

ASCE Met Section Infrastructure Group, New York Academy of Sciences &
Polytechnic Institute of NYU, Department of Civil Engineering

Present -- A Technical Seminar & An Exhibition:

**“Against the Deluge: Storm Surge Barriers to
Protect New York City”**

March 30 and 31, 2009 --- (Earn 10 PDH'S)

At Polytechnic Institute of NYU, Dibner Auditorium, 5 Metrotech Center, Brooklyn, NY 11201

(Subway Trains A-C-F to Jay Street; M-R to Lawrence Street; 2-3-4-5 to Borough Hall)

Monday, March 30, 2009

2:30 – 9:00 Registration and Exhibition

3:00 – 3:10 Welcome – **Dr. F.H. (“Bud”) Griffis**, Chairman, Dept of Civil Engg., Polytechnic Institute of NYU, Brooklyn, NY

Part I. THE THREAT OF COASTAL FLOODING

3:10 – 3:30 Introduction -- **Dr. Douglas Hill**, PE, Consulting Engineer, Huntington, NY

3:30 – 4:30 **KEYNOTE: Lessons of Katrina for New York City** – **Larry Roth**, PE, GE, Deputy Exec. Director, ASCE, Reston, VA

4:30 – 5:00 *A Statistical-Deterministic Model for Hurricane Risk Prediction* – **Dr. Sai Ravela** and **Dr. Kerry Emanuel**,
Massachusetts Institute of Technology, Cambridge, MA

5:00 – 5:30 *Climatology and Forecasting NYC Storm Surges* – **Dr. Brian A. Colle**, and **Dr. Frank Buonaiuto**, Stony Brook
University, Stony Brook, NY

5:30 – 6:30 Dinner.... (In Exhibition Hall)

6:30 – 7:00 *Hydrodynamic/GIS Simulation of Storm Surge Flooding in the NY/NJ Harbor System* -- **Nicholas Kim**, PE, **Philip
Simmons**, PE, and **Brian George**, PE, Hydro-Qual, Inc., Mahwah, NJ

7:00 – 7:30 *Vulnerability and Potential Losses in NYC from Coastal Flooding* – **Joshua Friedman**, NYC Office of Emergency
Management, New York, NY

7:30 – 8:00 *Hydrologic Feasibility of Storm Surge Barriers* – **Dr. Malcolm Bowman**, Stony Brook Univ., Stony Brook, NY

8:00 – 9:00 *Review Panel: Should Barriers be Built in NYC?* **Warren Kurtz**, PE, Chairman, Consulting Engineer, Armonk, NY;
Col. A.L.Tortora, Commander, NY District, USACE, NYC; **James G. Mueller**, PE, Director, NYCDEP Bureau of
Engineering & Design; **Larry Roth**, PE, GE, Deputy Executive Director, ASCE, Reston, VA

Tuesday, March 31, 2009

2:30 – 9:00 Registration and Exhibition

Part II. ENGINEERING THE STORM SURGE BARRIERS

3:00 – 3:30 *Delta Project in the Netherlands: Past and Future* – **Dr. Jeroen Aerts**, IVM-VU University, Amsterdam

3:30 – 4:00 *Navigation and Regulatory Constraints* – **Michael Scarano**, PE, U.S. Army Corps of Engineers, NYC

4:00 – 4:30 *Environmental Considerations* – **Dr. R.L. Swanson**, Stony Brook University, Stony Brook, NY

4:30 – 5:00 *Geotechnical Aspects of Three Storm Surge Barrier Sites* – **Alfred H. Brand**, PE, **Hugh S. Lacy**, PE, **Anthony
Devito**, PE, and **Athena DeNivo**, PE, Mueser Rutledge Consulting Engineers, NYC

5:00 – 5:30 *Global Overview of Navigable Storm Surge Barriers* – **Piet Dircke**, MSc, Arcadis NV, Arnhem, Netherlands

5:30 – 6:10 Dinner(In Exhibition Hall)....

6:10 – 6:30 *Student Designs of NYC Barriers* – **Dr. Anne Ronan**, PE, Cooper Union, New York, NY

6:30 – 7:00 *Conceptual Design of an East River Storm Surge Barrier*—**Michael Abrahams**, PE, Parsons Brinckerhoff, NYC

7:00 – 7:30 *Conceptual Design of a Storm Surge Barrier across the Narrows* – **Peter Jansen**, Arcadis NV, Arnhem, Netherlands

7:30 – 8:00 *Conceptual Design of an Arthur Kill Storm Surge Barrier* – **Thomas Schoettle**, PE, Camp Dresser & McKee, NYC

8:00 – 8:30 *Conceptual Design of Sandy Hook to Rockaway Barrier*, **Graeme Forsyth**, CEng, Halcrow Group, UK

8:30 – 9:00 *Panel Discussion – Can Barriers be Built in NYC?* **Dr. F.H. (“Bud”) Griffis**, Chairman, Dept of Civil Engineering,
Polytechnic Institute of NYU, Brooklyn, NY + above today’s speakers

Registration:

Before 3/9/09: (Pre-registration is a must to save a seat—please register early and save \$60!)

ASCE/NYAS Members: \$170; \$150 group (5 or more); \$100 one-day/\$50 full-time students with ID (no proceedings);

Non-members: Above member prices + \$30. Checks should be drawn to “ASCE Met Section” and mailed to:

ASCE Met Section c/o J. Khinda, 98 Park Terrace East, #3B, New York, NY 10034-1418.

Full registration includes a copy of the proceedings and dinners – See Registration Form for details.

After 3/9/09: Prices at the gate – Above pre-registration prices + \$60 by check or cash; Proceedings only \$35.

Sponsorship:

Engineering companies are invited to become **Platinum, Gold or Silver Sponsors**. Each sponsor can also reserve a
10’x10’Exhibit Booth in the Auditorium Hall and/or have a **full-page “ad”** in the proceedings.

Please send reservations to: **Virpal Kaur**; 212-268-2730; vkaur@arorapc.com with a copy to: jamin@arorapc.com

For more information, please contact Group Chair: **Jagtar S. Khinda**, PE, F.ASCE; 212-788-1781; jkhinda@dot.nyc.gov