



System analysis of the Hollandsche IJssel including study on possible further improvements Hollandsche IJssel barrier

The Hollandsche IJsselbarrier is part of the Delta Works. This barrier, the dikes and the floodplains are protecting the area surrounding the Hollandsche IJssel. In the coming decades, a large flood protection assignment is expected for the Hollandsche IJssel.

As part of the Deltaprogramme, a system analysis of the Hollandsche IJssel is conducted, including a study on possible further improvements of the Hollandsche IJssel barrier. Aim is to further refine the adaptation path for the Hollandsche IJssel, consisting of optimal sets of measures for flood protection in time.



Sources

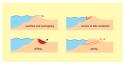
- Rising sea level
- High river discharge
- Wind causing wave setup
- Precipitation causing discharges
- Land subsidence





Pathways

- Failure probability Hollandsche IJssel barrier
- Failure mechanisms dikes



Responses*

Possible responses:

- Strengthen barrier
- Strengthen dikes
- Reduce water level Hollandsche IJssel
- Use strength of floodplains
- Spatial planning
- Early-warning systems & evacuation routes
- Prevention
- Sustainable spatial planning
- Disaster management

*based on multi-layer safety approach

Receptors

- Flooding surrounding area
- Fatalities
- Land loss & housing damage
- Possible disturbance roads and infrastructure

