



Long Term Redesign of Infrastructural Assets

General Approach & Case Study

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Issue

- The Netherlands has a complex network of waterways, with many and different types of hydraulic structures. A lot of these structures are nearing the end of their lifetime in the coming decades, making replacement or renovation necessary.
- The existing structures have to be redesigned to meet the challenges of future developments and service demands of future generations.
- This stresses the importance of an integral maintenance and development strategy at the network level.

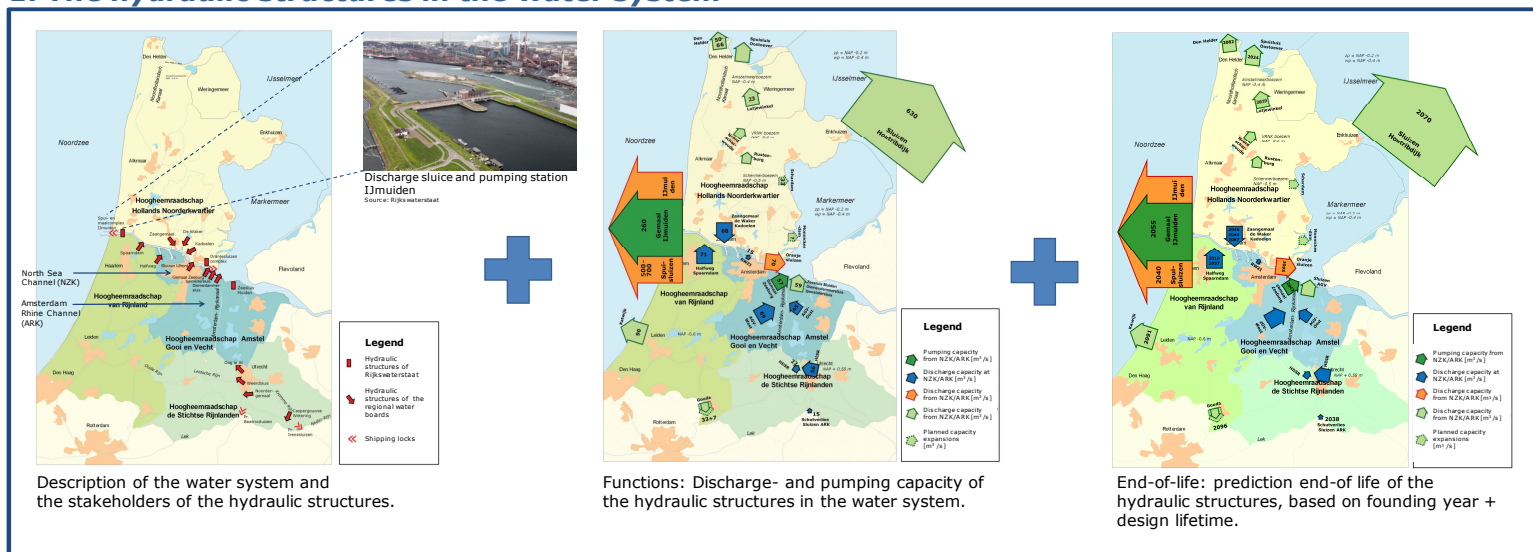
Approach

- This asks for a learning and interactive process with early stakeholder involvement.
- New functionalities, changing performance requirements, uncertainties in climate and socio-economic developments all influence the need and timing of the renovation or replacement, and should therefore also be considered.
- Adaptive Delta Management is a method that incorporates future uncertainties. This supports a transparent decision making process and uses so called 'adaptation pathways'.

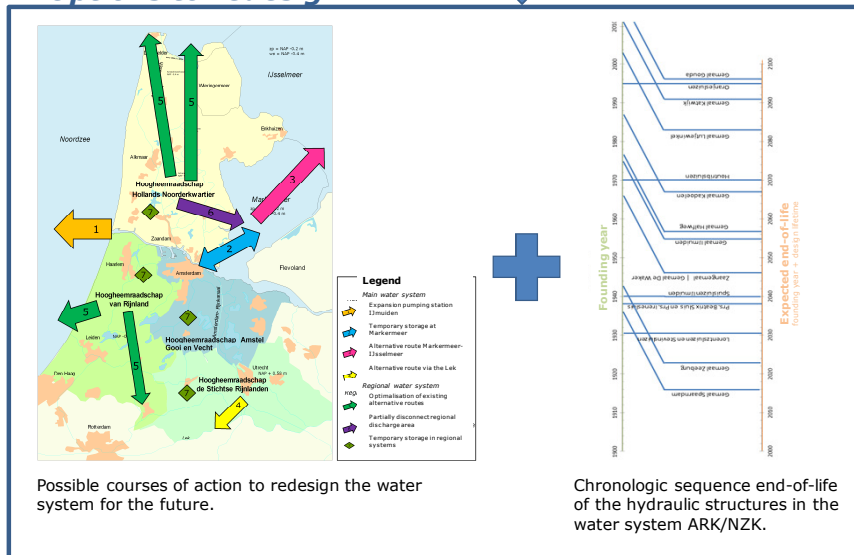
Case: Discharge Sluice and Pumping Station IJmuiden

Identify issues, propose strategies, identify vulnerability, identify options

1. The hydraulic structures in the water system



2. Options to redesign



3. Adaptation pathways

