

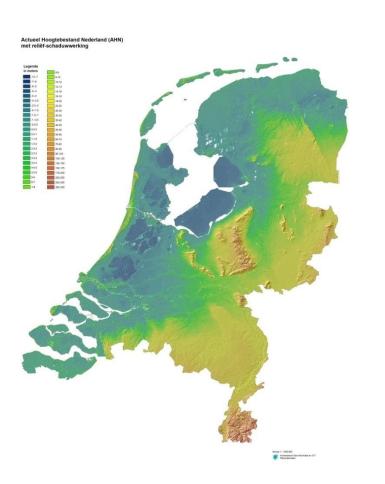
Ministerie van Infrastructuur en Milieu

### The Deltaplan revisited

Changing perspectives in the Netherlands' flood risk reduction philosophy

> 17 – 10 - 2014 HELP- Washington

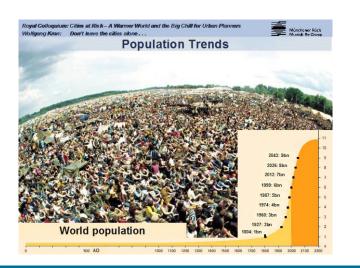
Melanie Schultz van Haegen



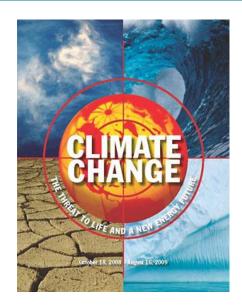


# **Global Trends**

- More floods, more damage, more risk
- Due to population growth, urbanisation, climate change, inadequate land & water management









17 oktober 2014



## Water & The Netherlands: Long term history







1580

1700

2000



# 1953 Disaster

## Construction of dams and barriers



17 oktober 2014



## Changed perspective in the Netherlands

- From fighting against water to living with water
- Pro-active approach, building resilience



#### The Netherlands – protected by levees Total Vulnerable to flooding Surface 41.528 km<sup>2</sup> 55% Area Inhabitants 16,8 million 60% GNP 700 billion 65% US\$ Andre Karrell





# The Deltaplan revisited: from flood protection to integrated risk management

- a minimum safety level for each citizen in the Netherlands (a probability to die due to a flood of at most 1/100,000 per year),
- the introduction of a new set of safety standards for the Dutch flood defences based on a societal cost-benefit analysis,
- counteracting social disruption in case of flooding, and
- protecting vital and vulnerable infrastructure.



# The Deltaplan revisited

- Legislation Programme Fund Commissioner -Implementation
- Forward-looking flexible adaptive approach
- Multi-layer safety
- Multilevel governance
- Participation
- Integrated risk management





# Building with nature





July 18, 2011



October 13, 2011

July 11, 2011



May 14, 2012



July 7, 2012



September 5, 2011





September 4, 2012





## From concept to action

- DRR WRM Climate Adaptation Development should go hand in hand (NL -DRR facility)
- Connect national experiences to international frameworks (cooperation NI – OECD, NL – WB)
- Assure basic requirements: funding, good governance, stakeholder involvement, capacity



## Messages

- Be prepared for more extreme events and even higher impacts of disasters.
- Disaster Risk Reduction, Water Resources Management and Climate Adaptation should no longer be treated as separate topics
- Use new data and tools for risk assessment to identify and prioritize actions. Improve preparedness of citizens in terms of risk awareness and emergency planning
- Risk reduction, preparation and prevention are sensible investments that pay off in terms of reduced loss of life, avoided damage, and long-term economic growth and stability.
- Risk prevention should be integrated with long-term planning and create opportunities for synergies with planned investments, including plans for adaptation to climate change.
- Uncertainties are no excuse for inaction: be flexible and adaptive