



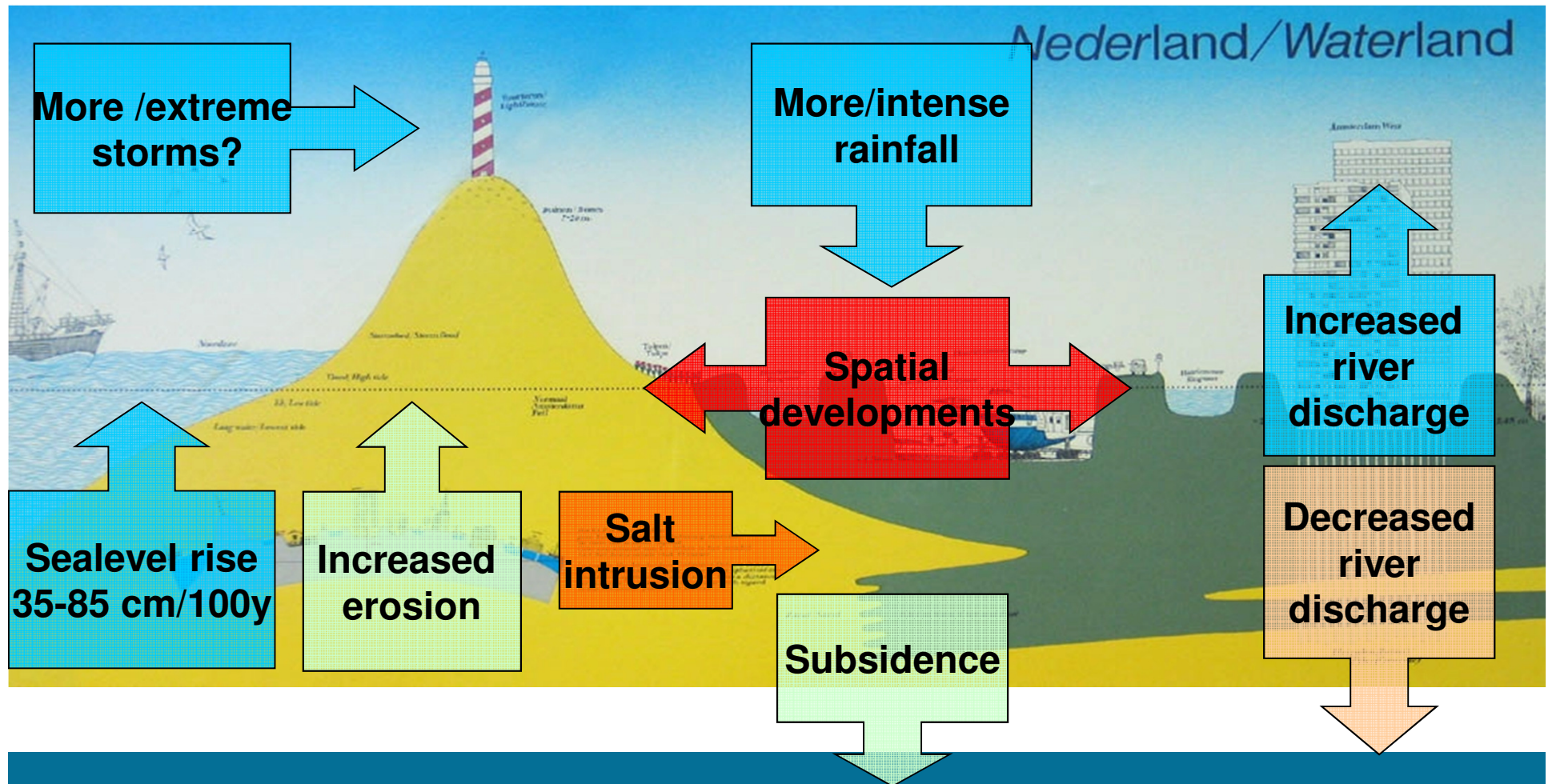
The Delta Programme in the Netherlands

Freshwater

april 2016



Future challenges





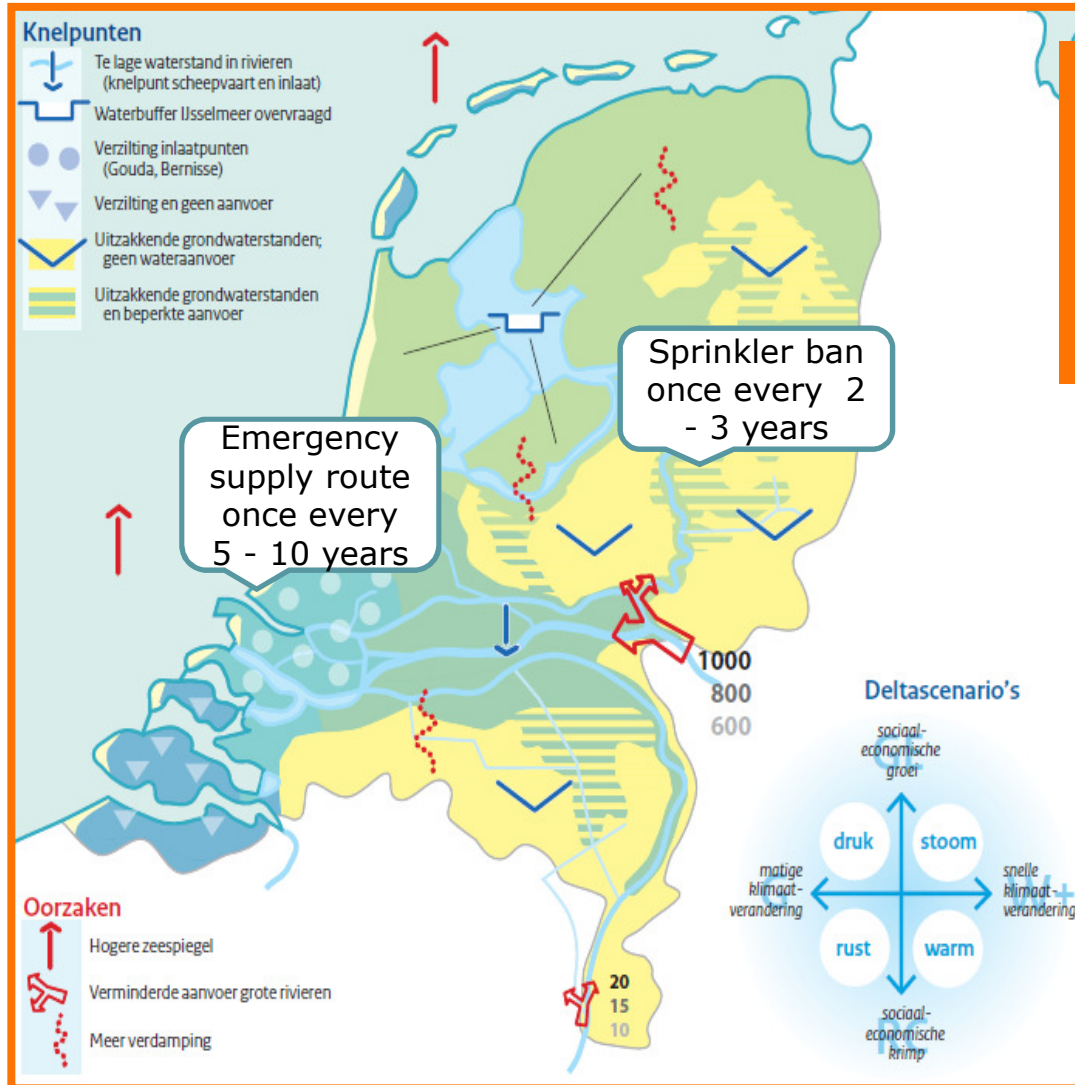
Water scarcity in a water rich country?

'Water scarcity = the difference between water demand and availability of water of the right quality '

Key words:

- Water demand
- Water availability
- Right quality





Climate change reduces water **availability**
Socio- economic development changes water **demand**

Pressure points

- Salinisation of fresh water inlets;
- No fresh water supply possible from the main water system;
- Water demand exceeds the water buffer;
- Insufficient amount of water in rivers and canals



Goal and Task Delta programme freshwater

Goal

- Sustainable fresh water supply, now and in 2050/2100.

Task

- Develop strategies for fresh water supply in the Netherlands in 2050/2100.
- Identify short term (2021) no-regret measures
- Deltaprogramme
 - ✓ Started in 2010
 - ✓ Delta decisions were made in 2014
 - ✓ Implementing measures from 2016



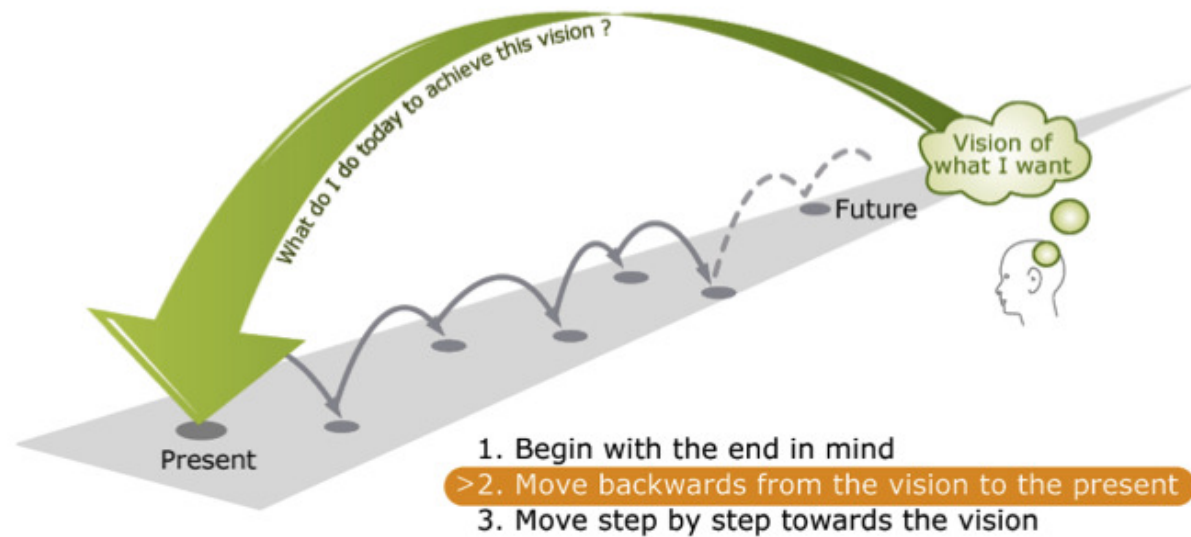


Key governance aspects

- Delta Act
 - yearly set up of Delta Programme incl. timetable and costs
 - Delta Fund
 - Delta Programma Commissioner
- Central government, provinces, municipalities and regional water authorities shared ownership for achieving goals
 - Joint Fact finding!
- Stakeholder engagement
- Integrated approach
- Adaptive Delta-Management



Developing nationally optimal solutions: towards strategies and delta decisions



Source: www.naturalstep.org/backcasting

- Identify 'tipping points' by confronting scenarios with present day policy and longterm policy goals
- Adaptive delta management
- Avoid overinvestment, but do now what is necessary



Delta Programme content

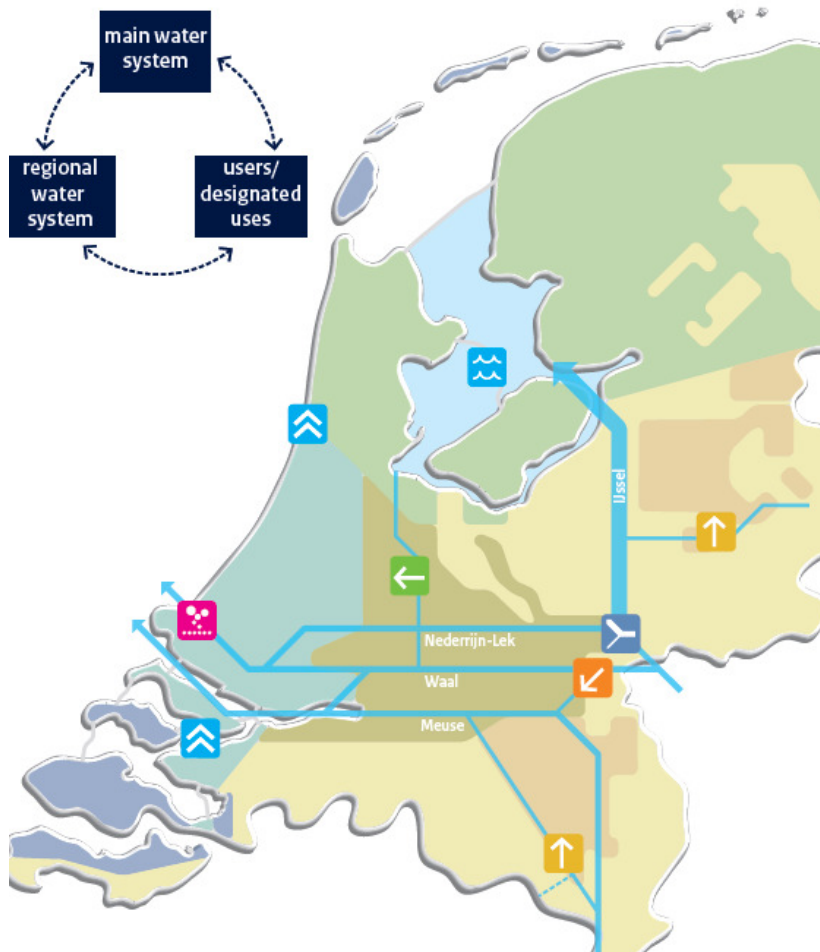
Delta Programme 2015: Delta Decisions

- New flood protection standards, based on a) probability of flooding b) impact of a flood → risk-based approach
- More predictability in the availability of freshwater for consumption, agriculture, industry, nature, shipping activities
- More climate-proof and water-robust spatial planning

Delta Programme 2016: implementation!

- End 2015: amendment to the law to set down the new standards for flood protection
- Pilots with water users, central and regional governments to reach more transparent decisions on the availability of fresh water]
- Central government agreed to ensure the protection of national vital and vulnerable functions

Delta Decision fresh water



Freshwater is a shared responsibility

- Coherent measures will be taken in the main- and regional water system and by consumers.

The freshwater strategy is adaptive to climate change

Reduce fresh water demand:

- Local storage in soil
- Drought and salt resistant crops
- More effective irrigation of crops

Improve water supply:

- Increase storage in lake IJssel (flexible stage management)
- Alternative fresh water supply to central Holland



Transboundary aspects

- How will water consumption develop in the upstream countries?
- What will be the consequences for the river discharges?
- What are the options for dry periods (agreements, retention, etc.)?

