

Draft 12 March, 2004

**International conference**  
**Climate change: a challenge or a threat for**  
**water management**  
Amsterdam 27- 29 September, 2004

**Objective**

To provide water and climate practitioners and researchers a platform to present and discuss their research work and results in an international conference.

**Issues**

- Evidence about impacts of increasing climate variability in the water sector.
- Research methodologies to study impacts and vulnerabilities in the water sector (drinking water, agriculture irrigation/food, ecosystems, coast, economies, disasters)
- Coping options and best practises
  - i. Climate impact assessments (methodologies) on water (hydrology) resources availability
  - ii. Climate impact assessments on water resources quality (drinking water, coastal waters, surface waters etc.)
  - iii. Vulnerability assessments and early warning systems
  - iv. Coping mechanisms (process, structural measures, spatial planning, agriculture).

**Outcome**

- Conference statement

# PROGRAMME

**September 27**

**9.00 – 10.00 Registration**

**10.00 – 12.00 Opening session**

Chair: Joost de Jong

10.00 Opening:

Film 'The Heat is On, Better be Prepared'

- Joost de Jong, word of welcome
- Paul Reiter, word of welcome
- Bill Cosgrove, President of the World Water Council,  
*Evidence, impacts and coping with climate variability and change in the water sector*
- Michel Jarraud, Secretary General World Meteorological Organisation,

*Bridging climate information to water managers*

11.00 Coffee Break

11.30 Gerbrand Komen (and Bert Metz),  
*Climate and water research issues: national and international*

11.45 Melanie Schultz van Haegen (Minister for Water, Netherlands),  
*Netherlands water policy on Water and Climate in the international context*

**12.00-14.00 Lunch, poster session and visiting AQUATECH**

**14.00-17.00 Session 1:  
The impacts of changes in climate on hydrological systems**

Chair: Paul Crutzen (Nobel Laureate)

Keynote speakers:

14.00 Panagiotis Balabanis tbc,  
*EU strategies and programmes Water and Climate*

14.20 Joe Alcamo (UniKassel),  
*The impacts of climate variability and change upon water systems and the challenges for water and climate research*

14.40 Presentations:

- Silvio J. Simoes and Ana P. Barros, Brazil,  
*The effects of climate variability on water resources: a regional perspective*
- B. Van den Hurk e.a., the Netherlands,  
*Hydrological simulations in the Rhine Basin*

15.20 Coffee Break

15.40 Presentations:

- Min TU e.a., the Netherlands,  
*Precipitation variability in the Meuse basin and its linkage to atmospheric circulation*
- L. Pfister e.a., Luxembourg,  
*Spatial variability of trends in hydrological extremes induced by orographically enhanced rainfall events due to westerly atmospheric fluxes*
- W. Werkman e.a., the Netherlands  
*Modelling the impact of climate change and land subsidence on the hydrological systems in the Netherlands*
- P. Krahe e.a. Germany/Luxembourg/Netherlands,  
*Climatic changes and their effect on hydrology and water management in the Rhine basin*

Posters:

- L. Elleder, Czech Republic,  
*The 2002 Prague flood in pictures*
- L. Elleder, Czech Republic  
*The 2002 disastrous flood in Prague within the historical framework*
- Wen Wang, China,  
*ENSO events and precipitation and stream flow processes in eastern Tibetan plateau area in China*
- C.S. Ngongondo, Malawi,  
*Detection of long-term rainfall variability and trends and its effect on a derived effective precipitation index in the Mulunguzi river catchment's area, Zomba, Southern Malawi*
- M. Eberle e.a., Germany/ the Netherlands,  
*Flood frequencies and the occurrence of extreme floods of the lower river Rhine in the context of climate change; historical observations and simulations based on climate modelling*
- V. Tsomaia e.a. Georgia,  
*Research of vulnerability of water resources in Georgia*

## September 28

### 9.00-12.30 Session 2: Impacts of changes in climate on water quality and biodiversity

Chair: Paul Reiter

Keynote speaker:

9.00 P. Kabat, the Netherlands,  
*Impacts of changes in climate on water quality and biodiversity and the challenges for water and climate research*

9.20 Presentations:

- G. Rise e.a., Norway  
*Increased organic matter in surface waters of south-eastern Norway – a change in the quality of freshwaters due to climate change*
- L. Peperzak, Netherlands,  
*Climate change and harmful algal blooms in the Dutch coastal zone of the North Sea*
- T. Ramaker e.a., the Netherlands,  
*Climate change and drinking water production in the Netherlands: a flexible approach*

10.30 Coffee Break

11.00 Presentations:

- A. Gutierrez e.a., Mexico,  
*Effects of climatic variability in lake Patzcuaro, an historical review and hydrological modeling*
- P. Van Puijenbroek, the Netherlands,  
*Climate change and the biodiversity in wetlands*
- P. Van Walsum, the Netherlands  
*Spatial planning for adapting to climate change*
- H. Senhorst, the Netherlands  
*Impact of Climate Change on water quality in Dutch surface waters*

Posters:

- J.P. van der Hoek e.a., the Netherlands  
*Climate change: Will it affect the drinking water supply in the Netherlands*
- A.P. Oost e.a., the Netherlands/ Germany,  
*Coastal protection and sea level rise*
- H. Van Luijtelaar e.a., the Netherlands  
*Climatic change and urban drainage (I): Quicksan*

- L. Stuyt, the Netherlands,  
*Environmental impact of flooding of a densely populated polder district of the Netherlands*

**12.30-14.00 Lunch, poster session and visiting AQUATECH**

**14.00-17.30 Session 3: Forecasting (meteo, hydrological) and vulnerabilities (human, social and financial/economic)**

**Part 1 (14.00 – 15.30)**

Chair: Roberto Lenton USA (GWP)

Keynote speaker:

14.00 Ad de Roo (EU)  
*Early warning and forecasting: possibilities and impossibilities*

Presentations:

- Kenzo Hiroki, Japan,  
*Development of the Method for Assessing the Flood Vulnerability*
- Sankar Arumugam e.a., USA,  
*Dynamic Water Allocation Framework for Multiple Uses: Utility of Climate Forecasts towards Short-Term Water Management*
- H.W. van den Brink e.a., the Netherlands  
*Estimating thousand-year extremes from seasonal forecast model archives*
- Dr. Caroline Sullivan, UK  
*Climate Vulnerability Index, Targeting attention on local vulnerabilities using an integrated indicator approach*

Posters:

- A. Ceylan, Turkey,  
*Flood hazards in Turkey*
- E. Ruijgh e.a., the Netherlands  
*Advances in flood forecasting in Europe*
- O.A.C. Hoes, the Netherlands,  
*Rainfall extremes in Netherlands*
- C.J.M. Vermeulen, the Netherlands,  
*Floodplan: a near real time flood forecasting, warning and management system*

15.30 Coffee break

**Part 2 (15.50 – 17.30)**

Chair: Salvano Briceno, UN ISDR (tbc)

Keynote speaker:

15.50 Uddo Rosenthal (Uni Leiden),  
*Increasing vulnerabilities*

Presentations:

- Madeleen Helmer, the Netherlands (Red Cross)  
*Towards water related disaster preparedness*
- J.F. Schijven en R. Husman, the Netherlands  
*Effect of climate changes on waterborne disease*
- L.M. Bouwer and P. Vellinga, the Netherlands  
*Principles of risk sharing and financing adaptation*
- G. Berz e.a., Germany,  
*Increasing losses from natural disasters; is climate change a driving factor?*

Posters:

- S. Meijerink, the Netherlands,  
*Policy oriented learning and shock events in water management*

**17.30-18.30    Poster Award and reception**

## September 29

### 9.00-12.10 Session 4: Coping processes and options (policies, structural and non-structural) opportunities and (best) practises through storage (surface and groundwater, recharging, infiltration, private sector etc.)

Chair: Pier Vellinga

9.00 Presentations:

- G. Bortone e.a., Italy,  
*Climate change and water management and protection plan in Emilia-Romagna region (Italy)*
- P. Bereciartua Argentina,  
*Vulnerability to global environmental changes in Argentina: Opportunities for upgrading regional water resources management strategies*
- W. Schuurmans e.a., the Netherlands  
*Risk management of flooding problems in polders*
- W. van Deursen e.a., the Netherlands,  
*Development of perspective based water management strategies for the Rhine and Meuse basins*

10.20 Coffee Break

10.50 Presentations:

- A Allali, Marocco,  
*The water management challenge in Morocco*
- A.R. Dussailant e.a., Chile/USA,  
*Stormwater infiltration and focused groundwater recharge in a rain garden*
- H. van Lujtelaar e.a., the Netherlands,  
*Climate change and urban drainage (II): Strategies*
- J. Aerts, the Netherlands  
*Developing regional strategies for seven contrasting river basins*

Posters:

- M. Tosserams, the Netherlands,  
*The delta works revisited*
- H. van Schaik e.a., the Netherlands,  
*Climate variability and change: Coping with uncertainty, lessons from the dialogue on water and climate*
- Levent Yilmaz, Turkey,  
*Meteorological Climate Change effect of the Ataturk Dam in Turkey at eastern Anatolia*

- L.R. Fiallos, Ecuador,  
*IDF zoning curves for Ecuador and its application in the civil building site design*
- D. Klopstra e.a., the Netherlands,  
*Policymaking on flood risk standardisation of a regional water system in changing environment*
- V. Kazandjiev, Bulgaria,  
*Unfavorable agroclimatic conditions in Bulgaria during 1997 – 2003 period and influence on agricultural outputs*
- M. Ritt-Fischer, the Netherlands,  
*Climate changes spatial planning*

**12.10-14.00 Lunch, poster session and visiting AQUATECH**

**14.00-15.40 Nile Basin Netherlands Partnership**

Chair: Ir. J. Boeve tbc

Keynote speaker:

14.00 David Grey, WB NBI,  
*Climate, water and development economics*

Presentations:

14.20 Mohamed Yasir tbc,  
*Moisture recycling in the Sudan*

14.40 Sam Mutiso tbc,  
*The significance of subsurface water storage in Kenya*

15.00 Albert Tuinhof,  
*About groundwater and climate*

15.20 Eelco van Beek,  
*Impacts of climate change on the Nile basin*

**15.40 – 16.15 Coffee break**

**16.15 – 17.00 Closing session**

Chair: Joost de Jong

16.15 Conference statement

16.30 Andrasz Szollosi-Nagy (UNESCO) reacts on statement

16.45 Closing ceremony (Joost de Jong)