

Towards an attractive and sustainable metropolis in the Dutch delta

Development scenario 2040 for Amsterdam Metropolitan Area
in an uniquely open and forthright process

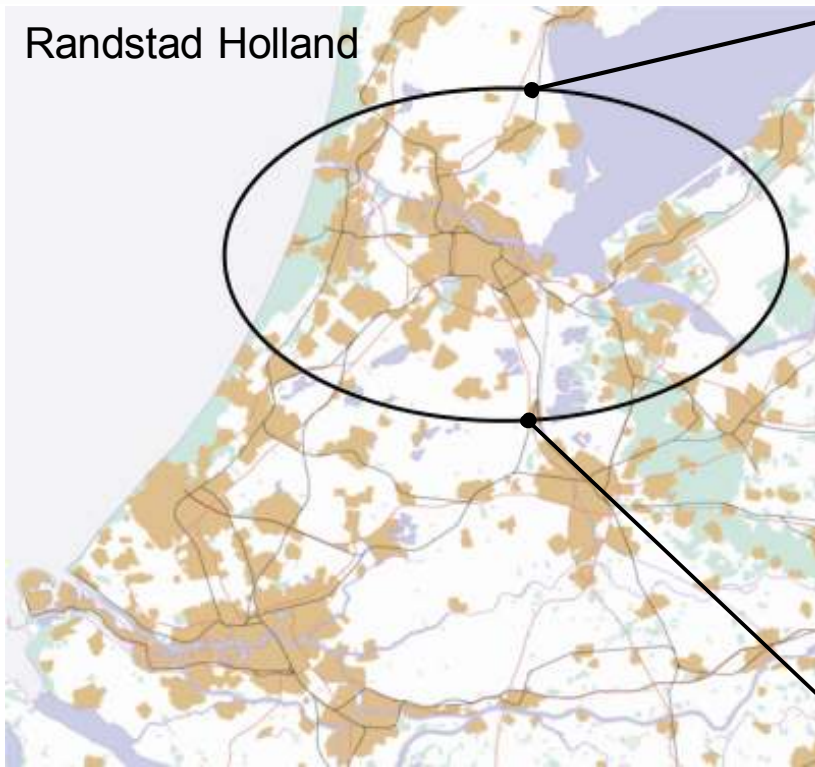
ir. Reinoud Bakker - Province of Noord-Holland – Netherlands



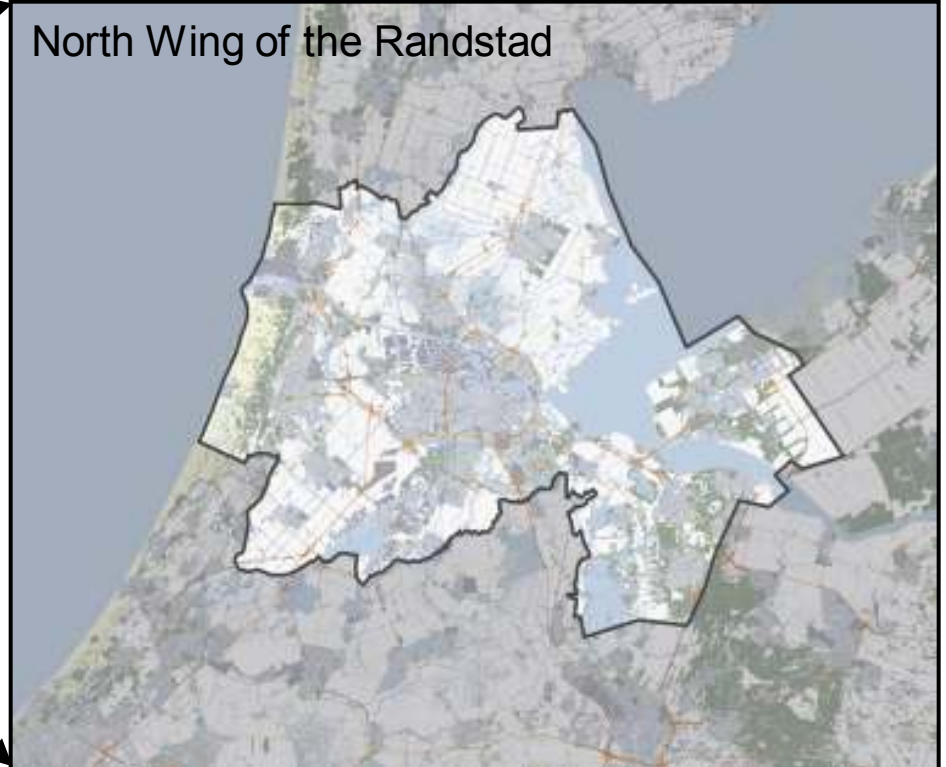
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Randstad Holland



North Wing of the Randstad



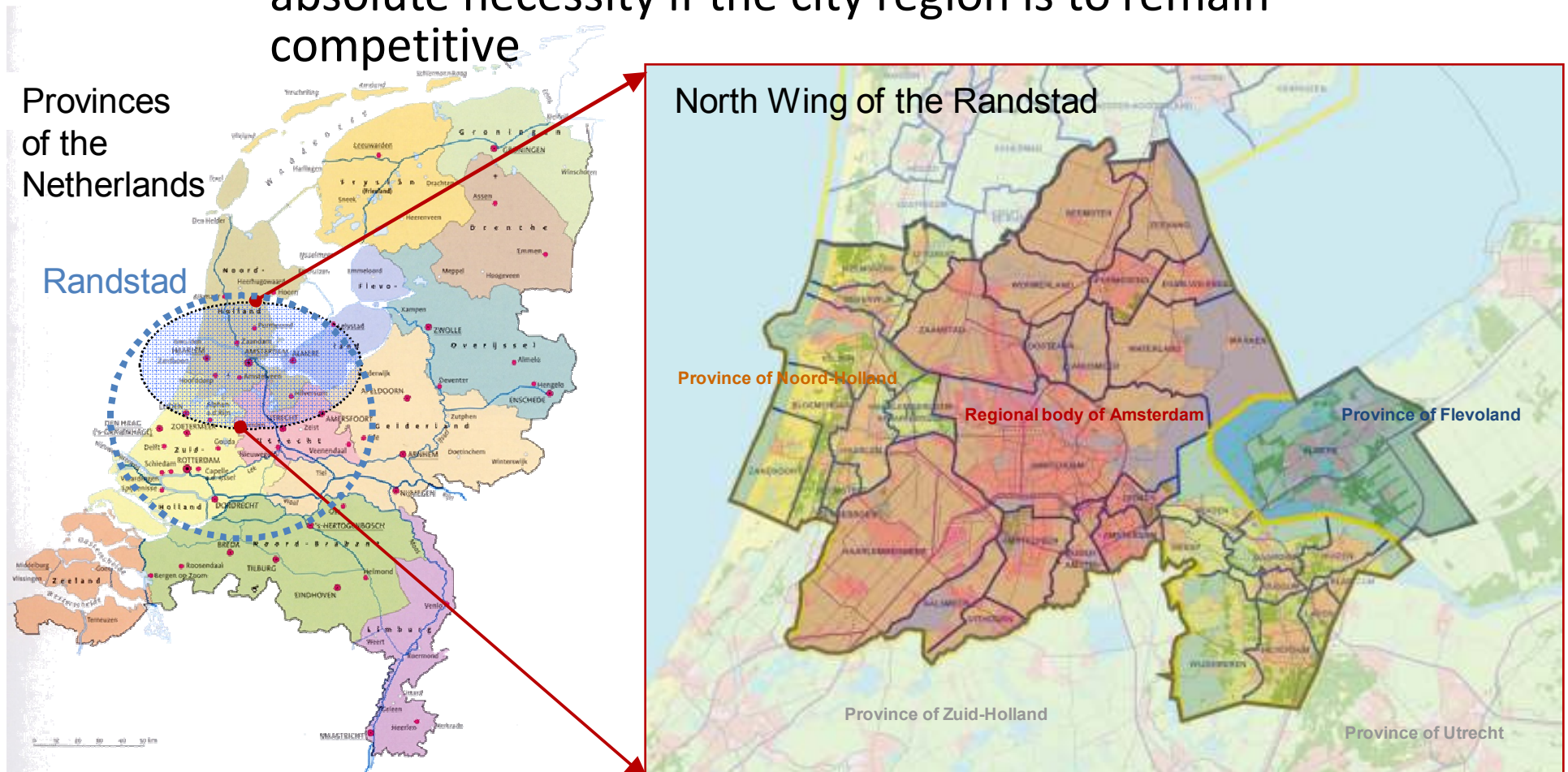
Administrative Challenges

- New Dutch spatial planning Act (July 2008): new approach and role of tiers of government (national-provincial-municipal):
 - Structural vision: only binding the body that institutes it
 - Implementation affects citizens and other tiers of government
 - Legal instruments can be used and are binding to other parties

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Administrative Challenges

- Decisive regional collaboration between 27 municipalities, 1 regional body and 2 provinces is an absolute necessity if the city region is to remain competitive



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Open and forthright process to discover:

- the metropolitan strengths, potentials, qualities and opportunities,
- but also the shortcomings and stumbling blocks this region might face as it develops into a strong European metropolis.

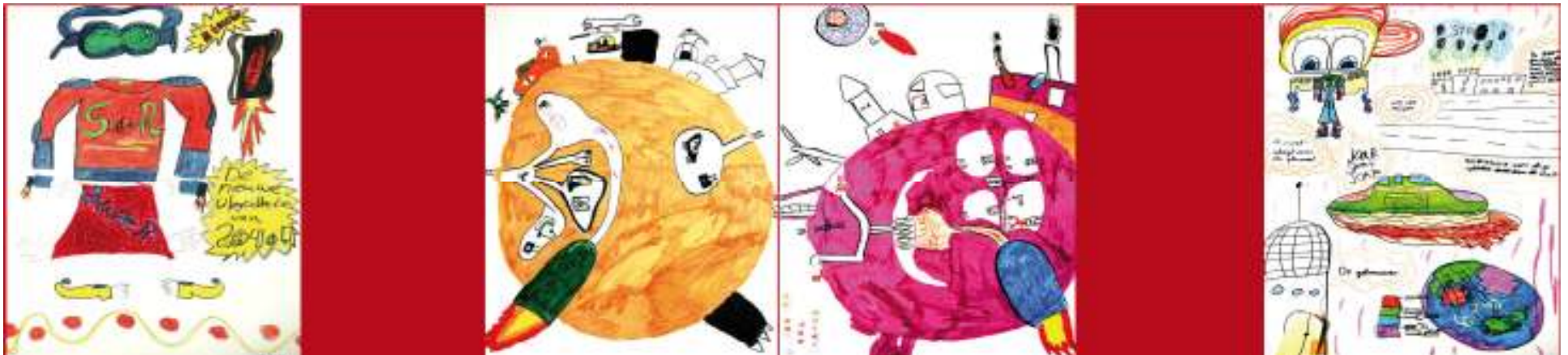


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From children who illustrated their dreams for the future....

...to foreign essayists who shared their considered visions:

a great many interested parties and experts were consulted over the year.



Key Question: Building the Metropolis

How can the polycentric Amsterdam region be transformed into a fully fledged metropolitan area that is internationally competitive?

“Metropolis in the Dutch delta”

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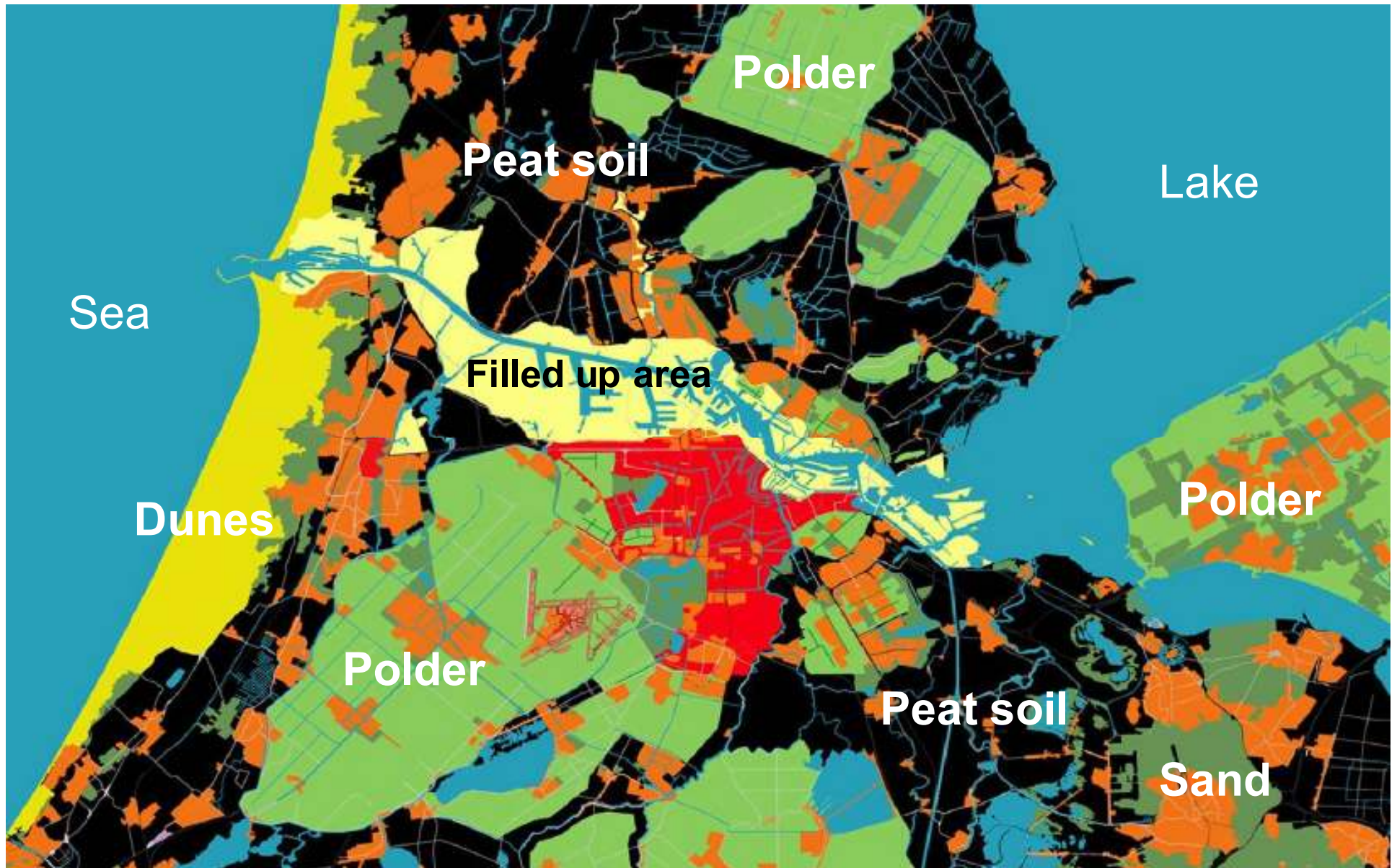
Unique identity >> unique competitiveness:

- History of city and water-landscapes
- Relative compactness ('small world city')
- Functional diversity
- Creative environment
- Spatial configuration



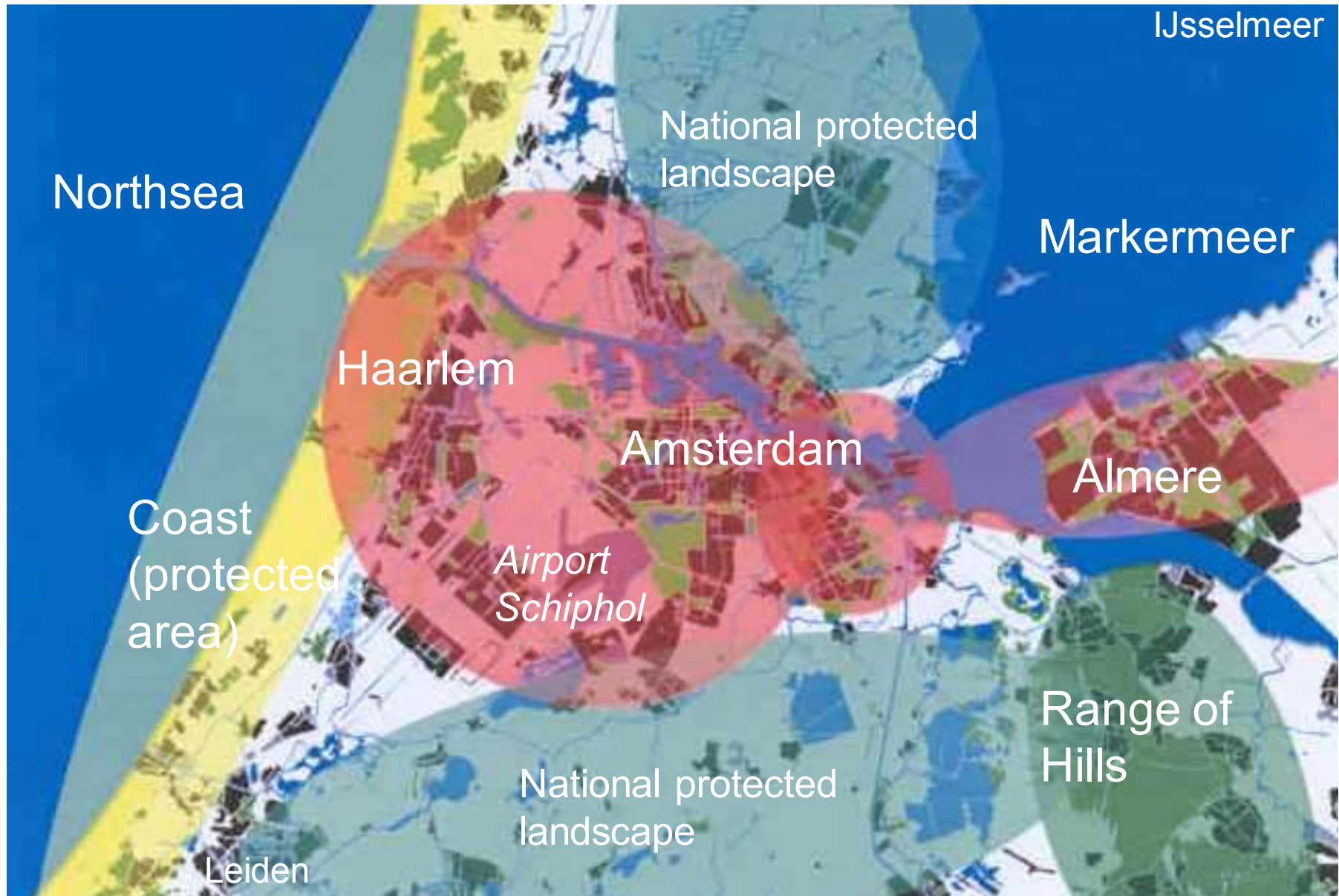
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Delta subsoil



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Spatial configuration



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Key Statistics (2007)

Dimensions	40 x 60 km
Surface area	1,815 km ² , of which almost 25% is water
Population	2.2 million, of whom 33% are of foreign origin
Population density	1,568 inhabitants/km ²
Dwellings	987,000 units, with an owner-occupied to rental ratio of 43:57
Jobs	1.0 million, of which 85% are in the tertiary sector
Business ventures	58,000
Gross National Product	a 47,000 per capita (2005)
Value added	a 5.1 billion (2005)
AMS Airport Schiphol	46 million passengers; 1.5 million tonnes of cargo
Port of Amsterdam	84.4 million tonnes in cargo throughput
AMS Internet Exchange	AMS-IX, the world's busiest internet exchange
Aalsmeer flower auction	a 1.7 billion in turnover



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Four challenges >> Four actions

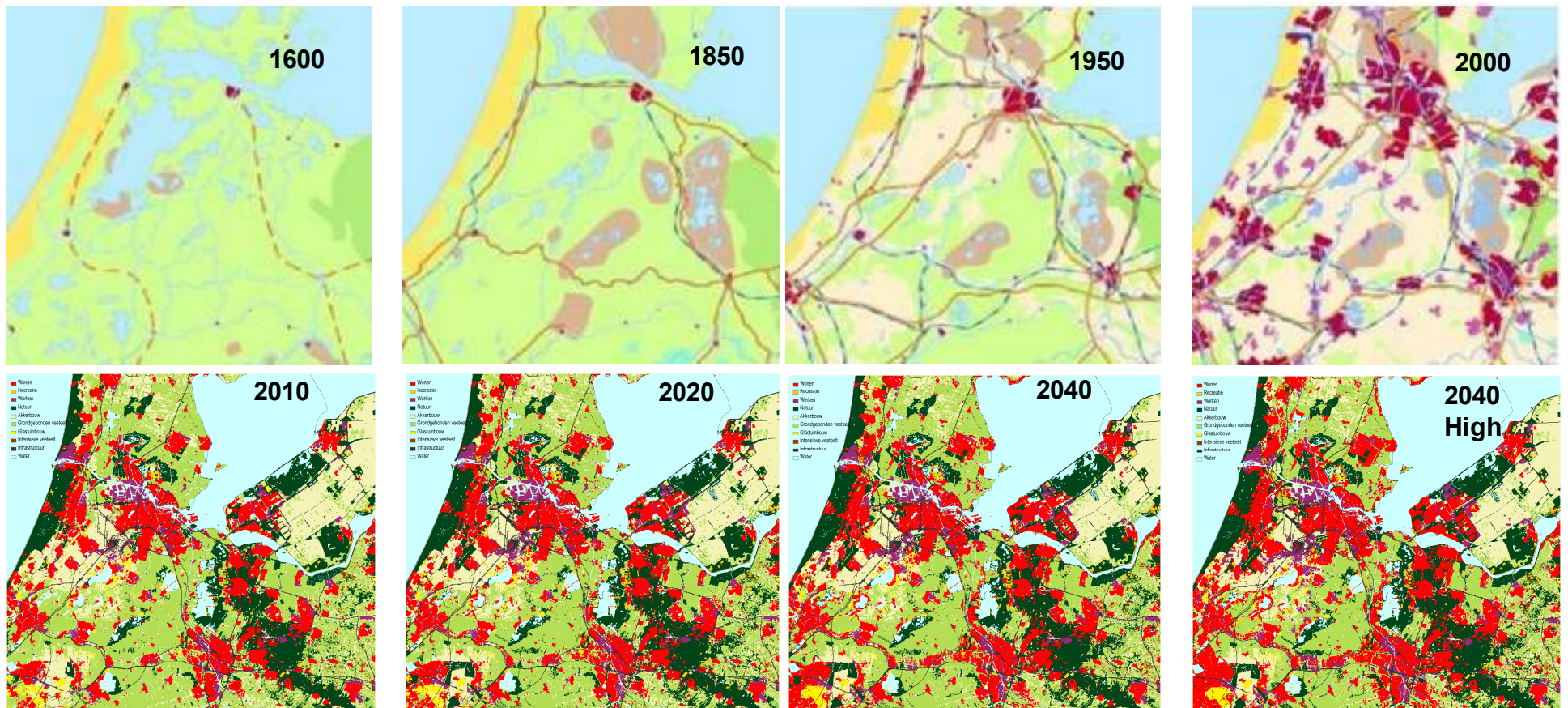
- Sufficient and attractive living and working environments >> no urban sprawl but clustering and bundling investments and urban transformation
- Congestion >> Regional public transport system
- Air quality and nature >> Metropolitan landscapes
- Climate change >> extra protection and watermanagement



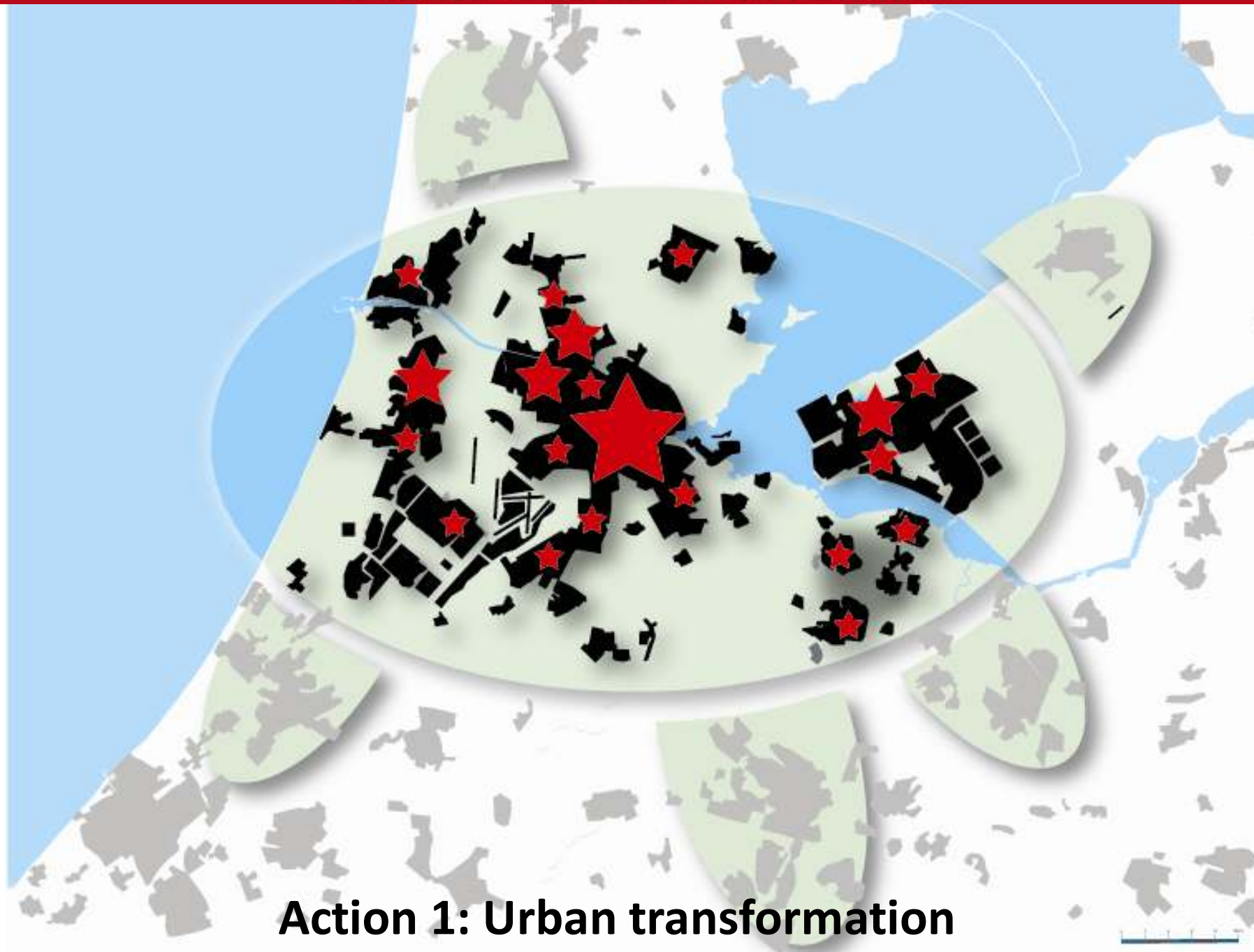
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Challenge: Urban development

>> No urban sprawl but clustering and bundling investments



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Action 1: Urban transformation

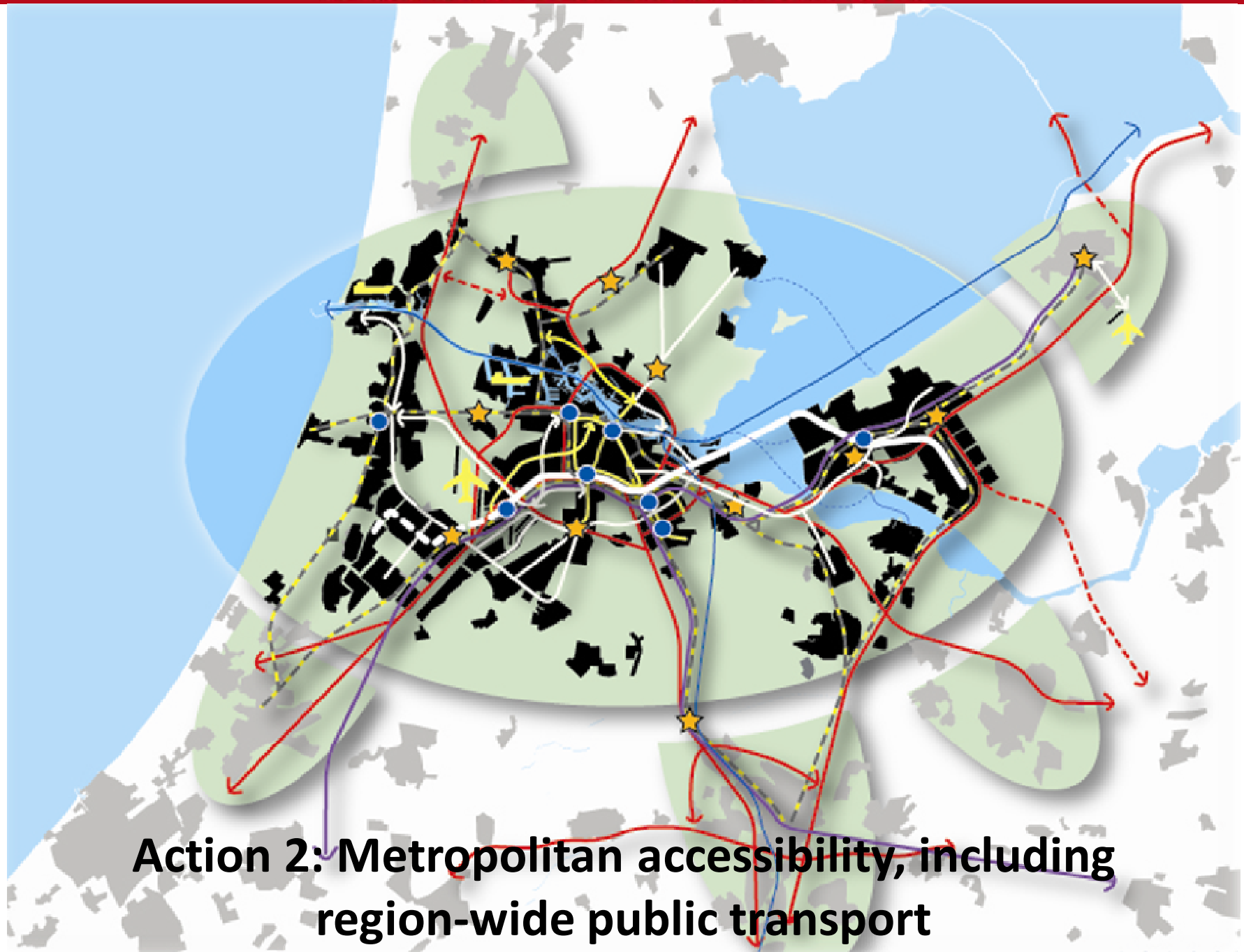
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Challenge: Congestion

>> Regional transport system for the metropolis



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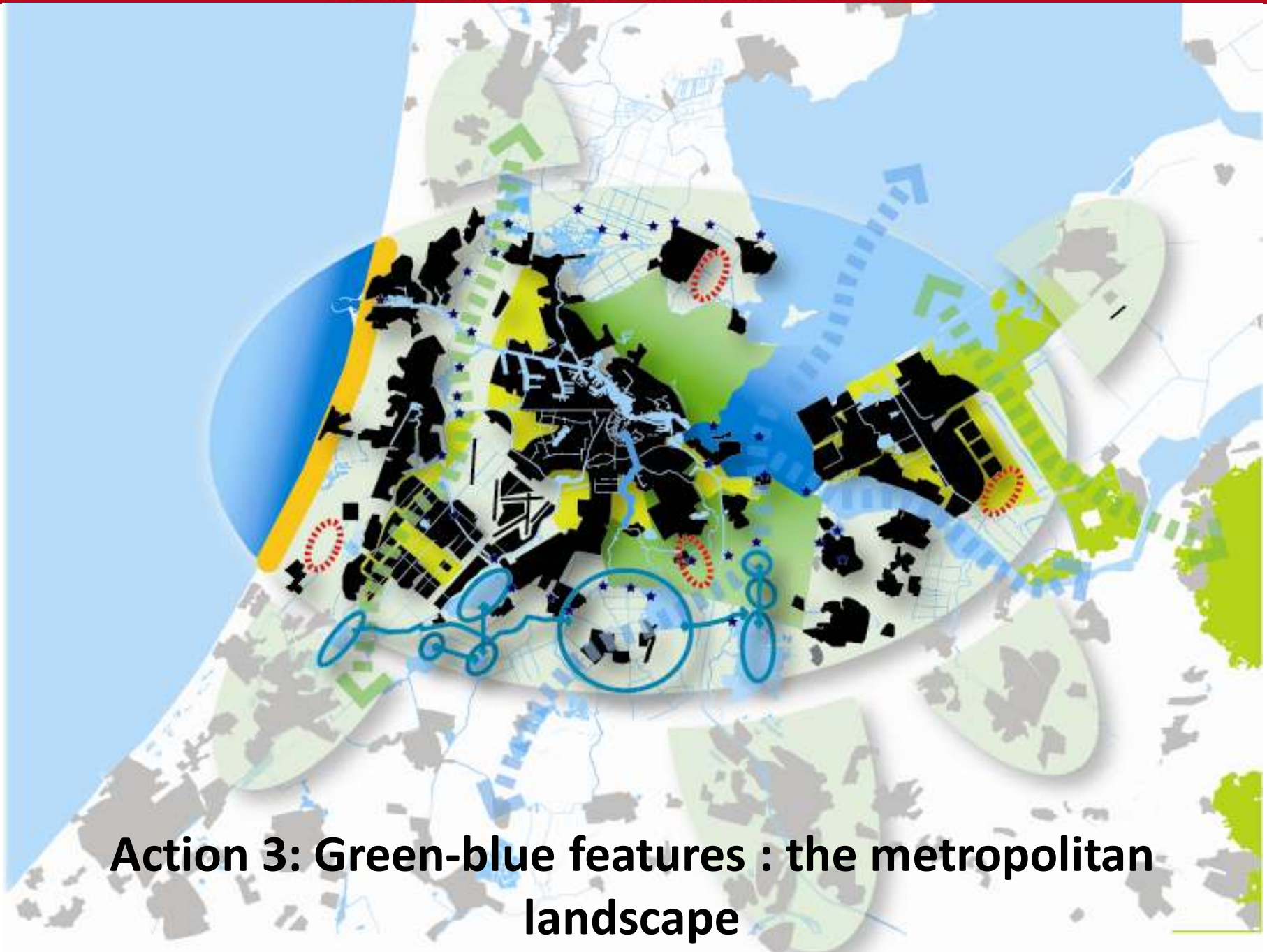
Action 2: Metropolitan accessibility, including region-wide public transport

Challenge: Air quality and nature

>> Metropolitan landscapes



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Action 3: Green-blue features : the metropolitan landscape

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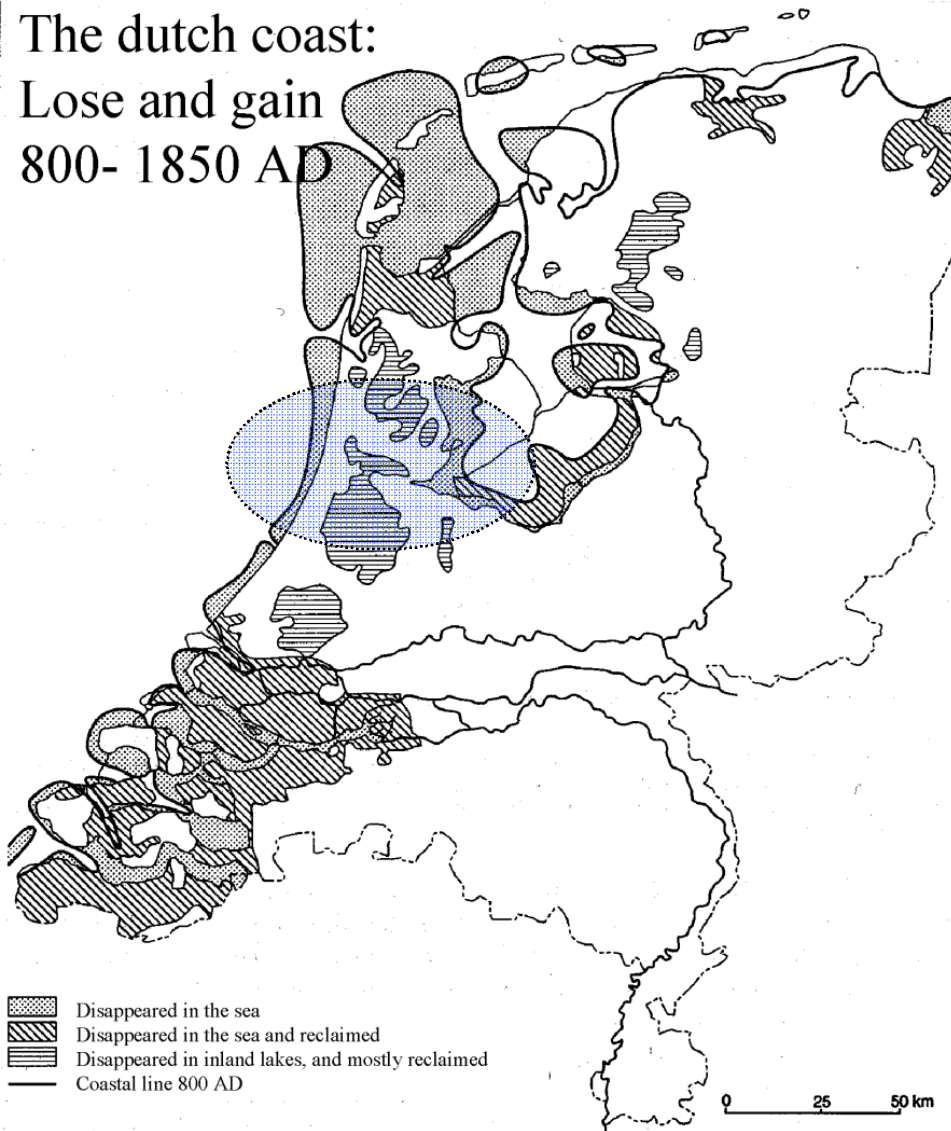
Challenge: Climate change

>> extra protection and watermanagement

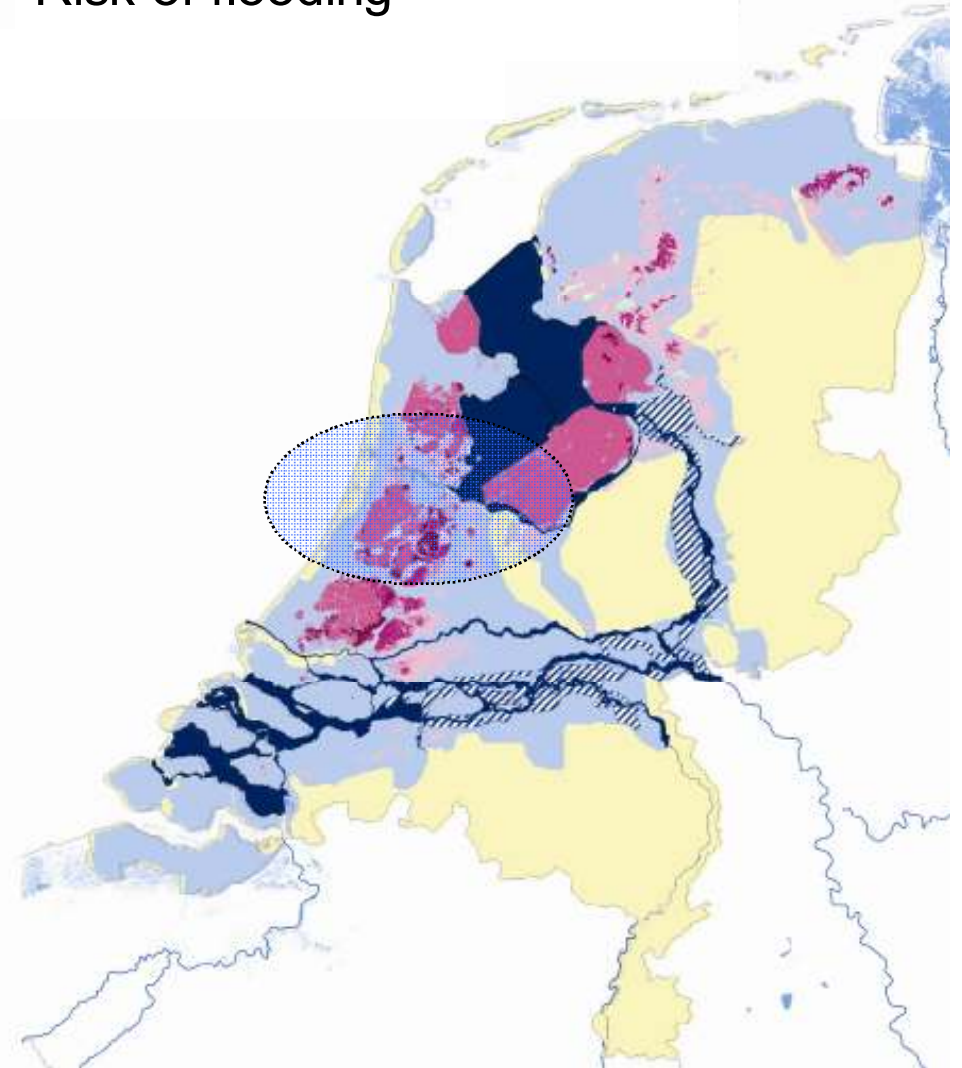


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The dutch coast:
Lose and gain
800- 1850 AD

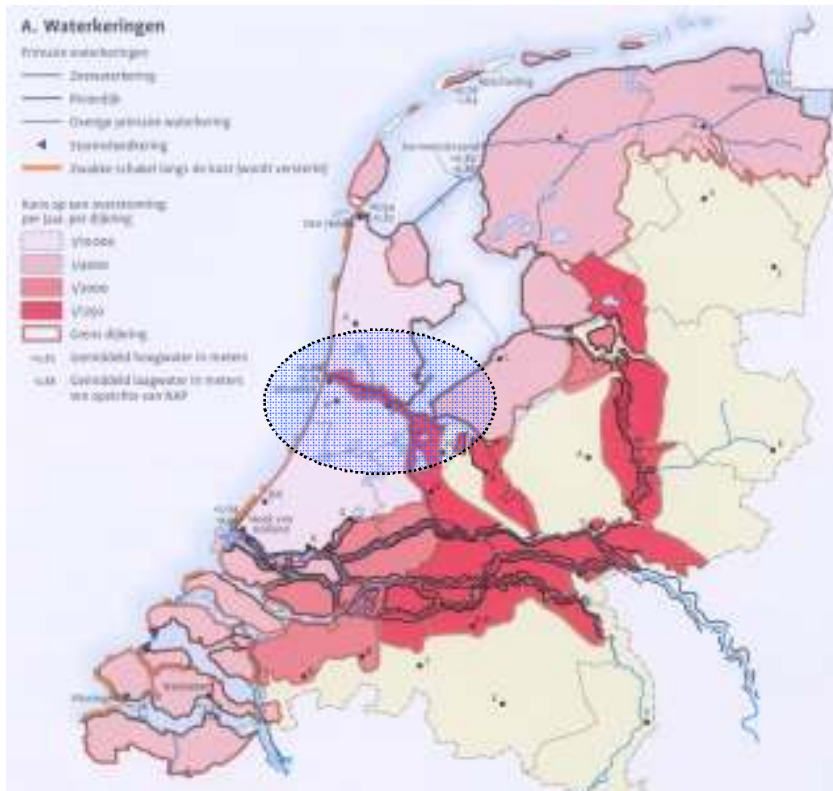


Risk of flooding



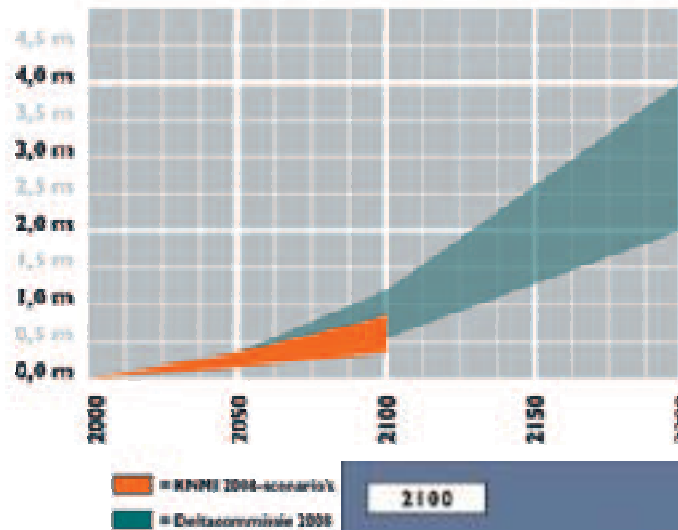
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Present level of protection



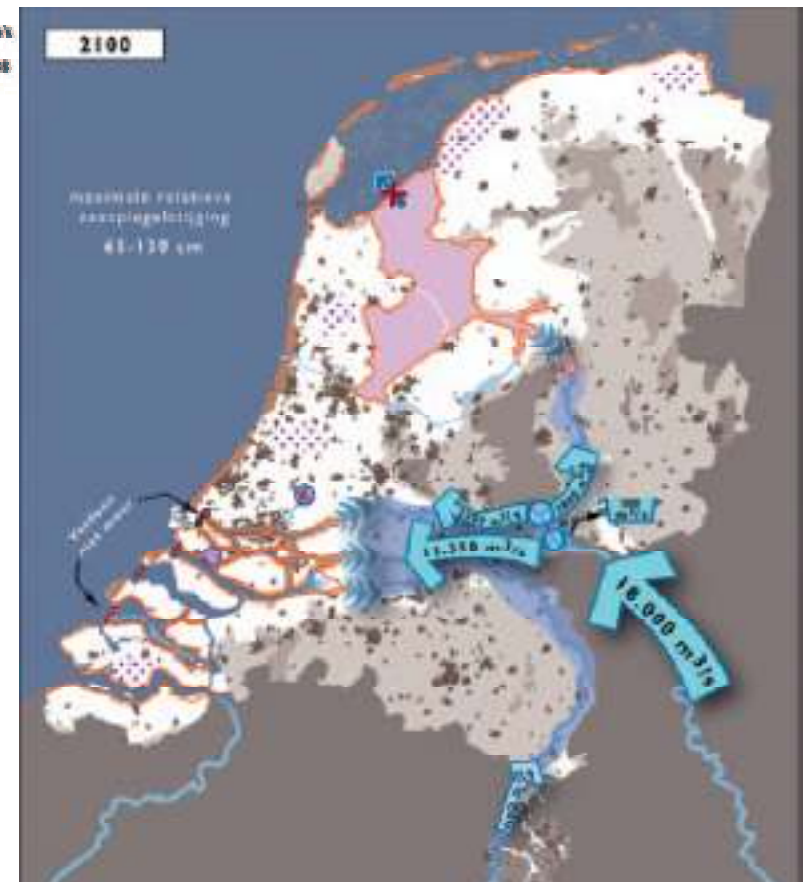
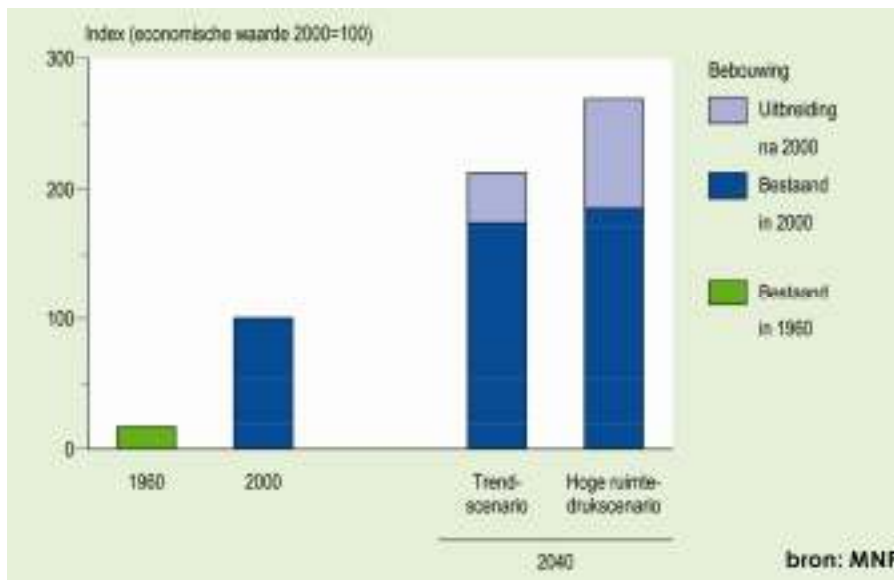
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Flooding 1953



Searise 2100/2200

Potential damage of Area's sensitive for flooding



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Special national advisory board (Deltacommissie) made public their advise early September for the Dutch government

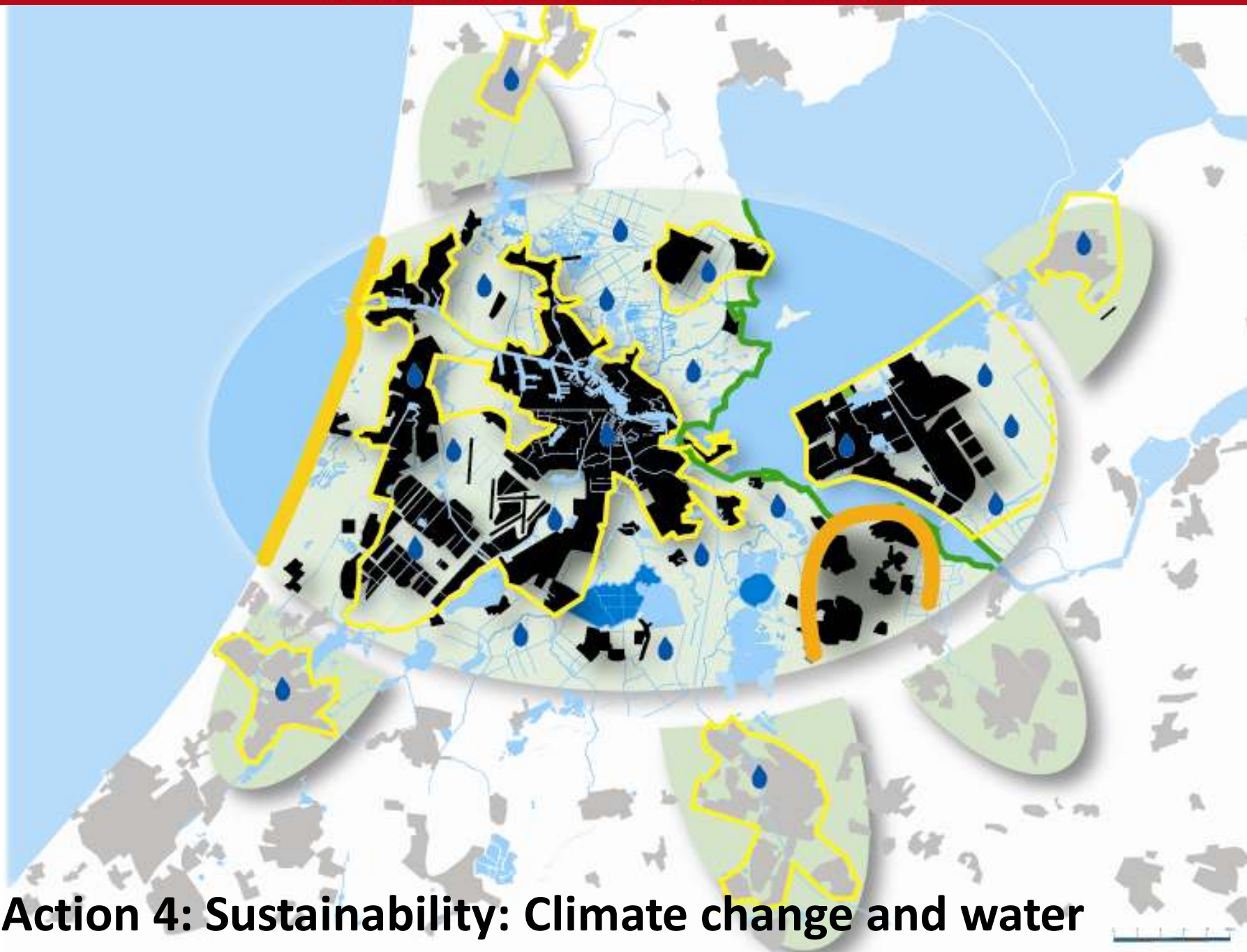
Possible solutions:

- Suppletion of sand along the coastline and make higher dams and dikes (ten times higher protection in the coming 100-200 years)
- Special emergency flooding areas along the rivers, to make controlled inundation possible
- Compartmentalize the land to minimize damage in case of dike burst
- Extra protection for high value economic areas
- Better water retention in urban and rural areas (permeable hardening, partially floodable public space etc.)
- Development of housing, business etc. adapted to water.
- No developments in high risk areas
- Largest lake in the country (IJsselmeer) as a clean water reservoir
- Making the water systems self-supporting

Estimated investments 1.2 – 1.6 billion Euros every year up to 2050



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Action 4: Sustainability: Climate change and water

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Metropolitan Area 2040

- intensification of the urban area
- expansion of the urban area
- rural settlements
- offices
- business parks
- greenhouse horticulture
- creative industry
- knowledge cluster
- Amsterdam internet exchange
- motorway
- park & ride transfer point
- regional public transport (rail)
- regional public transport (bus)
- high-speed train
- pedestrian / cyclist ferry
- car ferry
- seaway
- increase in water storage
- compartmentalization dike

www.metropoolregioamsterdam.nl

“Metropolis in the Dutch delta”