

International Workshop: ' Connecting Delta Cities '

About coastal cities, climate change and adaptation; A global exchange of experiences

Venue: 401 Park Ave, New York, NY 10016, United States, +1 212-683-9555
New York City, June 9-10th 2009

The potential impacts of climate change on large coastal cities have been addressed in the scientific literature over the past 10-15 years. Climate Change and sea level rise may exacerbate flood risks from storm surges as well as peak discharges from rivers. As a consequence, the vulnerability of infrastructure, people, nature and other economic sectors is expected to increase. Socio-economic trends may further amplify possible consequences from future floods as more people are moving towards urban coastal areas and capital is continuously invested in ports, industrial centers and financial businesses in flood-prone areas. By 2040, more than 50% of the global population is expected to live in urban coastal areas.

Adaptation to climate change and flood risks entails a broad portfolio of options. Adaptation strategies can be targeted to managing the probability of a flood or to minimizing its consequences.

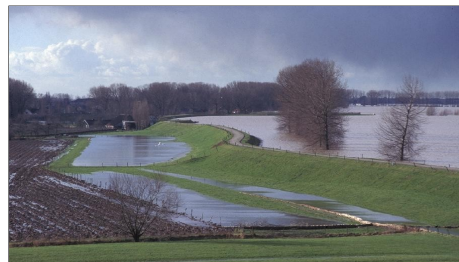
Furthermore, adaptation policies may address, evacuation schemes, improved communication to civilians and



Adaptation: Urban development 21ft above sea level

C-40: EXCHANGE OF KNOWLEDGE

The C-40 (<http://www.c40cities.org/>), initiative by President Bill Clinton, recognizes the central role cities have to play in tackling climate change. C-40 strongly supports the exchange of information and knowledge across coastal cities. The cities include New York, Jakarta, London, Tokyo, Sao Paolo and Rotterdam. Although C-40 initially focused on mitigating greenhouse gases, adaptation is now also increasingly regarded as a key issue.



How high can we construct flood walls and dikes?

GOAL OF THE WORKSHOP

The workshop will provide a stage for the state of the art science and policies in the area of adaptation to climate change in several key global cities. Innovations and bottlenecks in adaptation policies will be addressed as well as areas with potential for extended knowledge exchange.

The outcome of the meeting are two books. One book for a broad audience (Sep. 2009) and one in depth scientific book (Mar 2010). Both books describe the key issues related to successful implementation of adaptation strategies. To illustrate the development and implementation of adaptation measures, the books provide a comparative assessment between the cities of Rotterdam, Jakarta and New York showing climate change effects, solutions and their 'pros and cons'

Program Workshop NYC, June 9-10 (version April 20th)

Day 1 June 9th 'Adaptation research and policy in coastal cities'

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| Introduction | | |
| 9.00-9.10 AM | Welcome | Malcolm Bowman & William Solecki |
| 9.10-9.30AM | Each city representative (Jakarta; NYC, R'dam) makes a statement of 5 min on the main adaptation challenge for each city | Arnoud Molenaar (City of R'dam) Adam Freed (City of NY) Raymond Kemur (City of Jakarta) |
| 9.30 –9.45AM Movie: Connecting Delta Cities | | |
| Session 1(Morning): Scenarios & effects | | |
| 9.45 – 10.15 | Climate change & Sea level rise | Hans Peter Plag (Univ. Nevada) |
| 10.15- 10.45 | Climate effects and flood risks in New York | Radley Horton (Columbia/GISS-NASA) |
| Coffee | | |
| 11.00-11.30 | Climate adaptation in the Netherlands | Jeroen Aerts (VU Univ Amsterdam) |
| 11.30 – 12.00 | Climate effects Jakarta | Muh Aris Marfai (Univ Yogyakarta) |
| 12.00 –12.30 Moderated discussion (Dennis Kamber) | | |
| Lunch 12.30-13.30 | | |

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| Session 2 (Afternoon): Adaptation policies for coastal cities | | |
| 13.30-14.15 | Thames Estuary 2100 | Alex Nickson, City of London, UK |
| Working groups 14.30 – 16.30 | Each group discussion starts with two presentations of 5-10 minutes, followed by a comment. | |
| <i>Group 1:</i> Is current scientific information on climate change tailored to the requirements of adaptation policy? | <ul style="list-style-type: none"> • <i>Brian Colle, Stony Brook</i> • <i>Radley Horton, NASA GISS</i> → comment: Adam Freed, NY Mayors office | Chair: Rae Zimmerman |
| <i>Group 2:</i> What options for adaptation are available and what are priorities? | <ul style="list-style-type: none"> • <i>Adaptation in NY, David Major, Columbia</i> • <i>John Jacobs, Rotterdam 2030</i> → comment: Raymond Kemur, DG Spatial Planning, Jakarta, Indonesia. | Chair: Klaus Jacob |
| <i>Group 3:</i> Climate risk priorities: perceptions & communication of adaptation policies | <ul style="list-style-type: none"> • <i>Sarah Newkirk: TNC</i> • <i>Esa Tobing: Jakarta Governors office</i> → comment: Arnoud Molenaar, Rotterdam, The Netherlands | Chair: Elke Weber, Columbia. |
| Moderated discussion 16.30-18.00 | Each group reports back in plenary with the most important conclusions from the sessions (10 min each) | Dennis Kamber |

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Day 2 June 10th: ‘Public & Private adaptation measures’

The second day will focus on international examples of concrete adaptation measures developed by governments and private companies. Within this context, additional topics are:

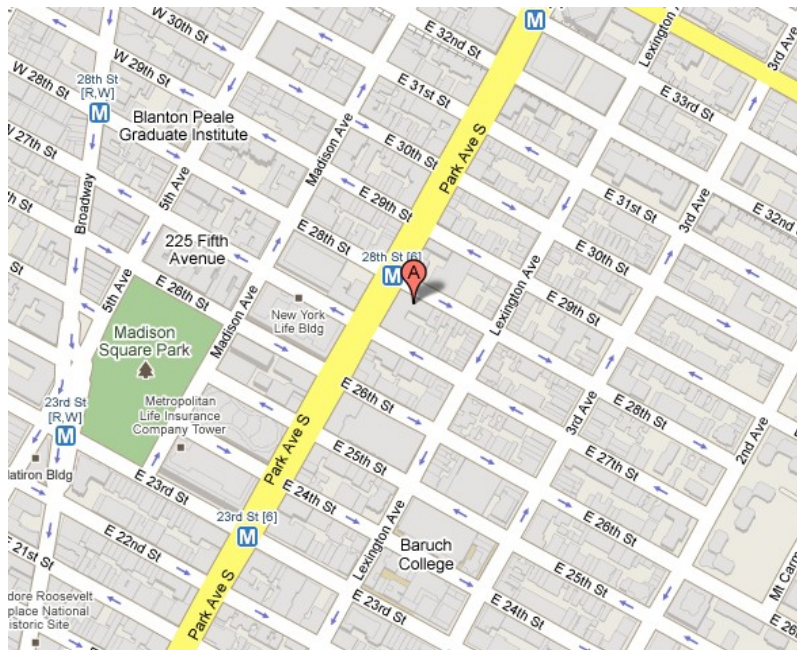
- Priorities: what adaptation measures should be implemented first?
- And, what should be done now in order to stay flexible and implement additional adaptation options in the future?

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| Session 1 (Morning) Plenary | | |
| 9.00-9.15 AM | Welcome | Malcolm Bowman & William Solecki |
| 9.15-9.45 | Risk – Insurance | Robert Muir Wood, (RMS) |
| 9.45 -10.15 | Climate change, adaptation and infrastructure | Ernest Tollerson, (MTA) |
| 10.15-10.45 | Climate adaptation and Urban Planning | L. Nieuwenhuis / D. Sijmons (H+N+S) |
| 10.45-11.15 | Climate adaptation and storm surges: a systems approach to protect large cities | Piet Dircke (Arcadis/Univ of Rotterdam) |
| 11:15-11:45 | Storm surge scenarios and the potential for barriers in New York | Malcolm Bowman, Douglas Hill (Stony Brook Univ NY) |
| 11.45 –12.30 | Moderated discussion (Piet Dircke) | |
| Lunch 12.30-13.30 | | |
| Session 2: (Afternoon) 13.30-15.00 Working groups | Discussion on expected impacts/effects and adaptation options (in time – what measures should be implemented when?) | |
| <i>Group 1 (Infrastructure)</i> | Gary Heath, DEP Rinske van der Meer, Port Authority Rotterdam, →Comment: Ernest Tollerson / Chris Zeppie | Chair: Reggie Blake, CUNY |
| <i>Group 2 (Flood Risk & Insurance)</i> | Laurens Bouwer, VU Univ. Amsterdam Elles Le Blanc (TBD) →Commentator: Gary Yohe, Wesleyan | Chair: Craig Faris. |
| <i>Group 3 (Architecture)</i> | <i>Kristina Hill, Uni. Virginia</i> <i>Peter Caradonna</i> → comment: Arnoud Molenaar, Rotterdam | Chair: Jakarta, Raymond Kemur |
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| Moderated discussion 15.00-16.00 | Each group reports back in plenary with the most important conclusions from the sessions (10 min each) | Piet Dircke |
| 16.00-16.30: Feeding workshop results into a book: Jeroen Aerts | | |
| Closing workshop 16.30 (allow people to go to airport on time) | | |

Location

Stony Brook University Manhattan Facility

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Contact & Background information

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Participants / Speakers Workshop New York June 9-10

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| 2 Tony Bigio | Worldbank |
| 3 Siet Meijer | Worldbank |
| 4 Arnoud Molenaar | City of Rotterdam |
| 5 John Jacobs | City of Rotterdam |
| 6 Rinske van der Meer | Port Auth Rotterdam |
| 7 Peter Pol | Ontwikkelingsbedrijf R'dam |
| 8 Martin Aarts | DSV Rotterdam |
| 9 Chris Zevenbergen | Dura Vermeer |
| 10 Mr T. Shioda | City of Tokyo |
| 11 Mr A. Hamanaka | City of Tokyo |
| 12 Helen Woolston | Transport for London |
| 13 Swenja Surminski | ABI |
| 14 Esa Tobing | Governor Office, Jakarta |
| 15 Muh Aris Marfai | University Yogyakarta |
| 16 Hasan Abidin | Jakarta |
| 17 Sander Hartemink | Dutch Embassy, Washington |
| 18 Tineke de Vries | NL consulate NYC |
| 19 Raymond Kemur | DG spatial planning Jakarta |
| 20 Alex Nickson, | City of London, UK |
| 21 Jan Jaap Brinkman | Deltares |
| 22 Dennis Kamber | Arcadis |
| 23 Piet Dircke | Arcadis |
| 24 Robert Muir Wood | RMS |
| 25 Lodewijk van Neuenhuijze | HNS |
| 26 Kristina Hill | Univ Virginia |
| 27 Jeroen Aerts | VU University Amsterdam |
| 28 Susan van t Klooster | VU University Amsterdam |
| 29 Wouter Botzen | VU University Amsterdam |
| 30 Laurens Bouwer | VU University Amsterdam |
| 31 Philip Ward | VU University Amsterdam |
| 32 Hans Peter Plag | Univ of Nevada |
| 33 Gert Tetteroo | Husdon400 |
| 34 Ernest Tollerson, | NY Metropolitan Transportation Authority |
| 35 Projjal Dutta | NY Metropolitan Transportation Authority |
| 36 Peter Bass | NY Metropolitan Transportation Authority |
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| 39 David Major | Columbia Univ |
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| 41 Reggie Blake | GISS NASA |
| 42 Klaus Jacob | Columbia Univ |
| 43 Rae Zimmerman | NYU |
| 44 Douglas Hill | SB Univ |
| 45 Elke Weber | Columbia |
| 46 Radley Horton | Columbia Univ |
| 47 Brian Colle | SB Univ |
| 48 Gary Heath | NYC-DEP |

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|-----------------------|---|
| 49 Sarah Newkirk | TNC |
| 50 Craig Faris | Maryland |
| 51 Jochen Albrecht | Hunter College CUNY |
| 52 Frank Buonaiuto | Hunter College CUNY |
| 53 Robert Wilson | Stony Brook University |
| 54 Roger Flood | Stony Brook University |
| 55 Robert Weisberg | Univ. Sth Florida |
| 56 Jon Miller | Stevens Institiute of Technology, Hoboken NJ. |
| 57 Tom Harrington | Stevens Institiute of Technology, Hoboken NJ. |
| 58 Alan Blumberg | Stevens Institiute of Technology, Hoboken NJ. |
| 59 Alice Le Blanc | AIG |
| 60 Adam Freed | City of NewYork |
| 61 Vivian Gornitz | Columbia/NASA GISS |
| 62 Johannes Westerink | Notre Dame University |
| 63 Megan | AIG |
| 64 Chris Ward | CEO NY&NJ Port Authority |
| 65 Martin Garrell | Adelphi University |
| 66 Larry Swanson | |
| 67 Charles Flag | |
| 68 Joshua Friedman | NYC office of emergency management |