

Managing a perpetual struggle by befriending the enemy

Ewout Leeuwenburg

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Facts about the Netherlands

30th Most densely populated country in the world

17M Citizens

1,341 Inhabitants per square mile

17th largest Economy in the world

5th largest Economy in the Europe

\$66k \$66,284 GDP per Capita

14th Highest GDP per Capita in the world

1st Largest port in the Europe



4th Largest airport in the Europe

Geography of the Netherlands



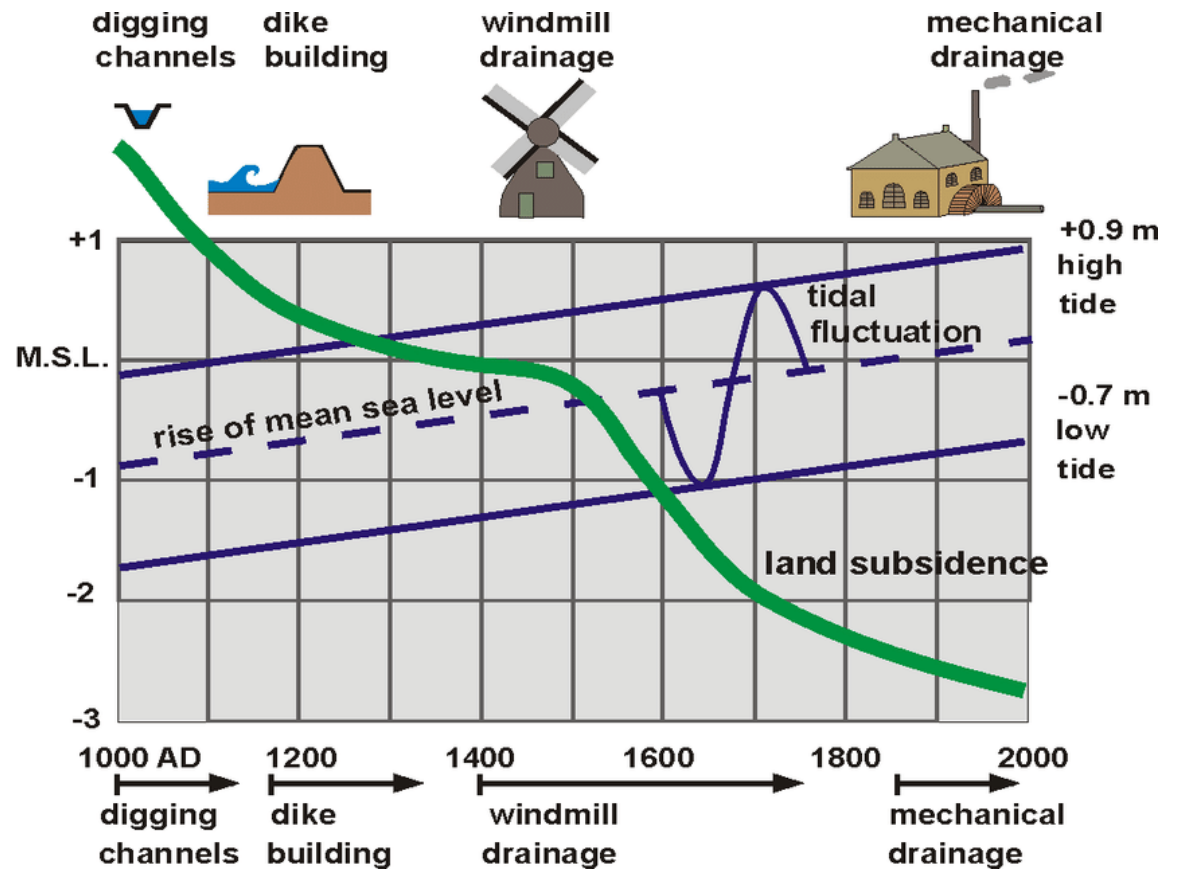
One third of the country is below sea level





Windmills and Drainage canals driving land reclamation and subsidence

Increasing rate
of land
subsidence
relative to
rising sea
levels



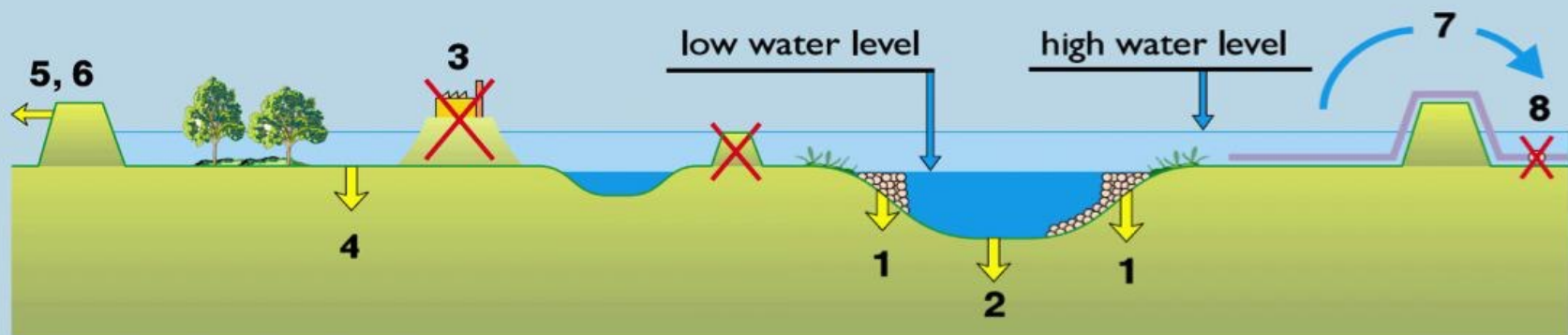


Delta Project



Summer droughts causing
low discharge

Room for the rivers

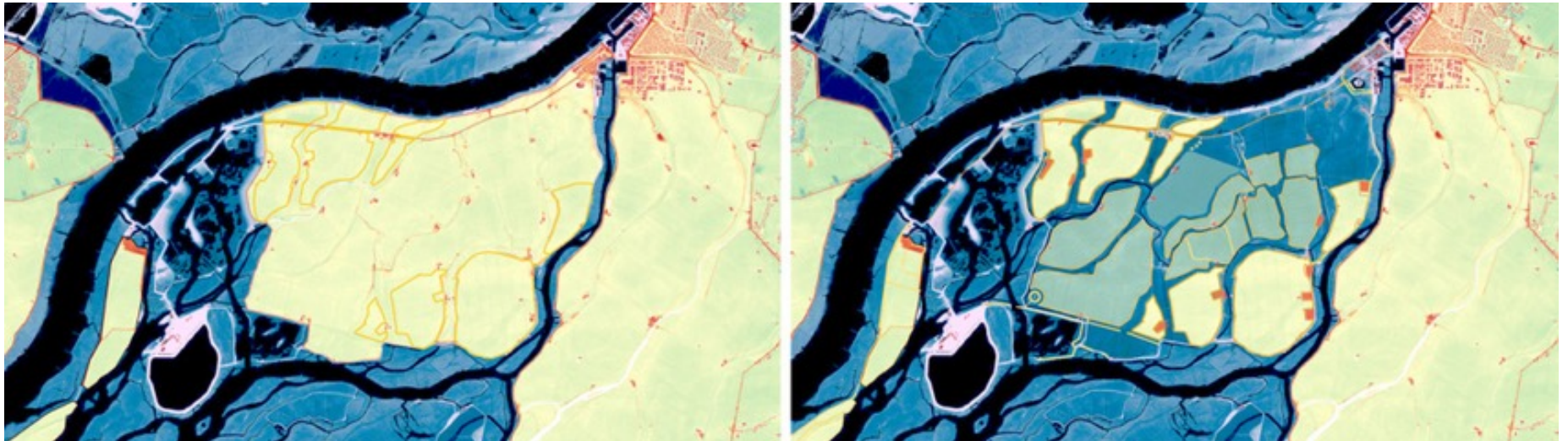


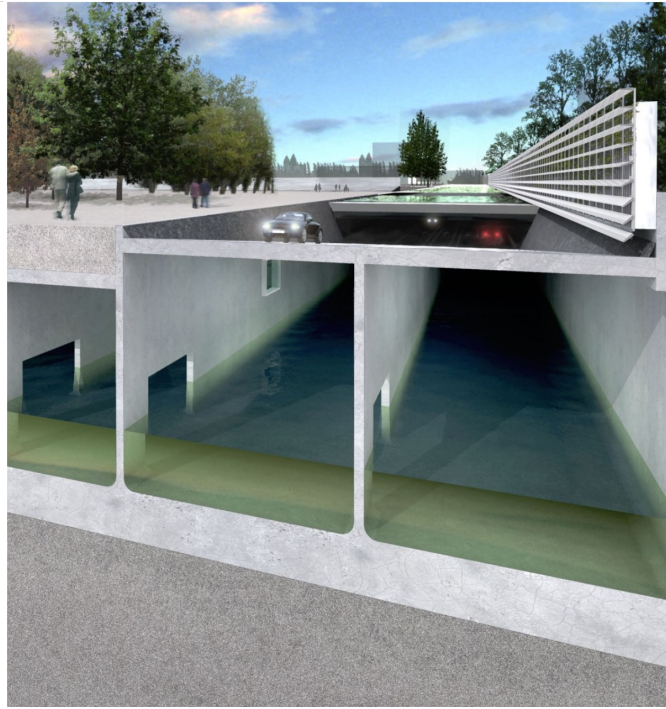
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- 1 - lowering of groynes
- 2 - deepening low flow channel
- 3 - removing hydraulic obstacles
- 4 - lowering flood plains

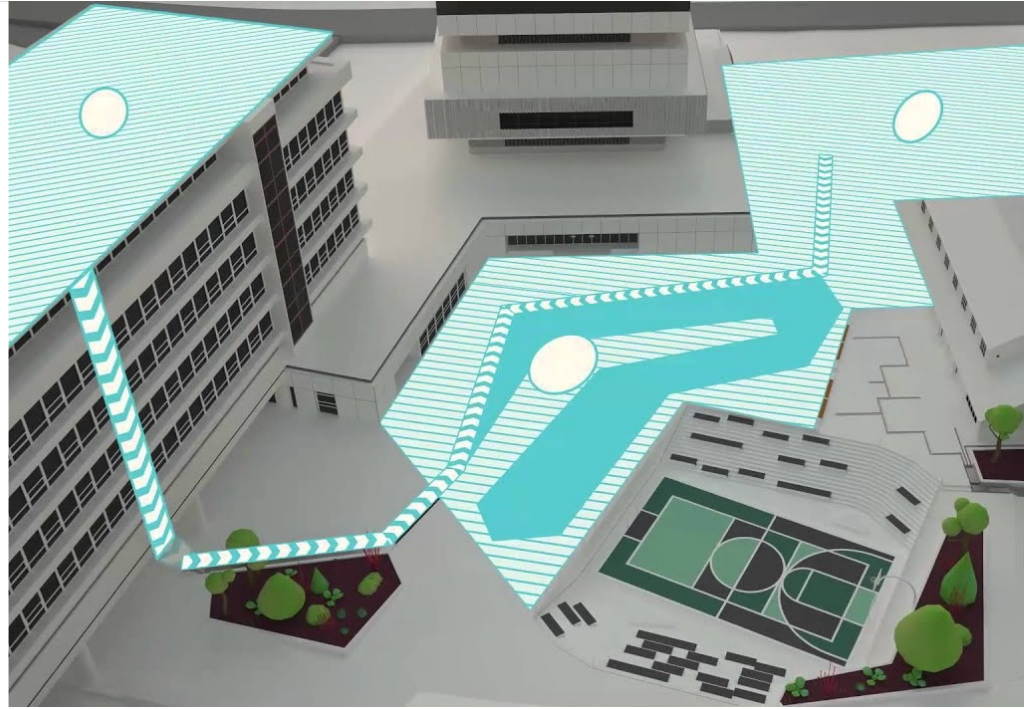
- 5 - locally setting back dikes
- 6 - setting back dikes on a large scale
- 7 - detention reservoir
- 8 - reduction lateral inflow

Room for the Rivers - Noordwaard





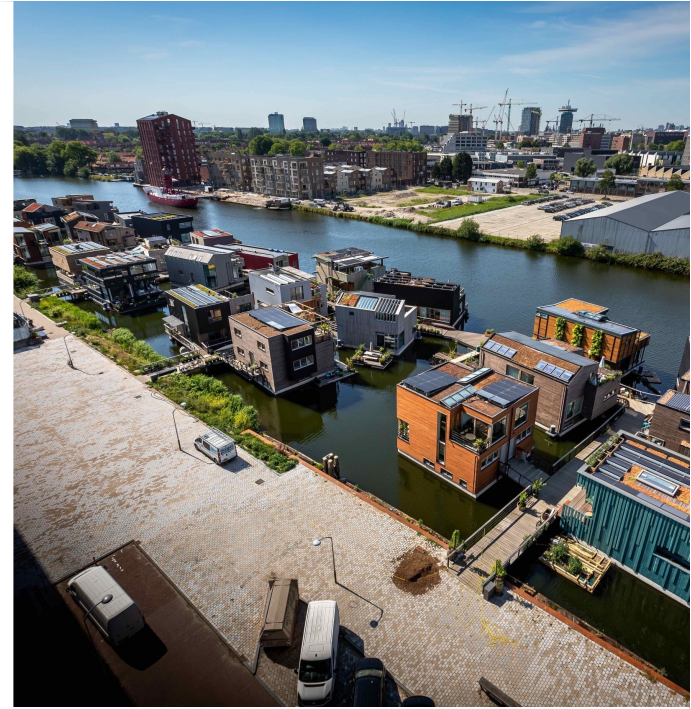
Rotterdam Museum Park flood mitigation



Water plazas



Plan Tide, Dordrecht



Living on water

Flood Risk affects
over a Billion of
People around the
world

