

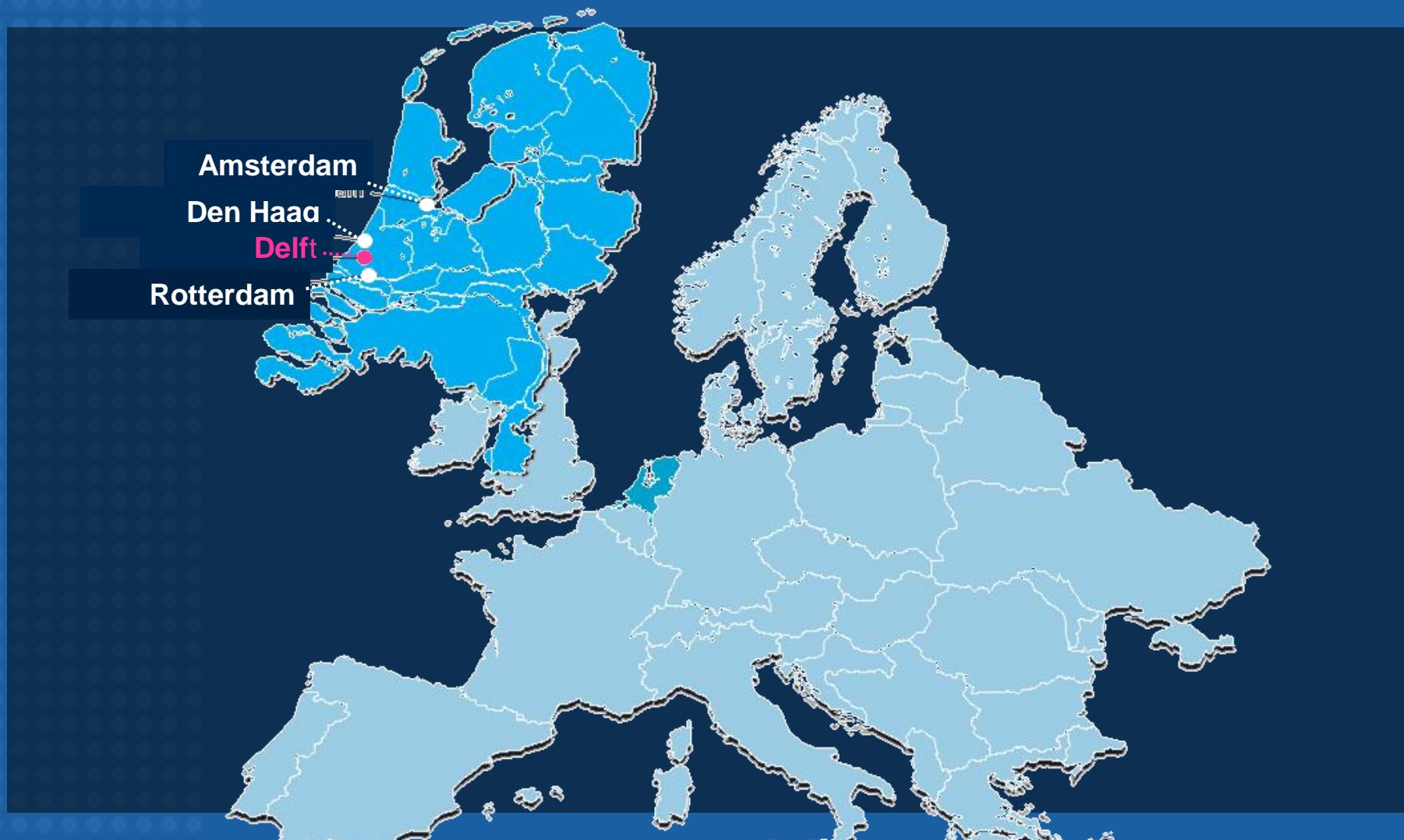
City of Delft



June 1st 2015, UNISDR meeting
Dr. Diny Tubbing
Ir. Karla Kampman MBA



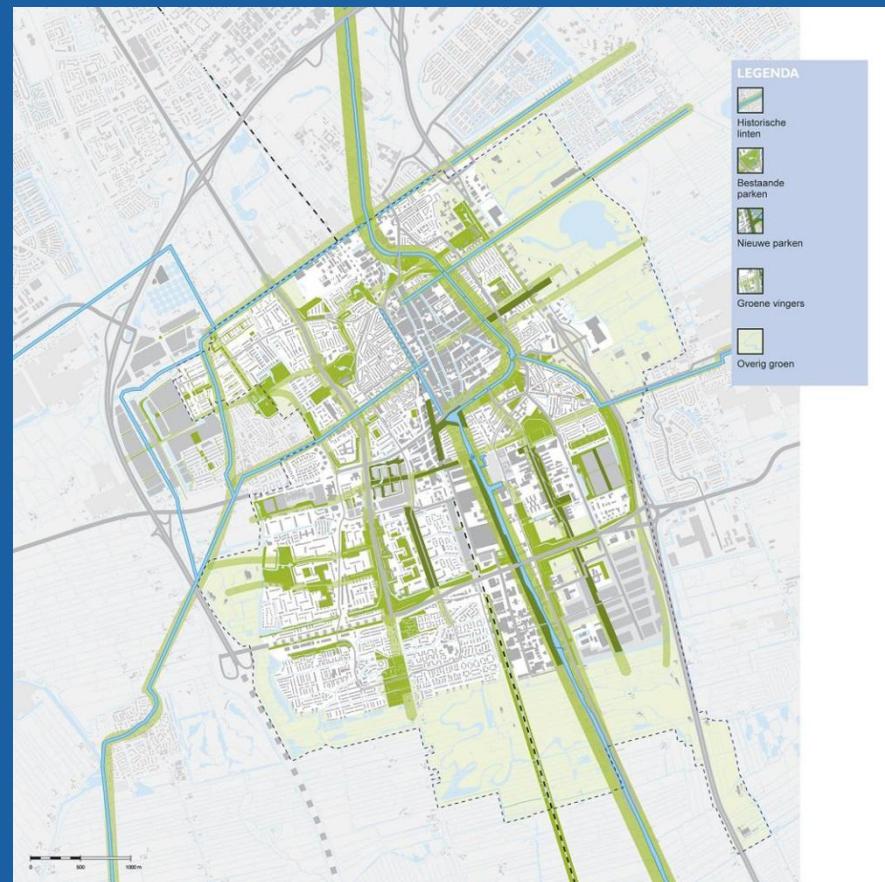
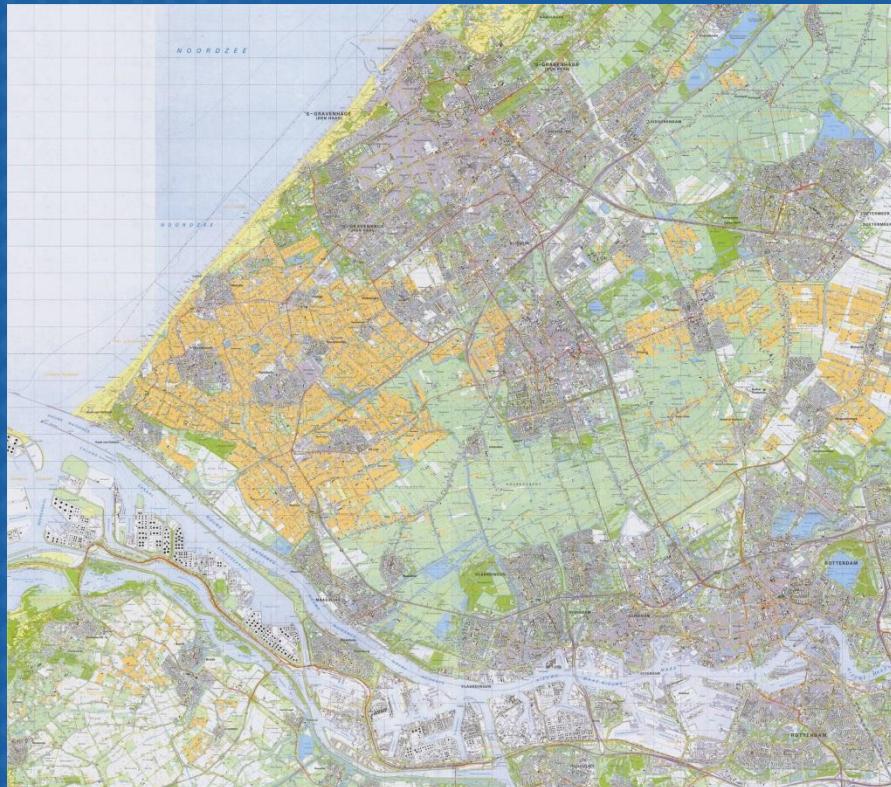
Location





Gemeente Delft

Map of Delft



Delft, facts & figures

South Holland Area (3 million inhabitants)

Delft has 100,000 inhabitants

Fully equipped

Middle sized town

International orientated

Many knowledge based companies

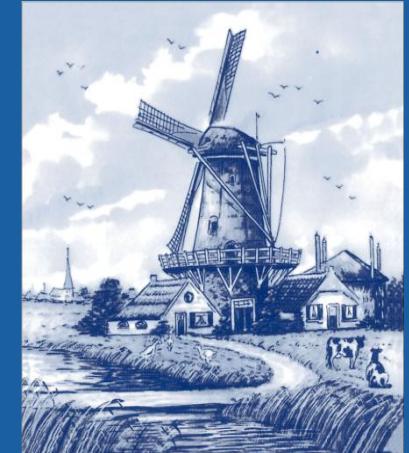
i.e. TU-Delft, IHE, Deltares,...

YES Delft ..

Characteristics of Delft



History
Royal family
Delft Blue
Innovation/TU
Delft kennisstad
Green area



Major disasters (1)

In 1998, 2000, 2004: floods



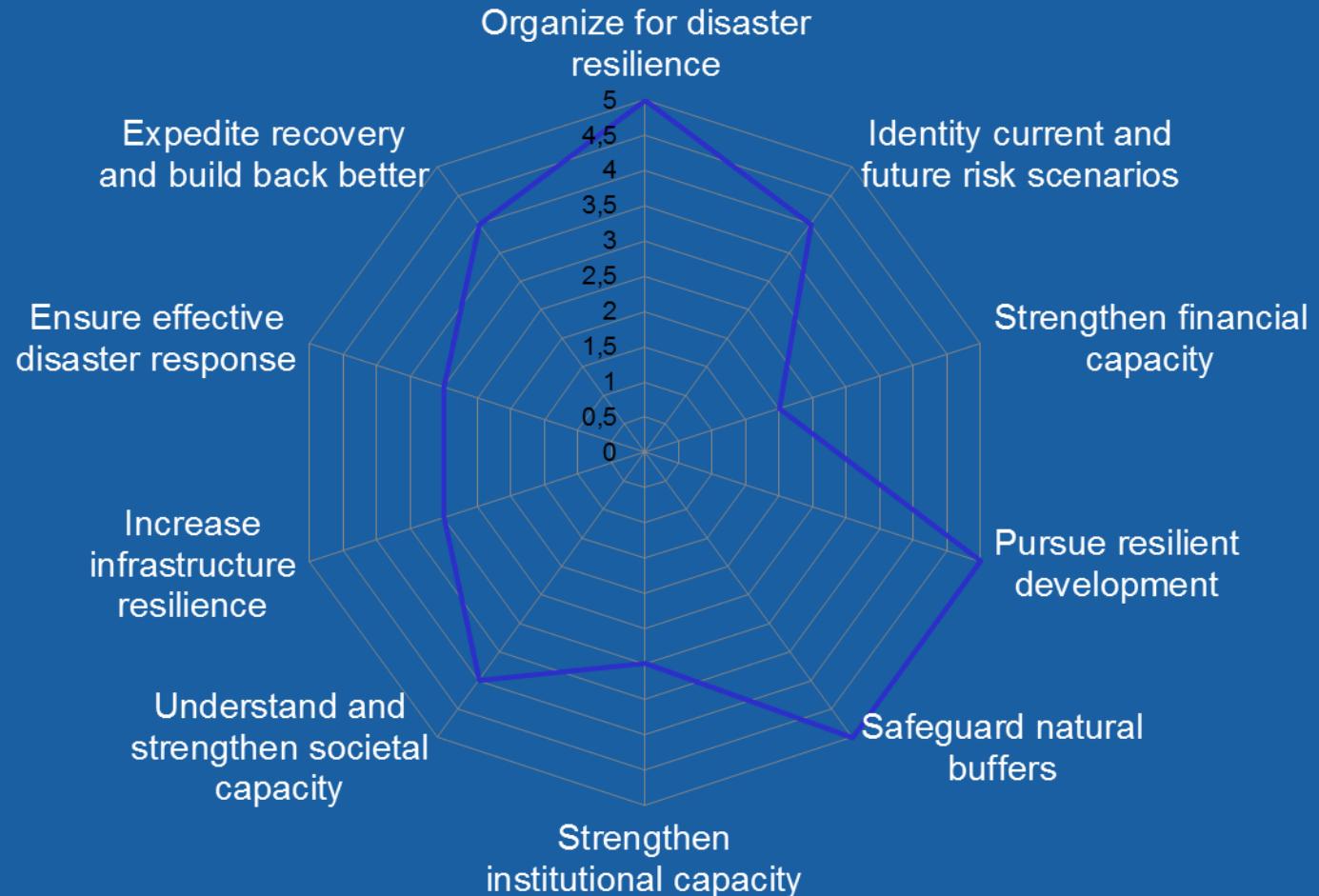
Major disaster (2)

About 1999: waterpollution



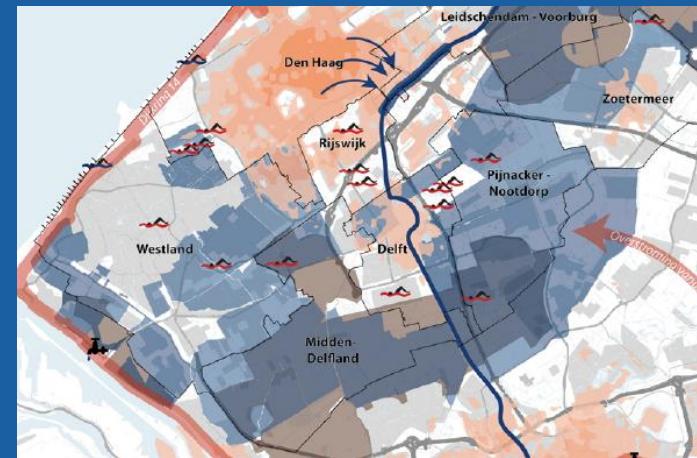
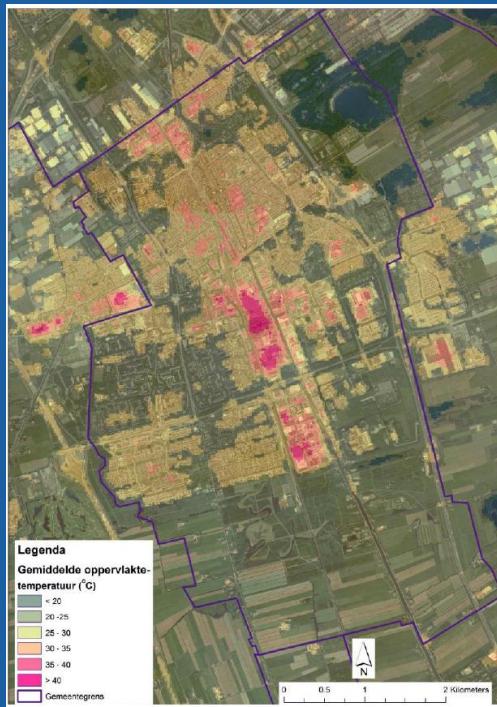
A large amount of molasses (=sugar watersolution) runs off in sewer and surface water

Score new 10 essentials

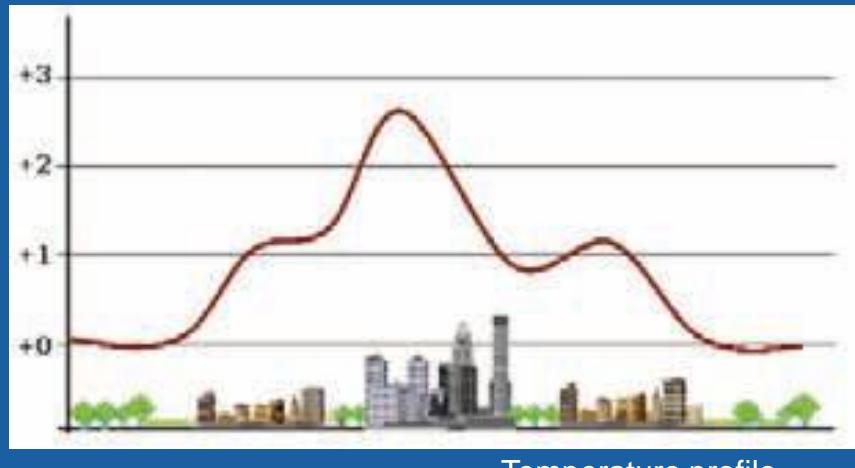


Main Challenges

- Subsidence and settlement (innercity)
- Inundation
- Downpours
- Heat
- Dryness



Vulnerability map



Action plan/General policy

- Contain, collect and run-off to the outlet waterways
- Ecosystem approach (services)/biodiversity
- Regional adaptation strategy (RAS) (greenhouses, meadow and cities)



Approach future risks

Installation of moveable weirs (inner city)

Realisation of natural bankings

Application of water

permeable materials

Community awareness actions like
“removing tiles, add green”

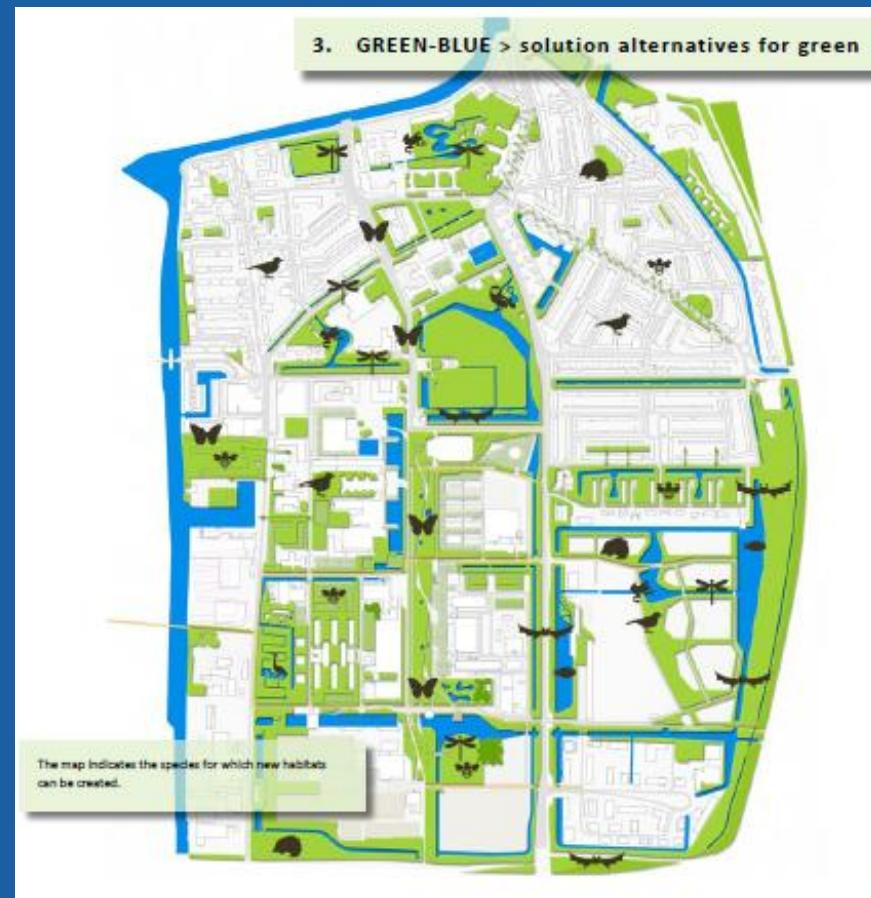


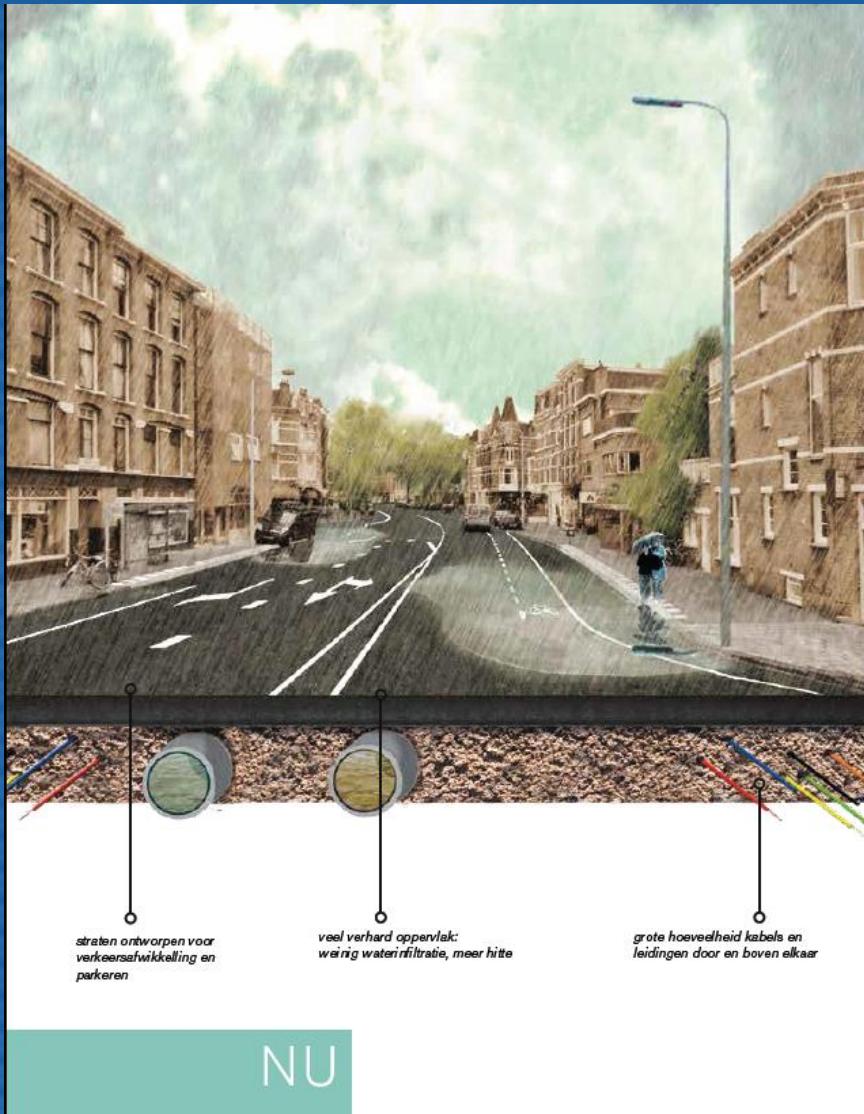
Area Approach

Green blue project
(stakeholders)

Smart City

Future city approach in which energy,
economic, social, housing and
environmental aspects including flooding
are included

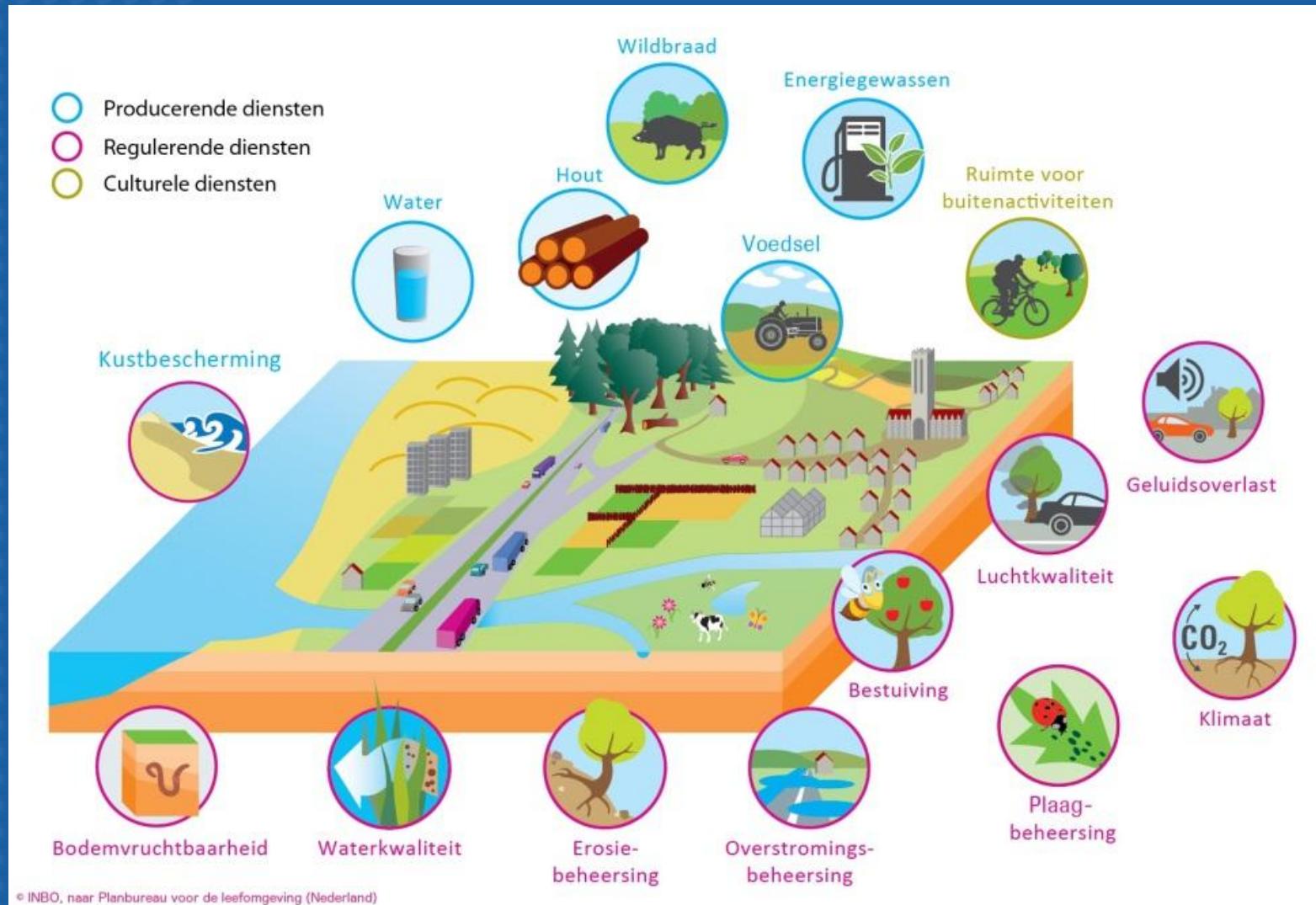




Bron Bosch &Slabbers, Deltares



Ecosystem services





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Examples





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Tools

- 3DI model
- Climate game
- TEEB: a model based on (social) cost benefit analyses
- Natural capital



Denkmodel Natuurlijk Kapitaal Nederland



Bron: PBL, gebaseerd op gedachtegoed TEEB

teeb.stad

TEEB-stad tool
Inzicht in de waarde van groen en water in de stad

Lian Merkx > Platform31
Heleen Bothof > LUZ architecten

Platforms

- Dutch Climate proof cities
 - Klimaatverbond (climate alliance)
 - Knowledge portals
-
- Participation meetings



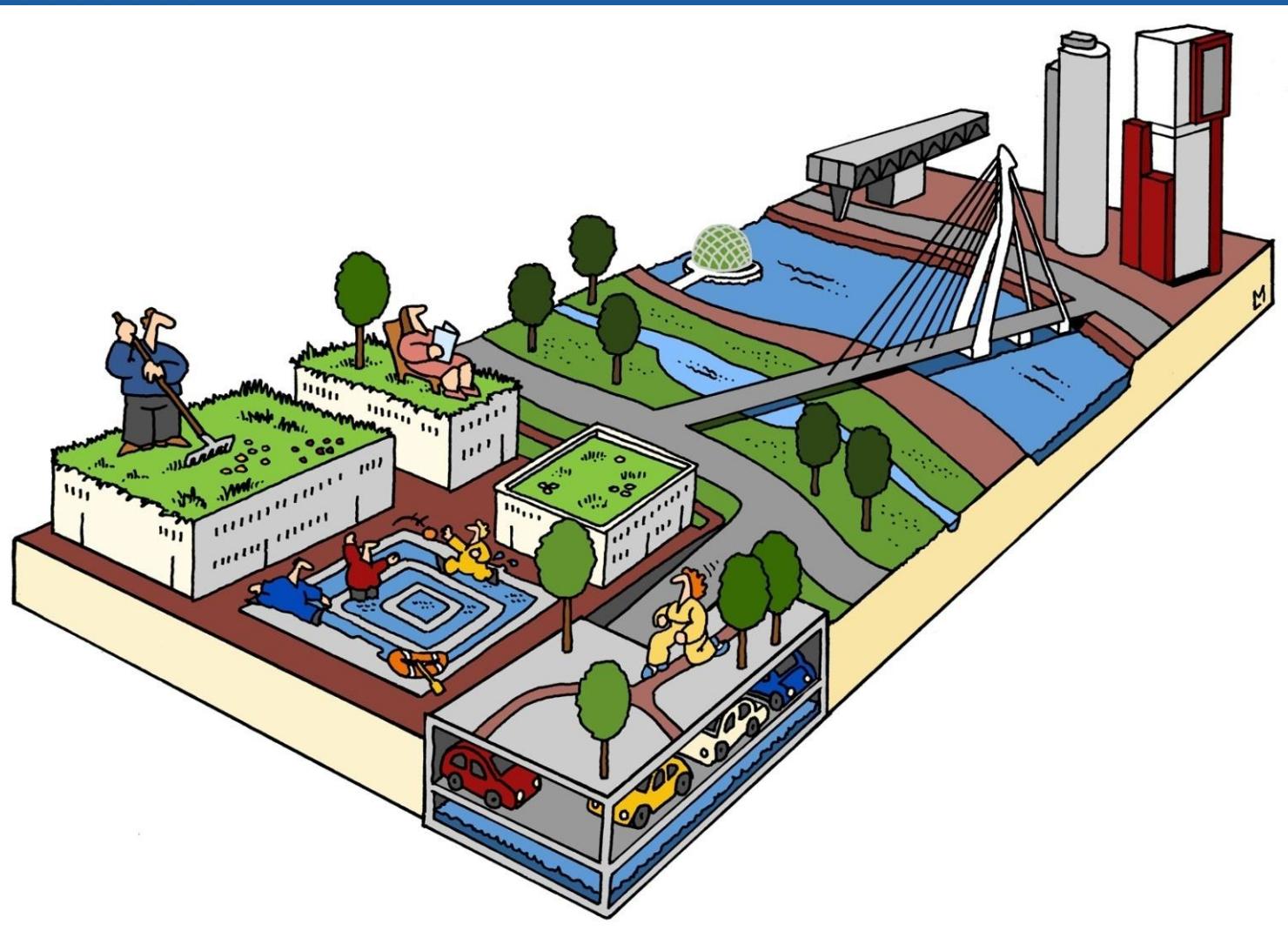
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Why?





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Too much water too little resilience

