

Netherlands

Water Management around the world.

NL



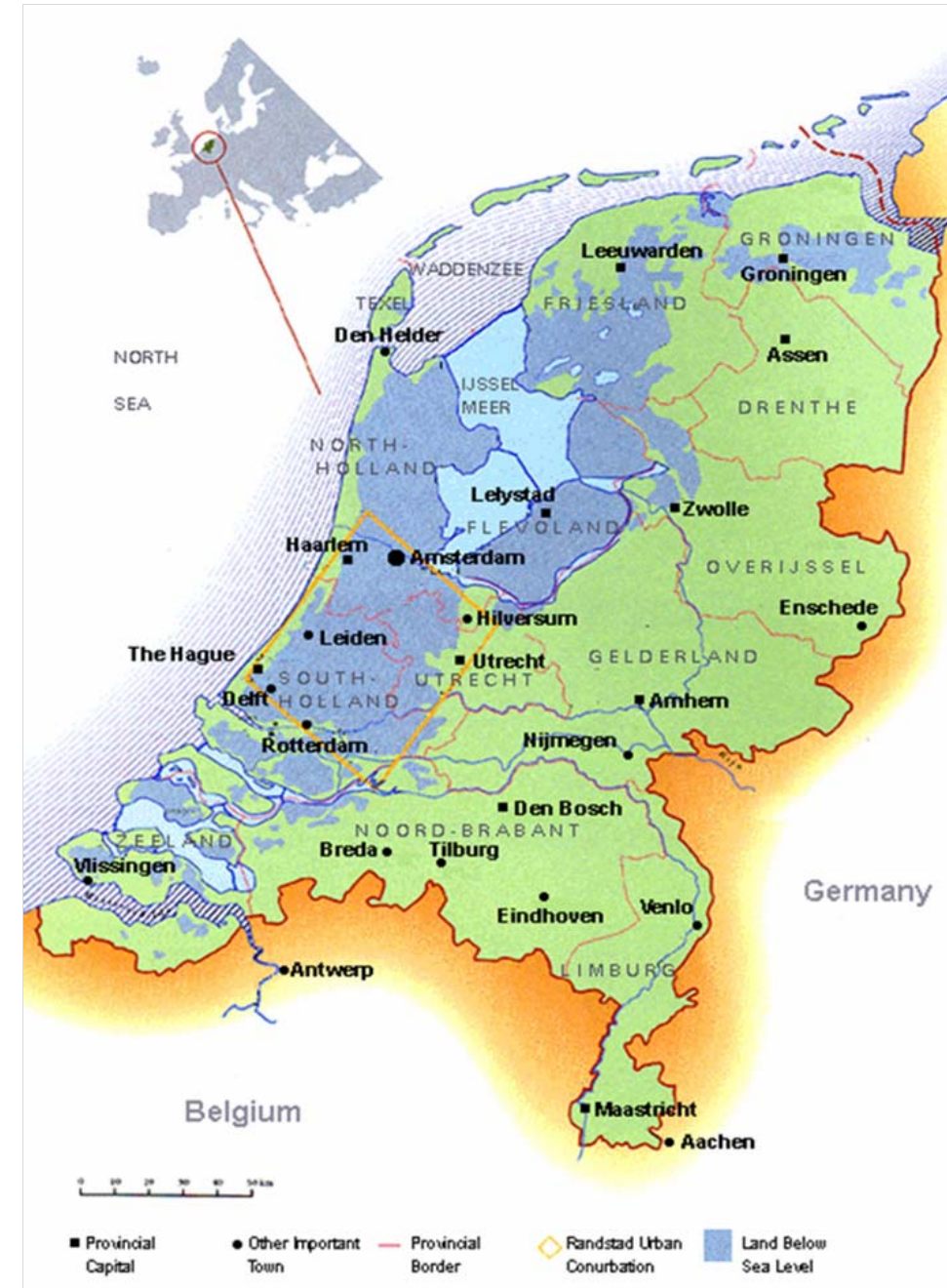
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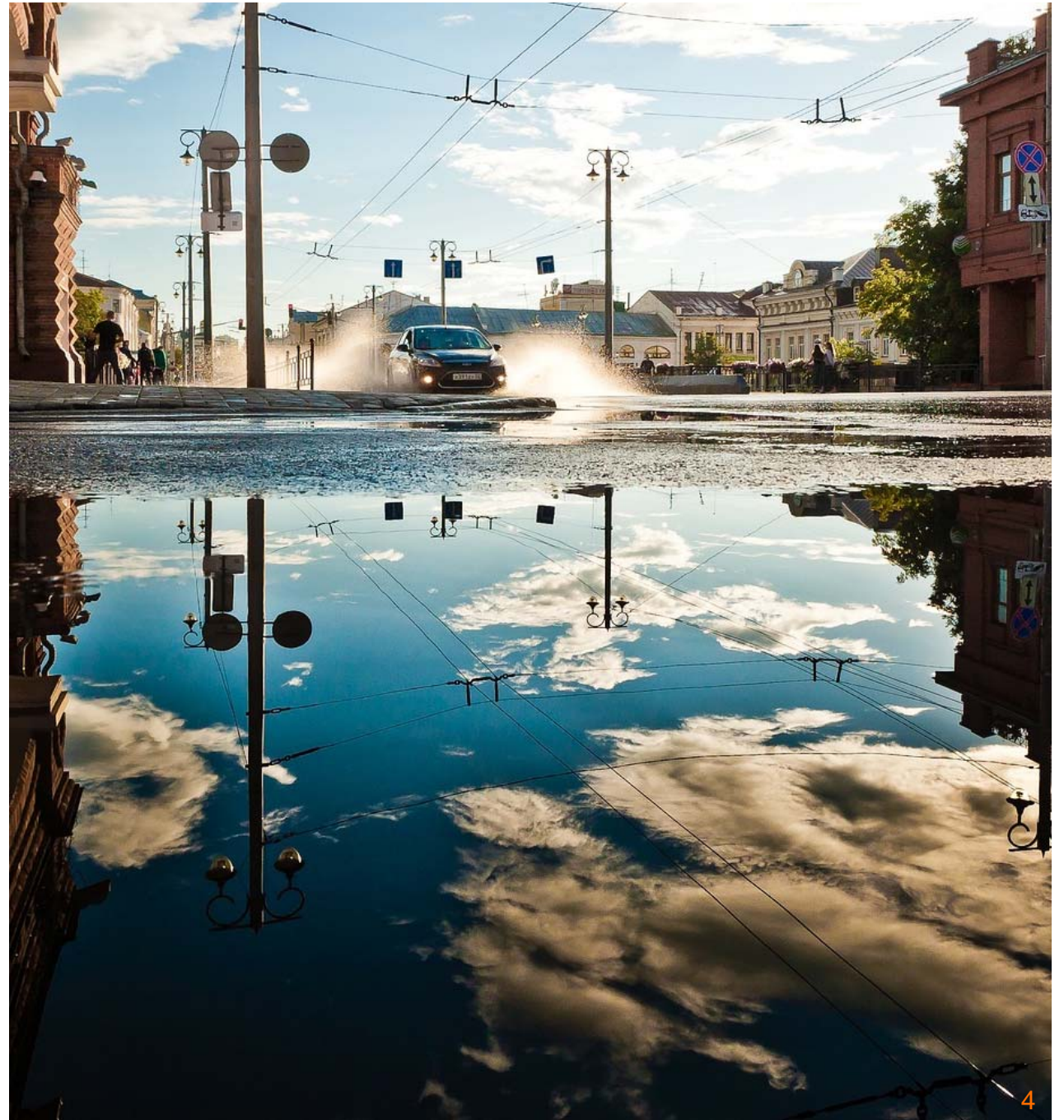
The Netherlands

- NL is a third bigger than the size of Maryland
- 17 million people
- 26% below sea level
- 60% of population, 70% of GDP earned in area below sea level
- 800 years of experience in innovative solutions for water related problems



Partnership US - NL

- 📍 Louisiana
- 📍 New York
- 📍 Norfolk
- 📍 Charleston
- 📍 And more....



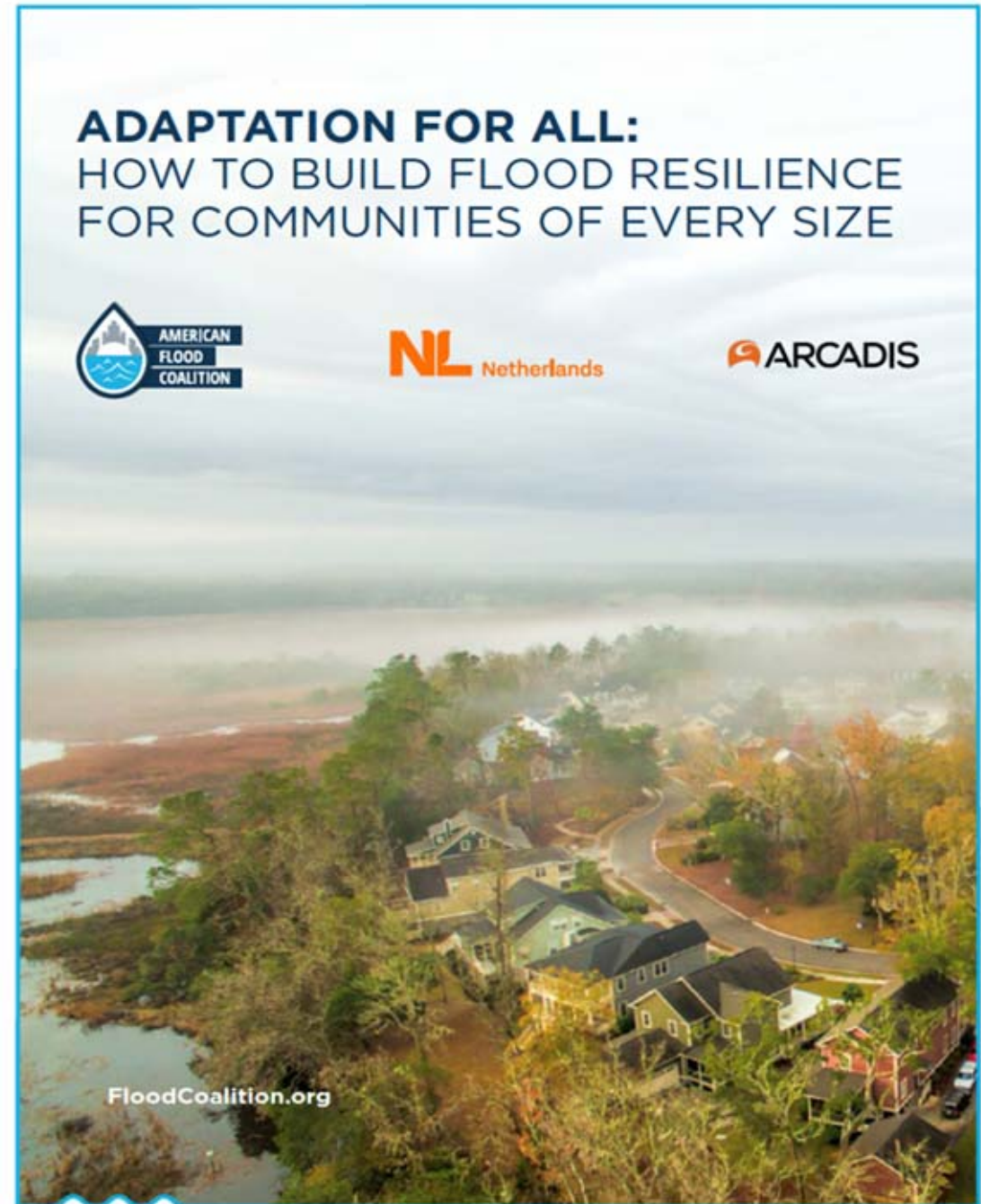
Adaptation for All

◆ Development

- △ Smaller communities < 50.000
- △ Become more resilient: find, scale and finance
- △ Record braking hurricane seasons

◆ Collaboration

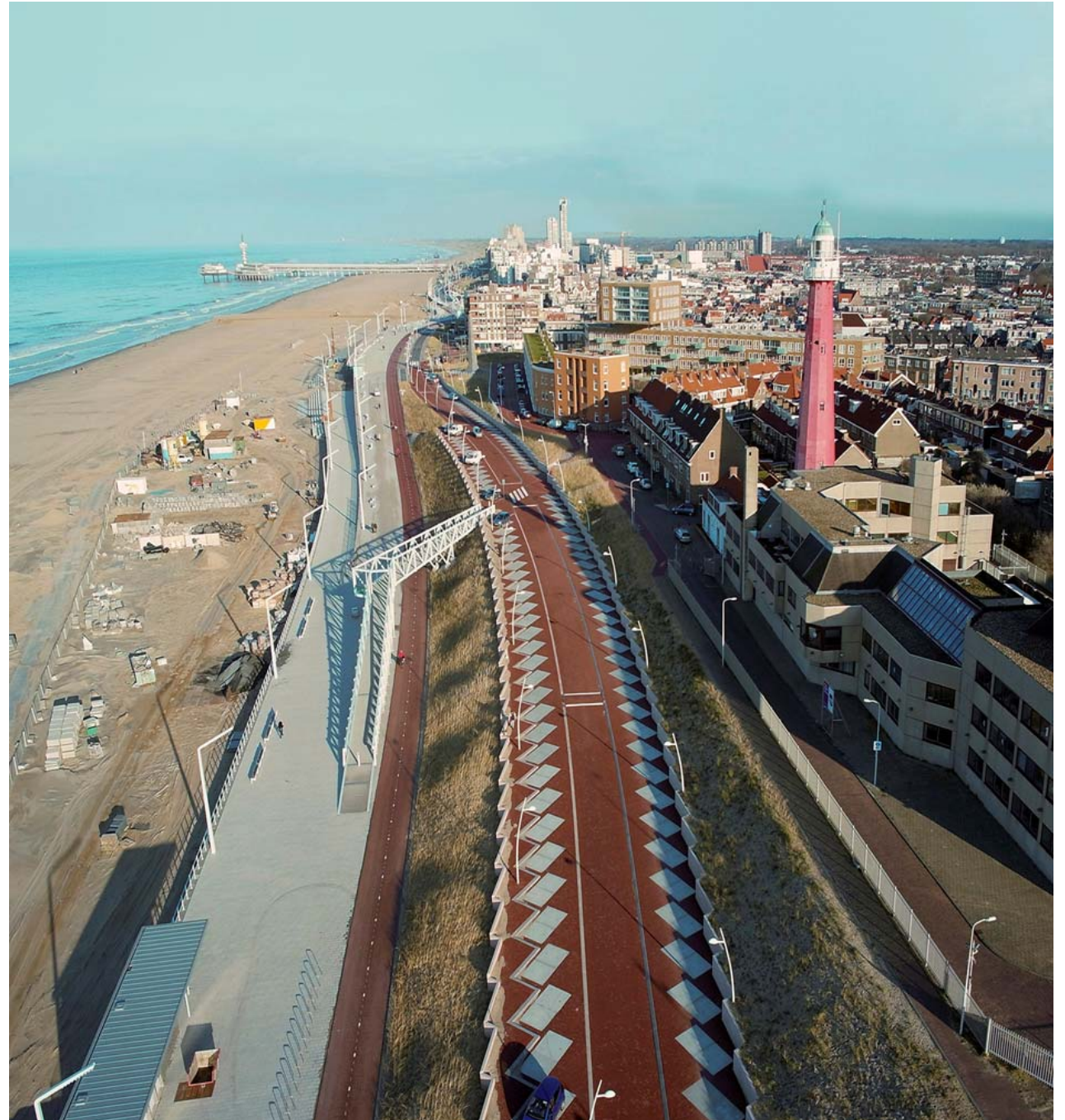
- △ American Flood Coalition
- △ Arcadis
- △ The Netherlands Embassy



Adaptation for All

Where to start building resilience?

- ◆ 26 real world case studies
- ◆ Cost and Complexity
- ◆ Learnings
- ◆ Simple, understandable language



Adaptation for All

How to use this guide?

- ◆ Start with key tips and ideas for developing a local flood action plan
 - ◊ Build resilience and adaptation
 - ◊ Invest in resilience
 - ◊ Create positive change
- ◆ Review the 26 approaches:
 - ◊ Land use and policy
 - ◊ Storm water and drainage
 - ◊ Coastal and shoreline
- ◆ Use the cost and complexity diagram
- ◆ Share this guide with stakeholders



Adaptation for All

How to use this guide?

These approaches are based on the following characteristics:

- ◆ Scale
- ◆ Investment types
- ◆ Operations and maintenance
- ◆ Federal funding
- ◆ Information resources



Adaptation for All

The Jack Smith Creek Wetlands

- ◆ Largest man-made wetlands in New Bern (NC)
a community of 30,000 people
- ◆ Can retain more than 5 million gallons of
stormwater
- ◆ Cost \$2.6 million
- ◆ A new Stormwater Maintenance Division
- ◆ A research park for North Carolina State
University



Room for the Rivers

◆ To manage higher water levels in rivers by:

- ◆ lowering the levels of flood plains
 - ◆ creating water buffers
 - ◆ relocating levees
- ◆ increasing the depth of side channels
- ◆ Increasing the construction of flood bypasses

◆ The program consisted of over 30 projects

Room for the River: Technical measures

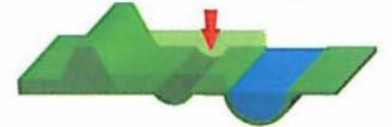
Deepening navigation channel



Water storage



Lowering of flood plains



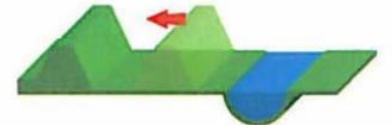
Lowering groynes



By-pass



Dike relocation



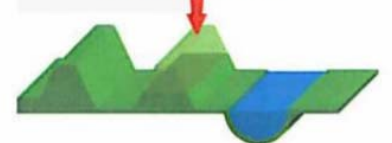
Removing obstacles



Strengthening dikes



De-poldering





Do you want to learn more about the guide, go to:

<https://nlintheusa.com/adaptation-for-all/>



Saskia Pardaans
Senior Advisor Infrastructure and Water Management
571 331 3265
Saskia.Pardaans@minbuza.nl
www.nlintheusa.com

