethic and skills of stewardship. In August 2010, New York Harbor School will move to its new location on Governors Island, surrounded by the harbor that is the foundation of their studies.

The Henry Hudson Scholarship for a deserving 2009 graduate who will pursue a career as a water professional goes to: Asha Armstrong. Born in Belize, and immigrated to the United States as a child, Asha pursued academic achievements in addition to extracurricular activities. She successfully served as a junior crew member on a 10-day trip from Boston to New York City aboard the historic schooner Lettie G. Howard. Additionally, Asha was one of 12 students who successfully completed the Mountaintop to Tap trek in the summer of 2007, walking and rowing from the Catskills to New York City over 21 days to educate the public about watershed preservation. Finally, during her senior year, Asha co-authored and published a scientific study about the growth rate of fish as part of an internship at the River Project. Asha will attend SUNY Stony Brook in the fall majoring in Marine Science.

NAF / HENRY HUDSON 400 FELLOWSHIPS IN WATER MANAGEMENT

Celebrating 400 years of Dutch-American friendship, The Netherland-America Foundation and the Henry Hudson 400 Foundation have established two NAF/HH400 Fulbright Fellowships in Water Management for study in the Netherlands or in the USA, to be offered for the academic years starting in 2009 and 2010.

The two 2009 NAF/HH400 scholarships have been awarded to:

Annie Winter, a 2009 graduate of the University of Pennsylvania, will explore factors that influence the success of national and international non-governmental organizations whose projects focus on flood risk assessment and flood impact mitigation in South and Southeast Asia. Her project will be multidisciplinary in scope, evaluating project performance from both a scientific and socio-political perspective.

Morgan Levy, a 2009 graduate of Sarah Lawrence College, plans to profile two farms, one in the Dutch Delta, the other in California's Bay Delta to compare and contrast two differently managed deltas in the face of climatic and ecological change. Travel to the Netherlands will provide Ms. Levy the opportunity to learn about a unique model delta, in order to further explore the primarily agricultural California Bay delta that is the focus of her current studies, and which faces massive redesign through human engineering, or alternately, natural disasters.

Both fellows will conduct independent research during the 2009/2010 academic year in the Civil Engineering Department at Delft University of Technology, a leading world center for advanced water management studies.

www.tudelft.nl

***EXHIBITION
AT THE LIBERTY
SCIENCE CENTER***



Liberty State Park, 222 Jersey City Boulevard
Jersey City, NJ 07305 USA

T: 201 . 451 . 0006
F: 201 . 451 . 6383

E: experienceservices@lsc.org

Breakthroughs: Managing Water in the 21st Century

Introduction

Managing Water in the 21st Century will focus on how people across the globe face new challenges in managing water in the coming decades. Two major categories of hurdles are potentially threatening the well-being of billions of people and will be the focus of the exhibition:

- Too Much Water – Communities and major metropolitan areas must manage excessive sea water from storm surges and sea level rise due to global climate change as well as river flooding
- Too Little Water – The demands for clean fresh water in some communities exceeds the supply; Fresh water is used in agriculture, human consumption, business and environmental conservation

Managing Water in the 21st Century will look at these issues and the new solutions and technologies that are being used to solve these problems.

The Exhibition

Managing Water in the 21st Century will divide the 2,500 sq ft Breakthroughs space into the following zones and exhibition experiences:

Zone 1: Introduction

This zone introduces the theme of the exhibition with a large graphic and a sculptural display that represents the relative amounts of Earth's ocean water versus available fresh water for human consumption, the latter being less than 1% of Earth's total water reserves while the former is 98%.

Zone 2: Water Rising Challenges

The gallery's landmark exhibit is a large interactive model of a coastal city that experiences flooding from storm surges—mirroring the effect that could occur for such events as an hurricane impacting the NJ/NYC area. Visitors will simulate the effects of big storms by releasing “fluid” materials that flood the landscape. Storm surge barriers, based on the Hollandse IJssel and Maeslant barriers in the Netherlands are then manipulated by visitors to control the floods. Graphic panels interpret the affects of sea level rise and the overdue hurricane we should be preparing for in the New York / New Jersey region. Animations from Google Earth may show images of flooding at selected global sites (major coastal cities and coastlines) for different magnitudes of storms and scenarios of sea level rise. Additionally the issue of river flooding – a major issue annually in the United States (including NJ) and elsewhere—will be covered. We will indicate the areas that experience perennial flooding.

Zone 3: Fresh Water Distribution and Consumption

A display of water bottles indicates the actual relative quantities of fresh water used daily by Americans, Japanese, Germans, the Dutch, Ethiopians and Mozambicans. Daily per capita volumes range from 157 gallons to 1 gallon, dramatically demonstrating the “water poverty” seen in some regions. Graphic panels interpret differences in global domestic, agricultural and industrial fresh water consumption and the problems faced in different regions. A budgeting water activity shows the volumes of water used in different domestic activities like bathing and flushing toilets. Higher level concepts like global water treatment and sanitation are interpreted graphically. A Q-drum and other artifacts demonstrate how various peoples manage their access to clean fresh water, underscoring the problems faced by different global regions.

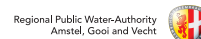




H209 was organized by the Henry Hudson 400 Foundation in partnership with Liberty Science Center, Metropolitan Waterfront Alliance and Netherlands Water Partnership. It was part of the NY400 week, which celebrated the 400th anniversary of Henry Hudson's voyage from Amsterdam to New York Harbor and the venerable bonds between the Netherlands and the United States.

For more information, and outlines of sessions: www.henryhudson400.com/h209

H209 thanks many sponsors for their generosity:



City of Rotterdam

