swimmable rotterdam harbours

case study lessons in overcoming urban bathing implementation challenges, following an urban systems-based approach

Marilotte Stemerdink
P5 Presentation Graduation Management in the Built Environment
Dr. Aksel Ersoy & Ir. Kristel Aalbers

paris, france

July 17th, 2024

Jean-Baptiste Gurliat / Ville de Paris (2024)

paris, france

August 8th, 2024

Getty Images (2024)

NBC New York (2024)

paris, france

May 14th, 2025

Le Monde (2025)

Le Monde

Paris to open three swimming sites in the Seine starting July 5

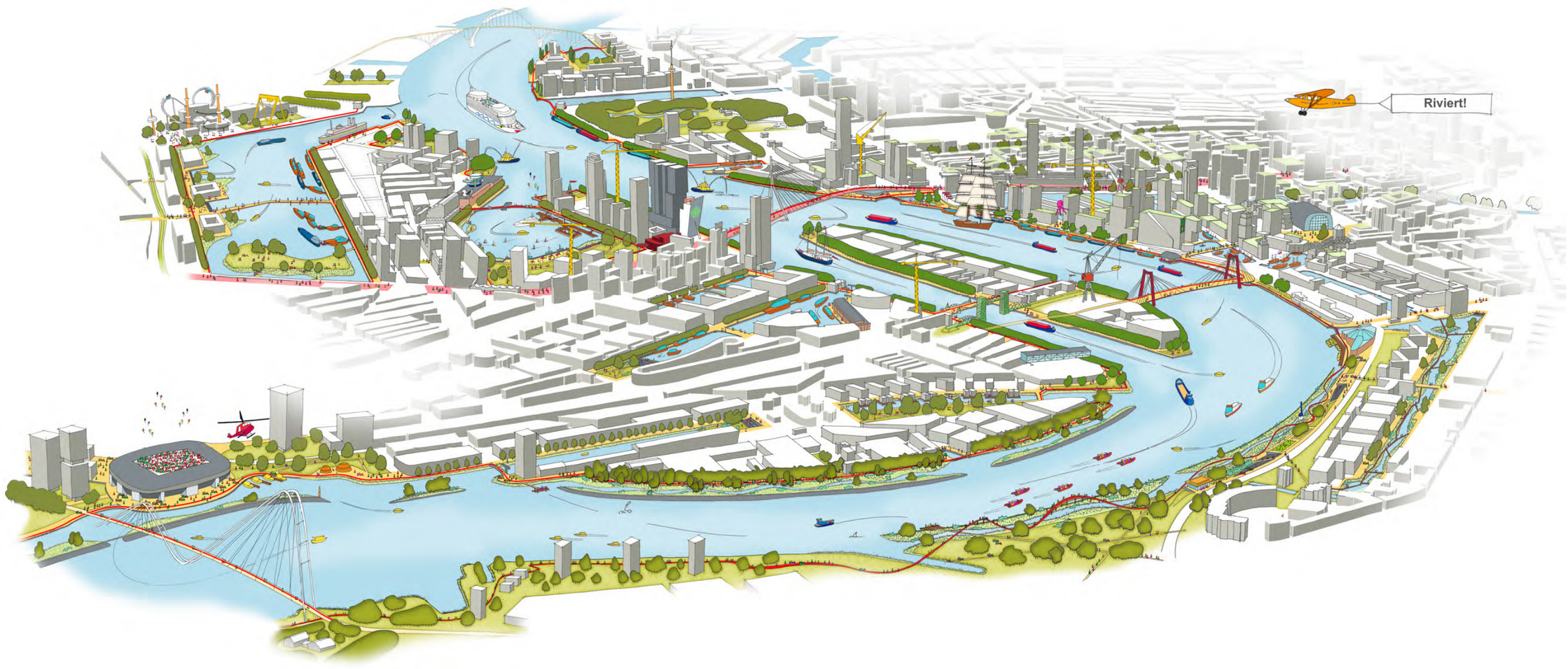
Free to access, the sites will be open to the public every day during Paris Plages, from July 5 to August 31. The City of Paris had to consider the constraints related to maintaining navigation activities.

By Stéphane Mandard and Emeline Cazi

Published on May 14, 2025, at 3:00 pm (Paris) · 5 min read · Lire en français

rotterdam, netherlands

Beleidsnota Wateratlas binnenstedelijke Nieuwe Maas



Gemeente Rotterdam (2019)

rotterdam, netherlands

ZWEMMEN IN NEDERLAND

Zwemmen in de stad is niet meer te stuiten: ‘Op een gegeven moment vragen mensen het niet meer, maar doen ze het gewoon’

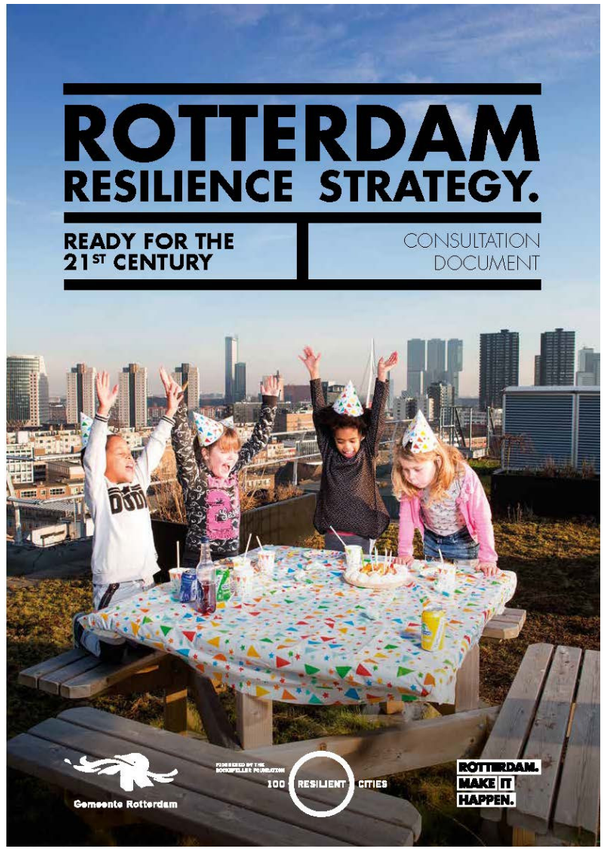
Elsje Jorritsma

21 augustus 2024 ...

NRC (2024)

Gemeente Rotterdam (2021)

Gemeente Rotterdam (2020)



Gemeente Rotterdam (2022)

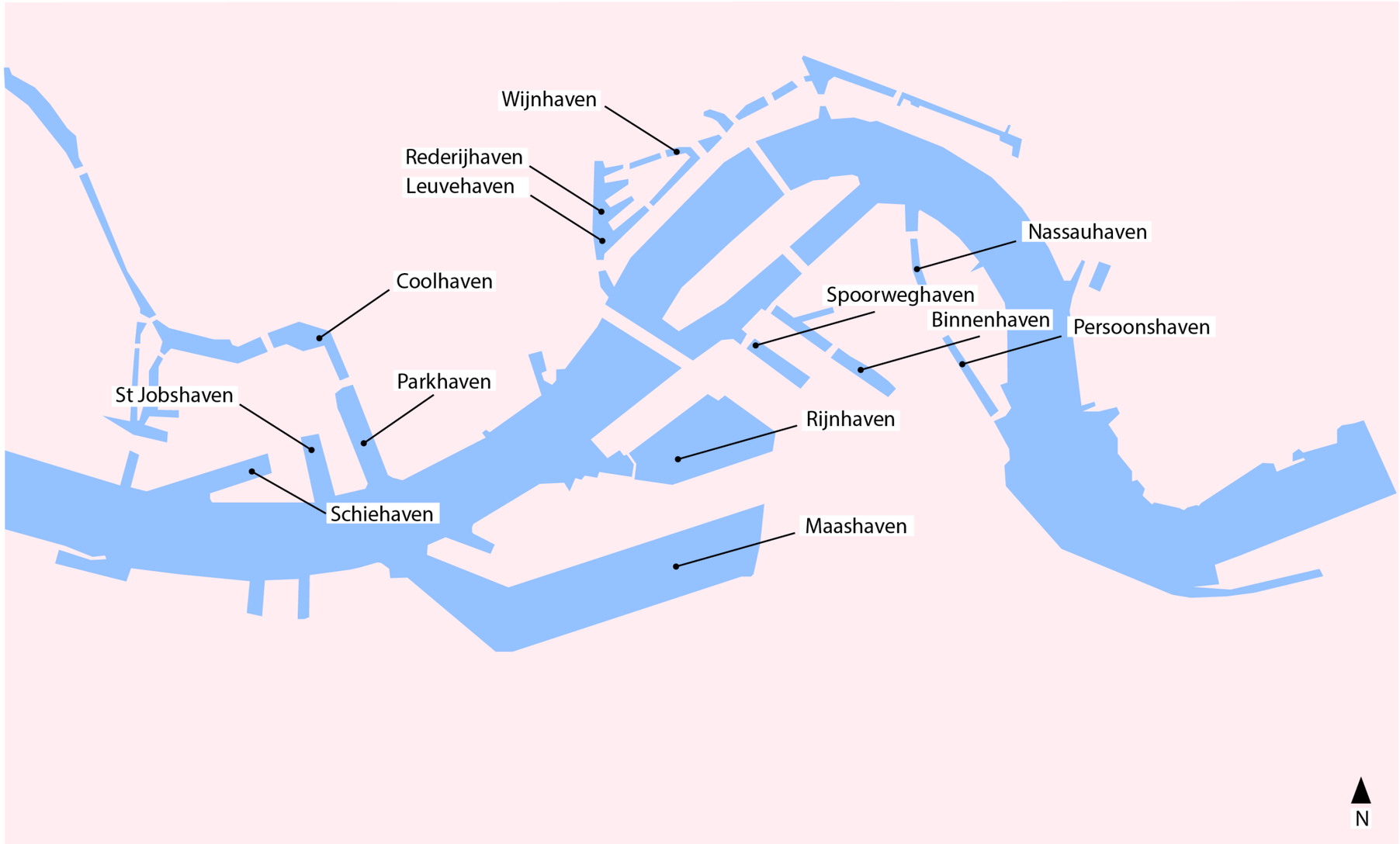
rotterdam, netherlands

Photography by Jan de Groen

rotterdam, netherlands

Photography by Jan de Groen

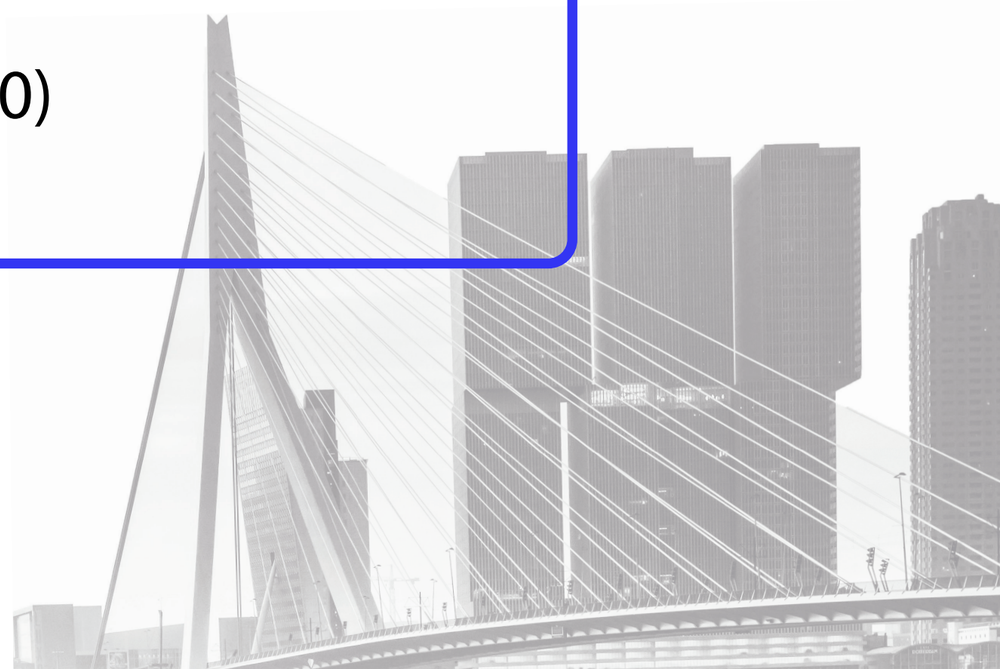
rotterdam, netherlands



*"The inconsistency in facing the complex **implementation challenges** in realising **swimmable harbours** in the inner city of Rotterdam can be considered yet unused potential for improving the quality of life and urban resilience."*

*"A **systems-based approach** that can transcend disciplinary boundaries can be extremely powerful in enabling well-informed and meaningful decision-making processes that challenge current norms, values and practices."*

(Iacovidou et al., 2020)



main research question:

How can the Municipality of Rotterdam learn from (inter)national case examples, to overcome place- and actor-related challenges in implementing urban bathing in the inner city harbours, following an urban systems-based approach?

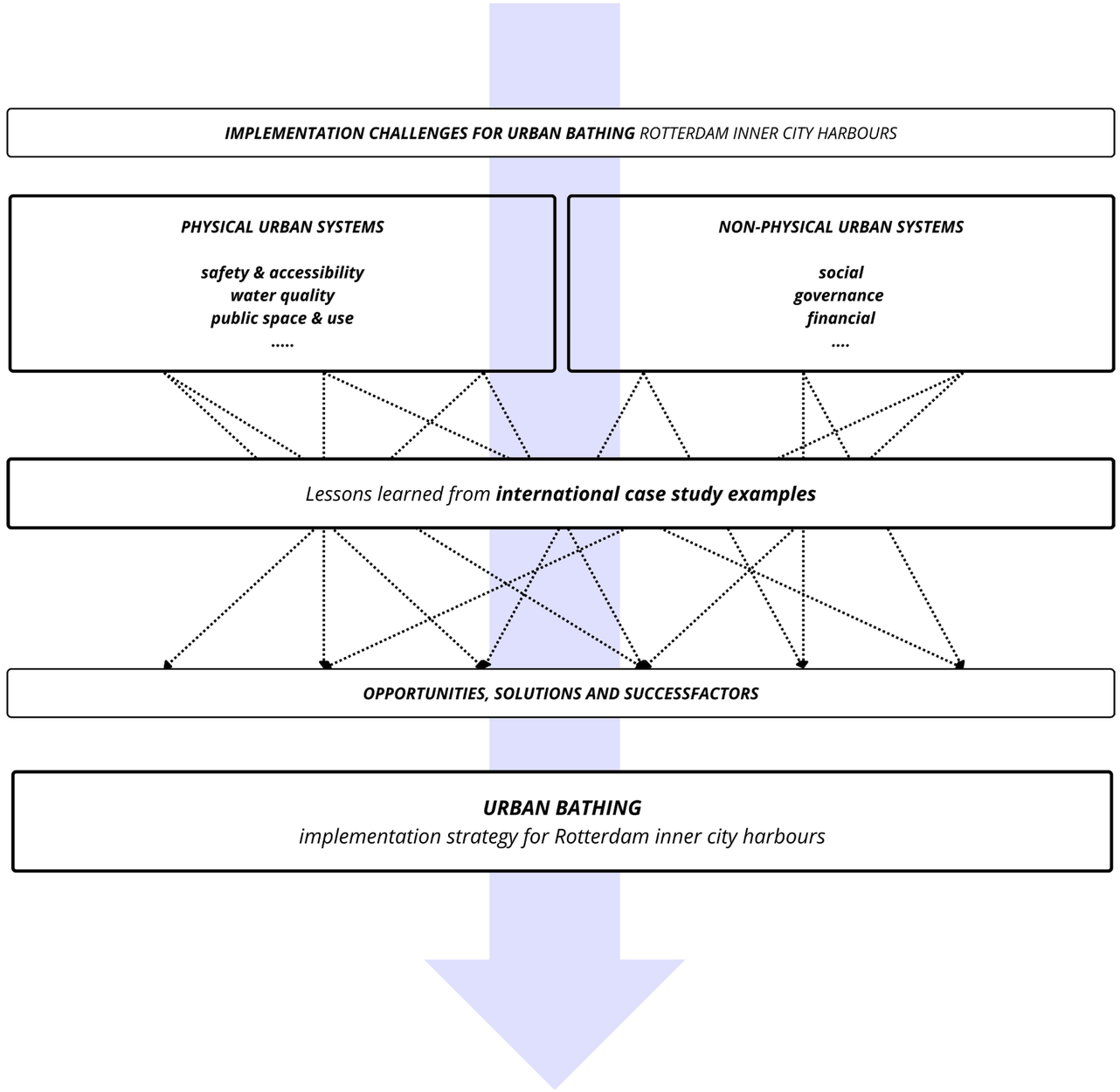
subquestions:

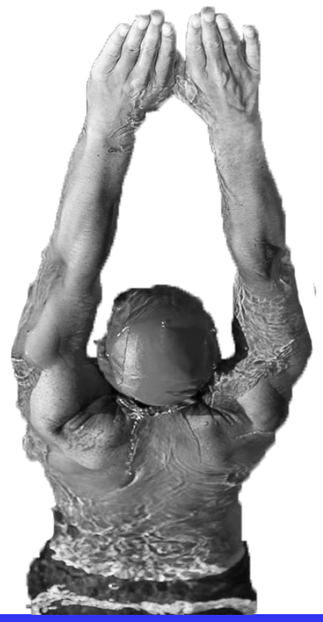
1. What urban system-based aspects enable urban bathing in the inner city harbours of Rotterdam?

2. How should place- and actor-related challenges be managed from the urban system perspective to implement urban bathing, based on the lessons learned from (inter)national case examples?

3. What place- and actor-related challenges and opportunities are leading in implementing urban bathing in the inner city harbours of Rotterdam?

conceptual framework

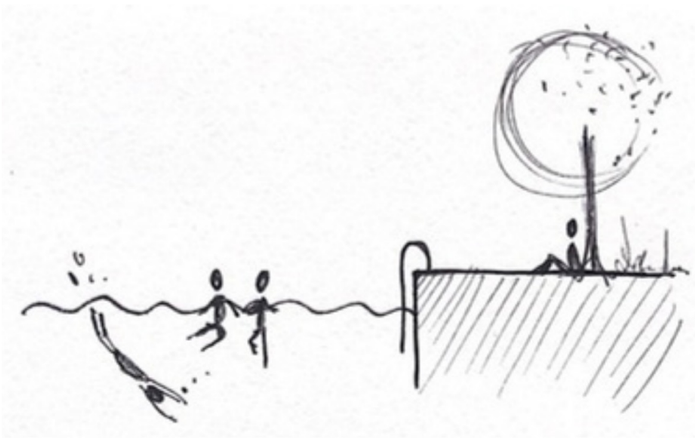




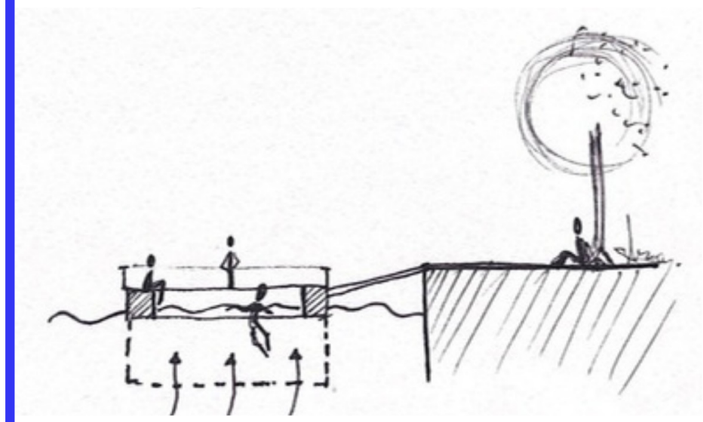
what is urban bathing?

basel, switzerland

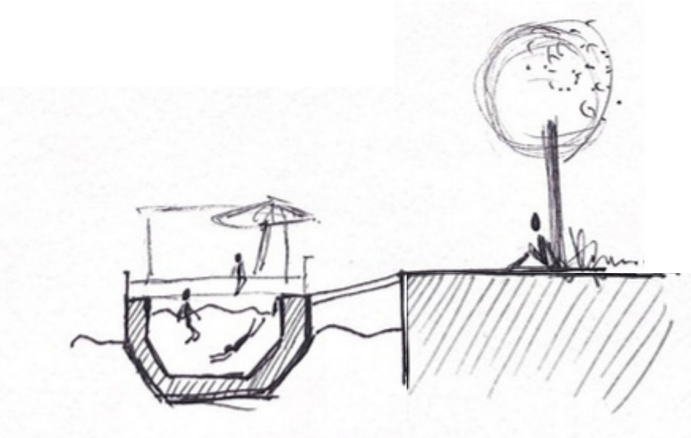
three types of urban bathing



The Free Style



The Protected Plunge

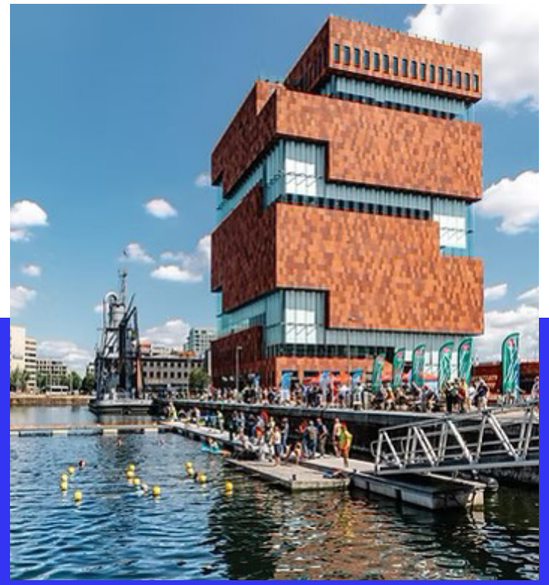


The Dip in a Bowl

The Free Style

1. *no fixed or floating 'pool' structure*
2. *direct contact with water in the harbour*
3. *access directly to the waterfront via quay, jetty or boardwalk*

Studio Fosiel, Dries Boone, Simon Verschelde (2024)

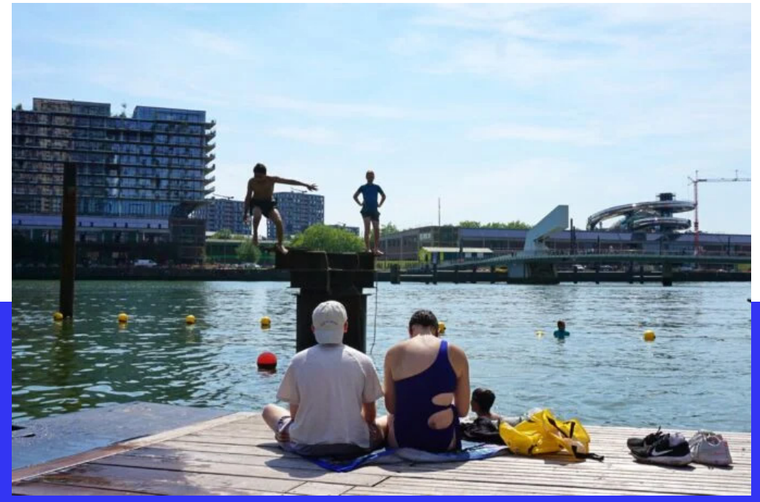


antwerp

Marineterrein Amsterdam (2023)

amsterdam

In de Buurt Rotterdam (2024)

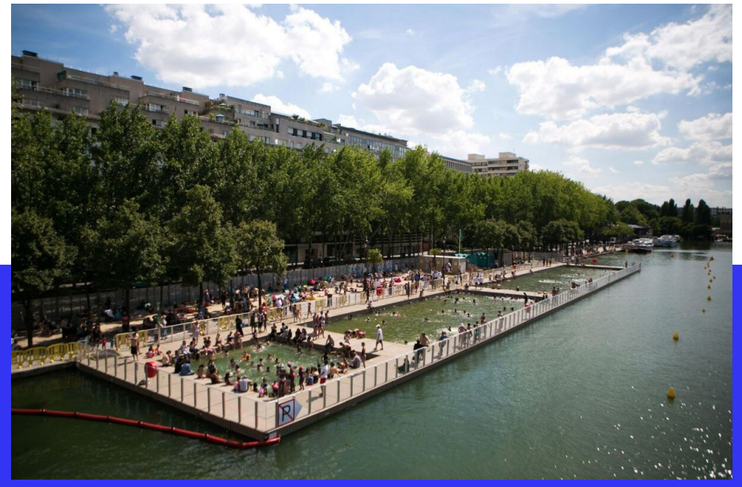


rotterdam

The Protected Plunge

1. *fixed or floating ‘pool’ structure*
2. *direct contact with water in the harbour*
3. *access to the structure via quay, jetty or boardwalk*

Le Parisien (2017)



paris

Bjarke Ingels Group (n.d.)

copenhagen

Happy Visuals/Göteborg & Co (2023)

göteborg

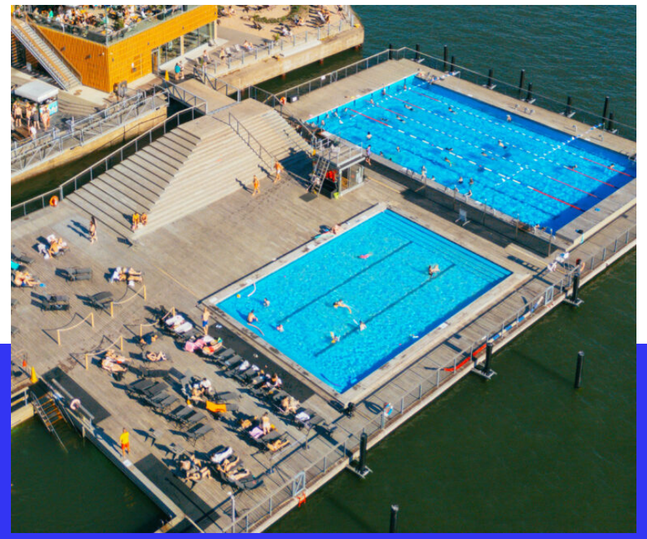
The Dip in a Bowl

1. *fixed or floating 'pool' structure*
2. *no direct contact with the water in the harbour (water is filtered or treated)*
3. *access to the structure via quay, jetty or boardwalk*

Allas Pools (n.d.)

Torsten Seidel (2017)

berlin

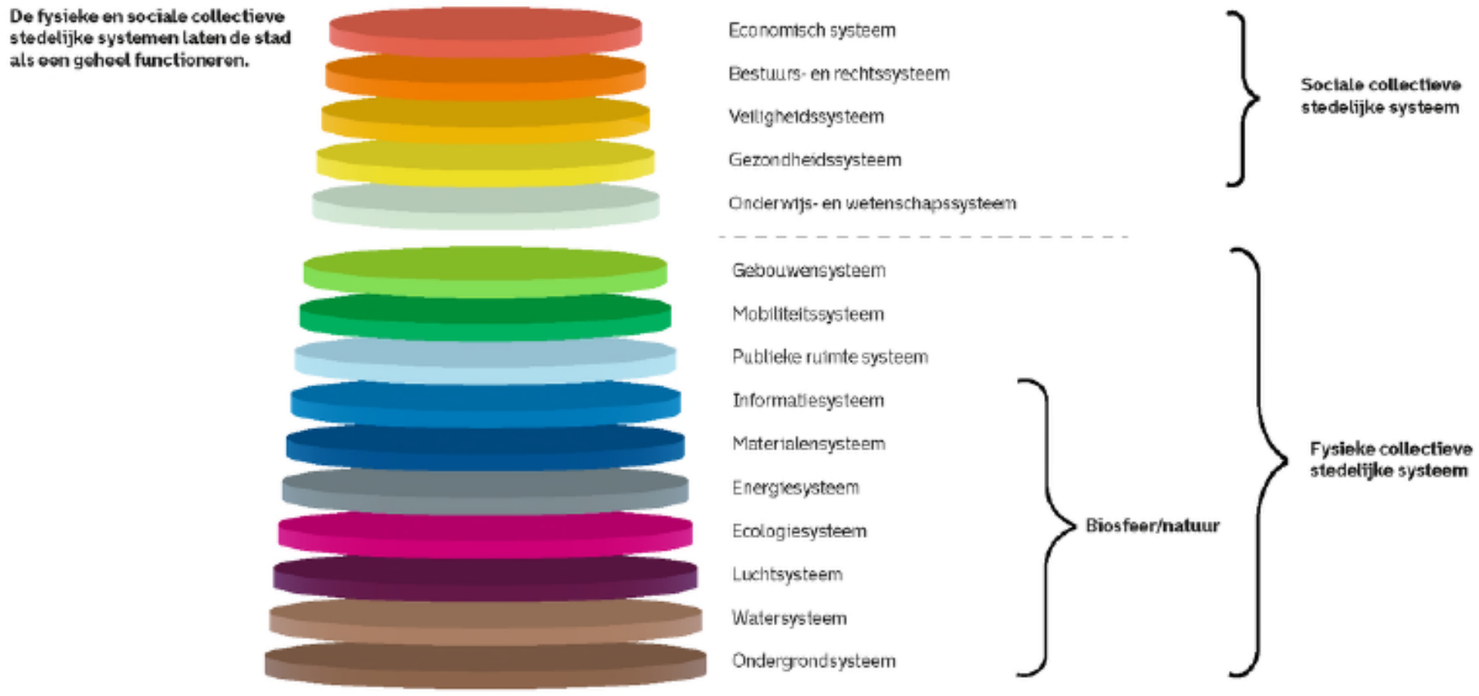


helsinki

The Floating Pool Lady (2010)

new york city

urban systems



Gemeente Rotterdam (2022). *Resilience Rotterdam Strategy.*

Hoogheemraadschap van Schieland en de Krimpenerwaard 750

I have something to say!

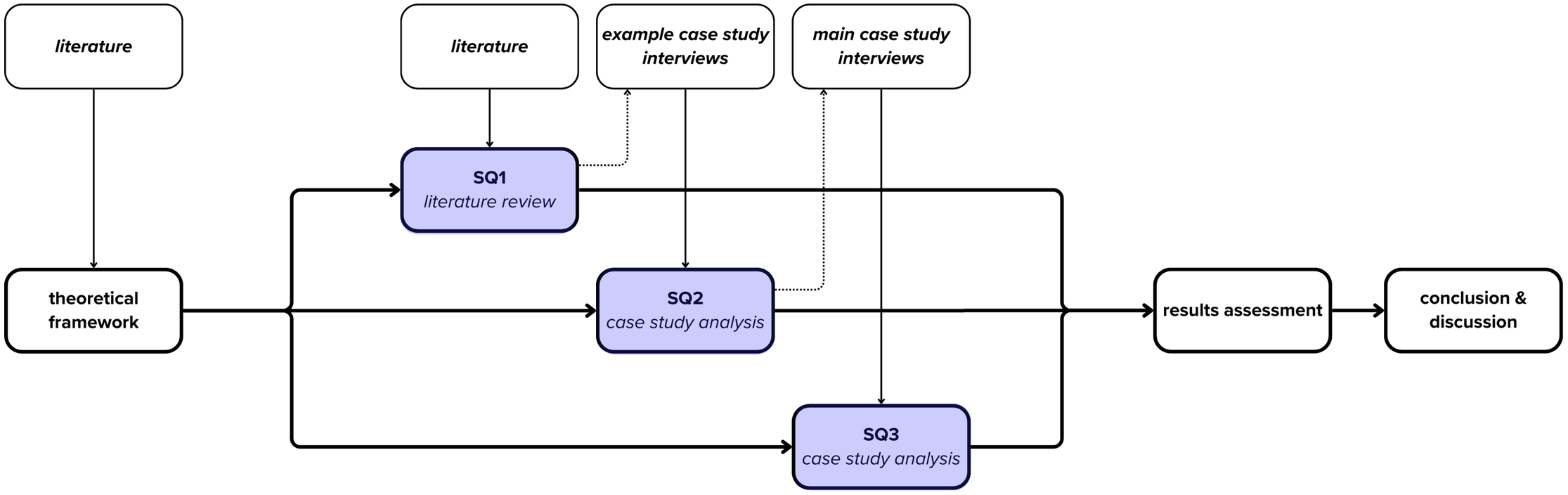
I have something to say!

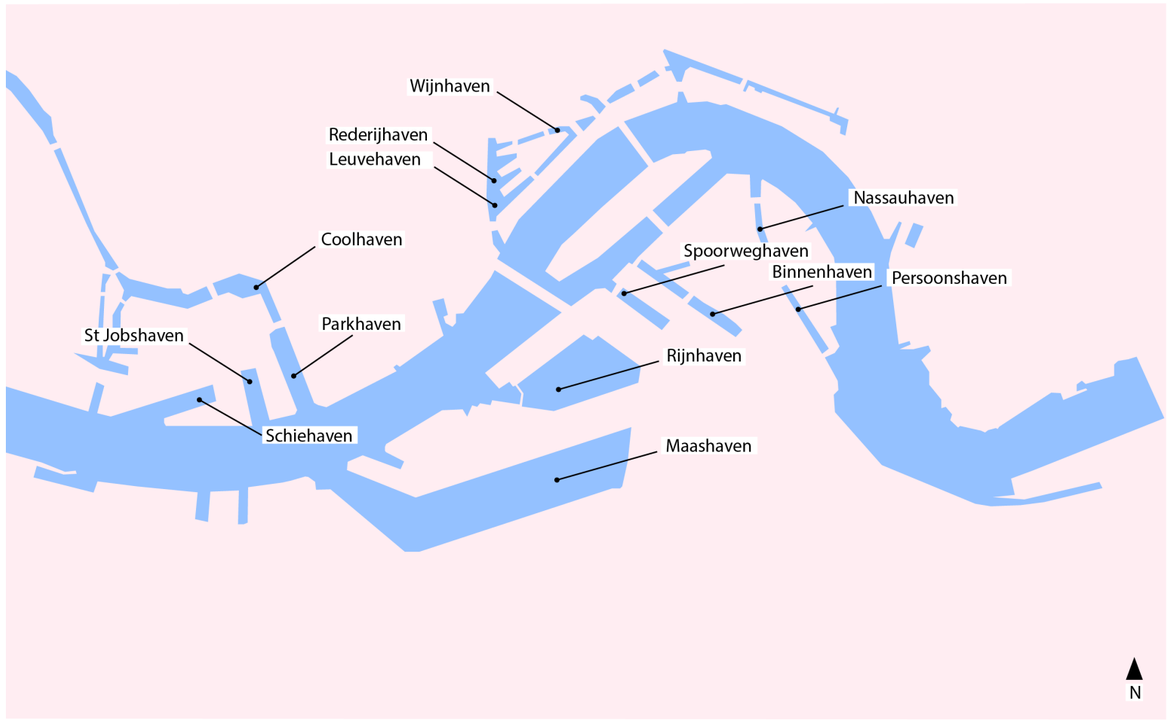
I have something to say!

Rijkswaterstaat
Ministerie van Infrastructuur en Waterstaat

Port of Rotterdam

methods


literature
literature
example case study interviews
main case study interviews
SQ1
literature review
theoretical framework
SQ2
case study analysis
SQ3
case study analysis
results assessment
conclusion & discussion

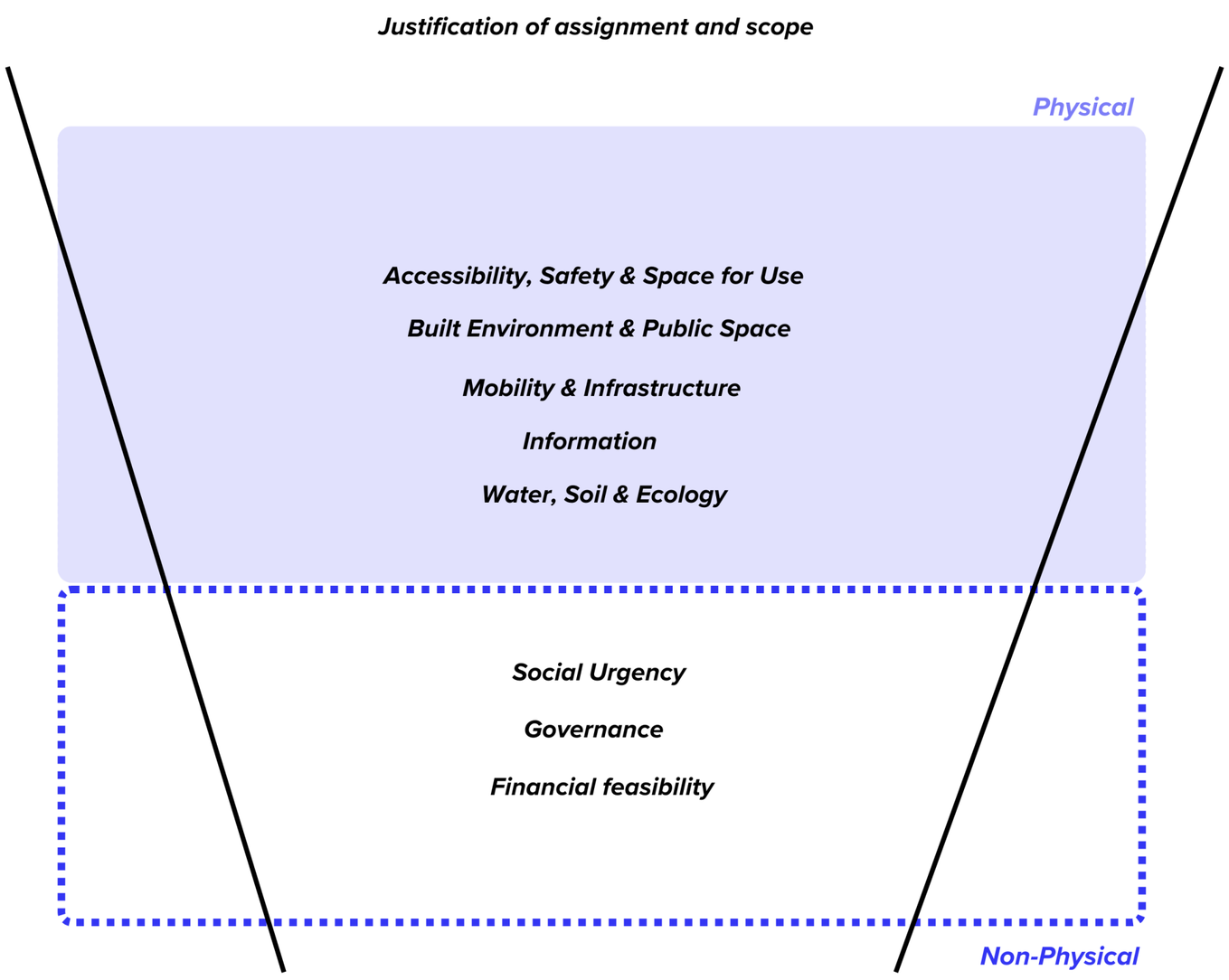


rotterdam cases

(inter)national cases

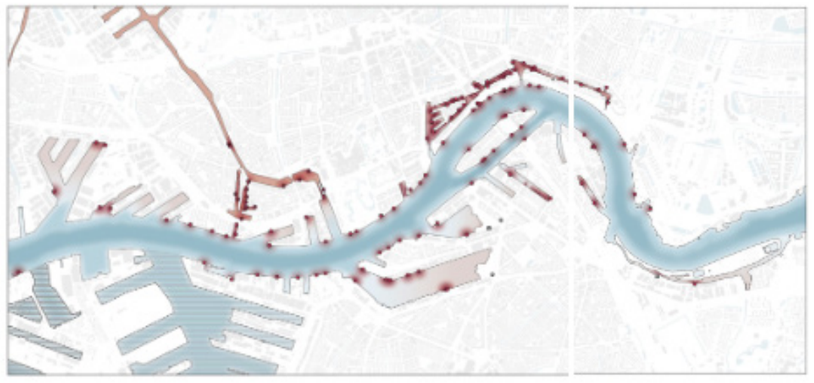
case study results

physical systems

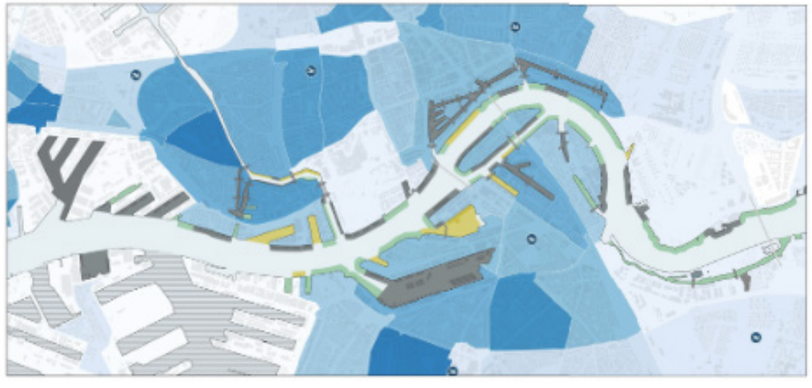


physical systems

nautical safety



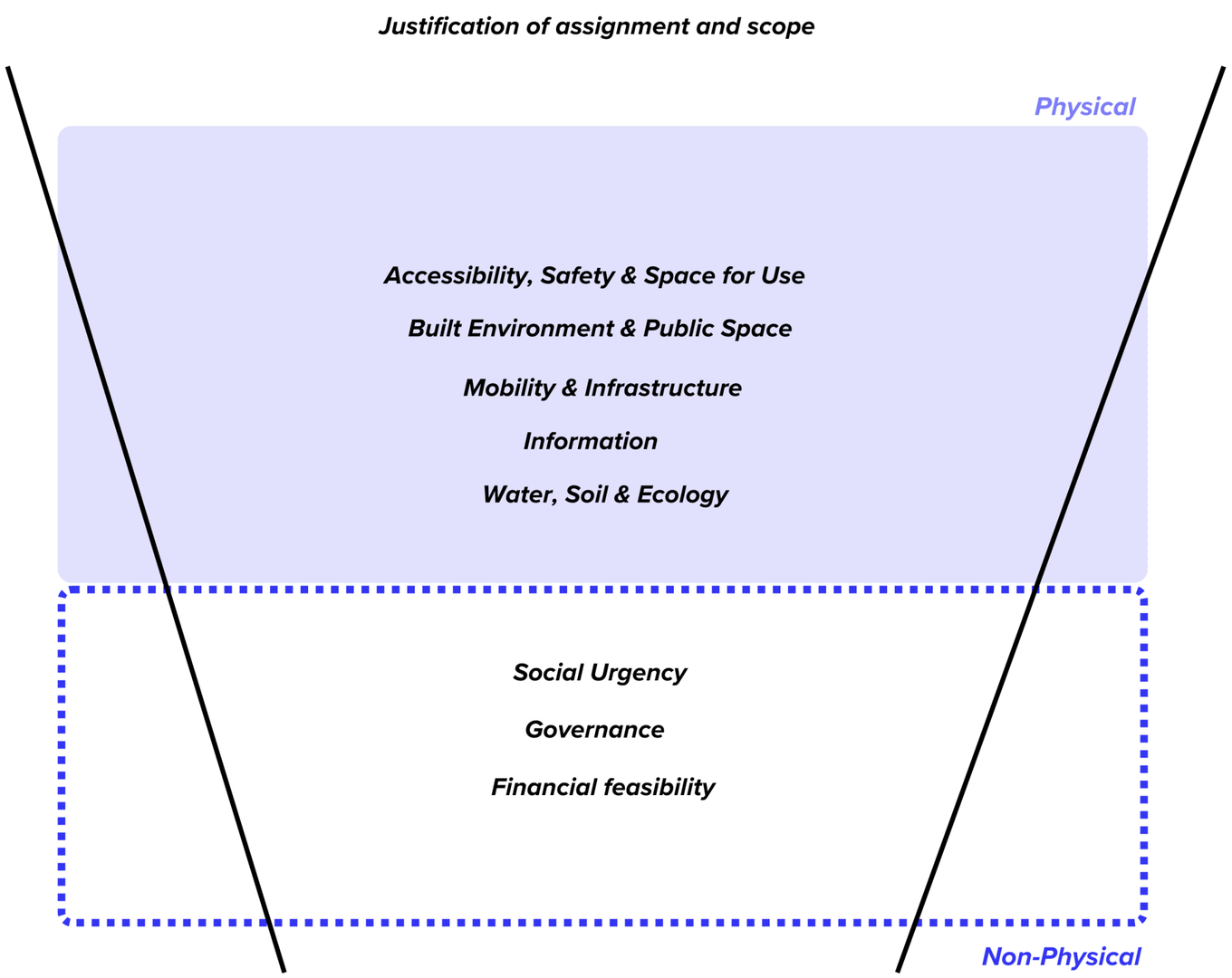
expected water quality



space for use

Studio Marco Vermeulen (2023)

non-physical systems



non-physical systems

The Social Fit

active adults

year-round use

physical activity

space for swimming laps

families

seasonal use

safety & overview

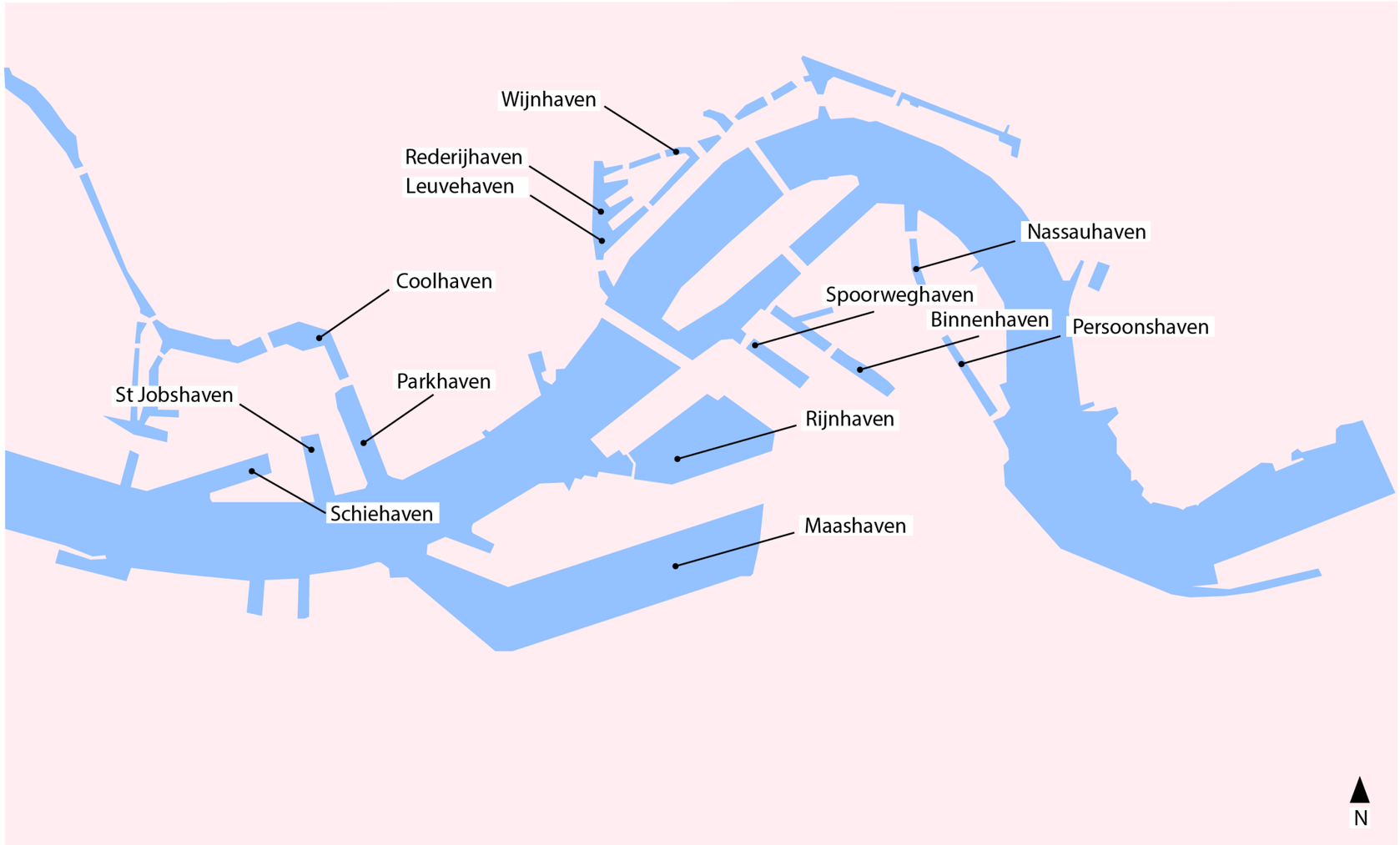
programming & facilities

recreational (young) adults

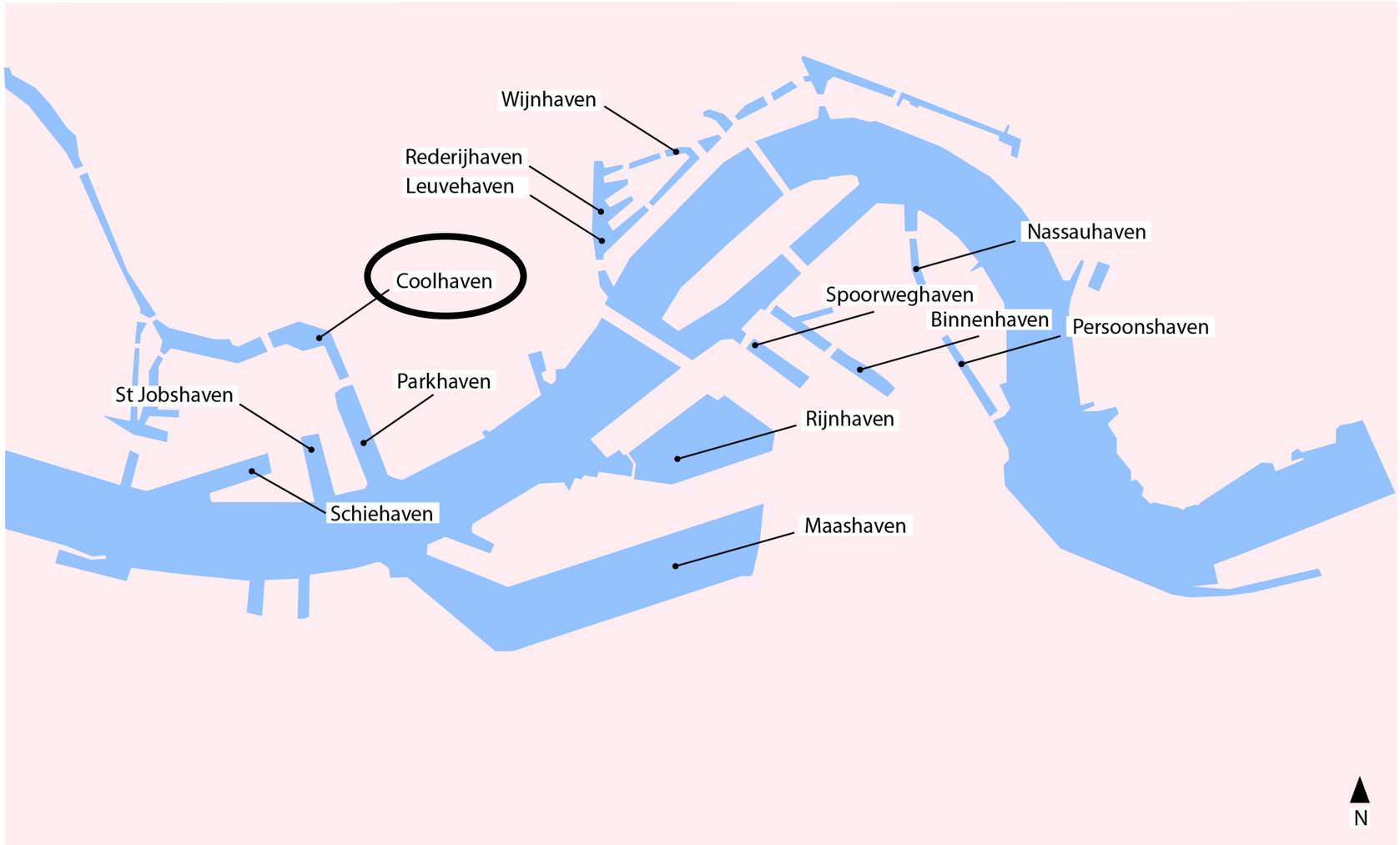
seasonal use

freedom & leisure

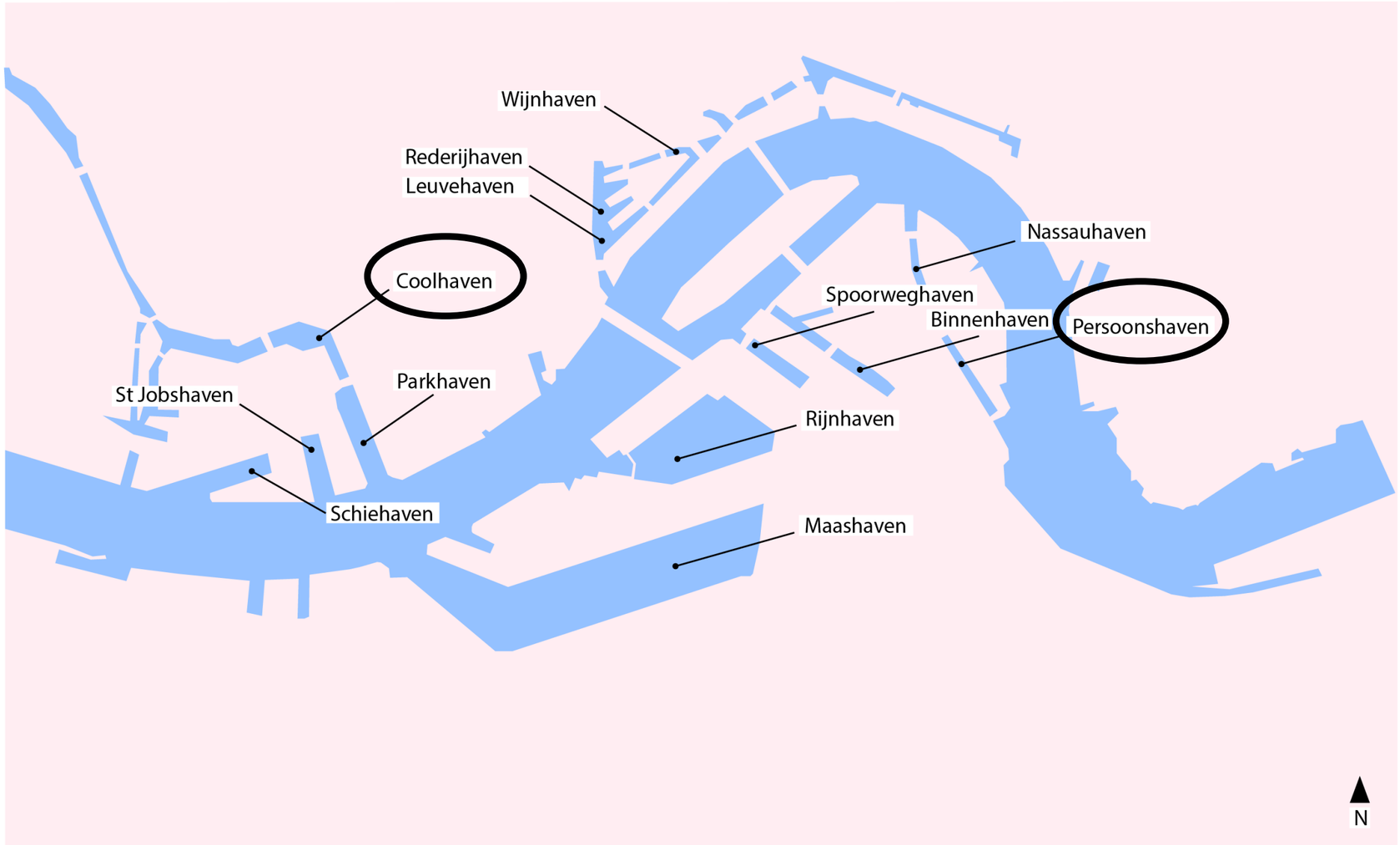
hospitality



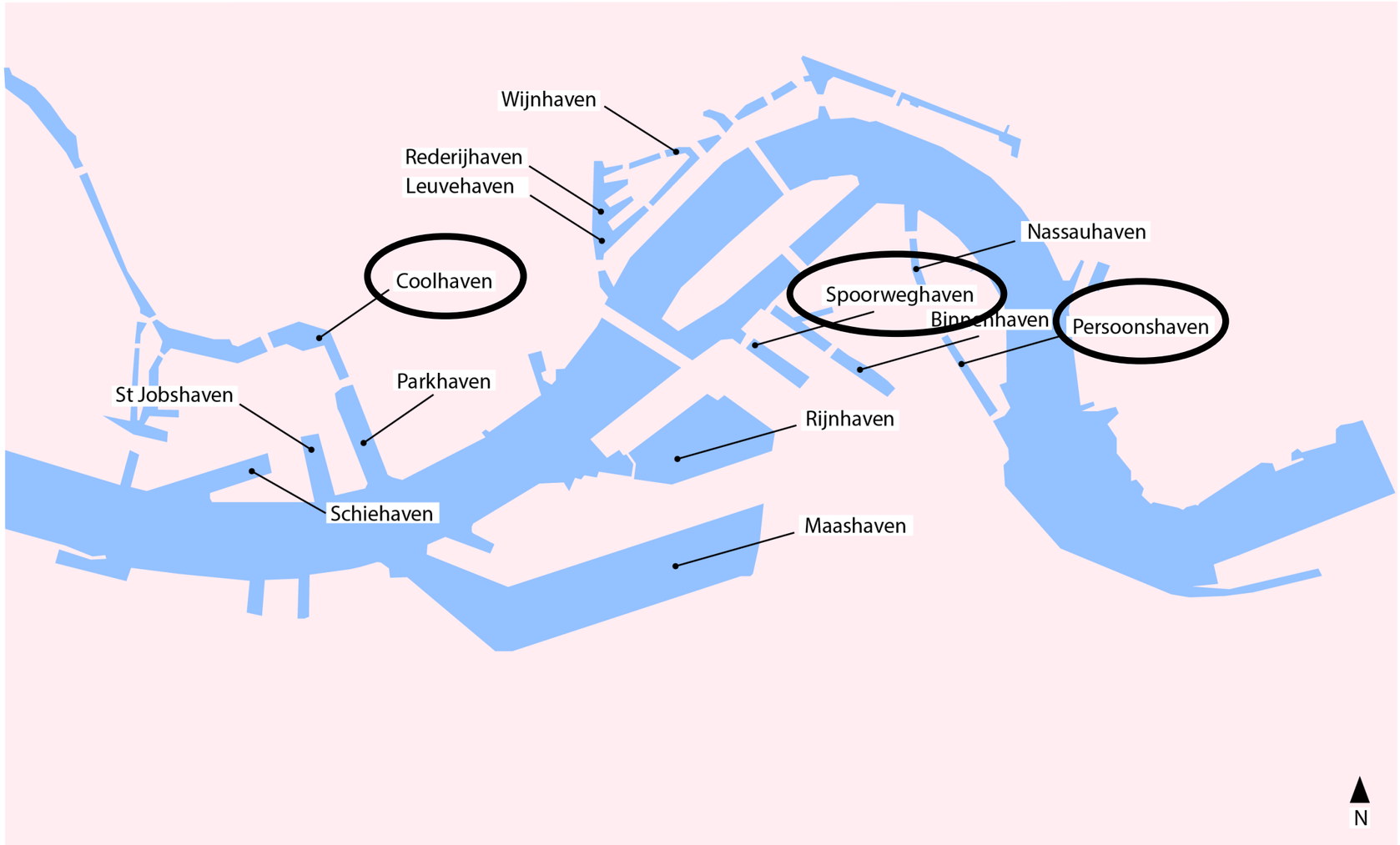
Scope of Rotterdam's inner city harbours. Image by author (2025).



Scope of Rotterdam's inner city harbours. Image by author (2025).



Scope of Rotterdam's inner city harbours. Image by author (2025).



Scope of Rotterdam's inner city harbours. Image by author (2025).

selected main case studies

J. Wildeboer (2019). *Flickr.*

spoorweghaven

The Free Style

F. Blok (n.d.). *3develop.*

coolhaven

The Protected Plunge

Author unkown (2008). Uploaded on Flickr by 'ourendhard1'.

persoonshaven

The Dip in a Bowl

example case studies

Marineterrein Amsterdam (2023)

marineterrein, AMS

The Free Style

Le Parisien (2017)

la baignade, PAR

The Protected Plunge

The Floating Pool Lady (2010)

floating pool lady, NYC

The Dip in a Bowl

implementation lessons

case studies

Marineterrein Amsterdam (2023)

marineterrein, AMS

The Free Style

take-aways

Must haves: physical safety, accessibility, water quality, public space

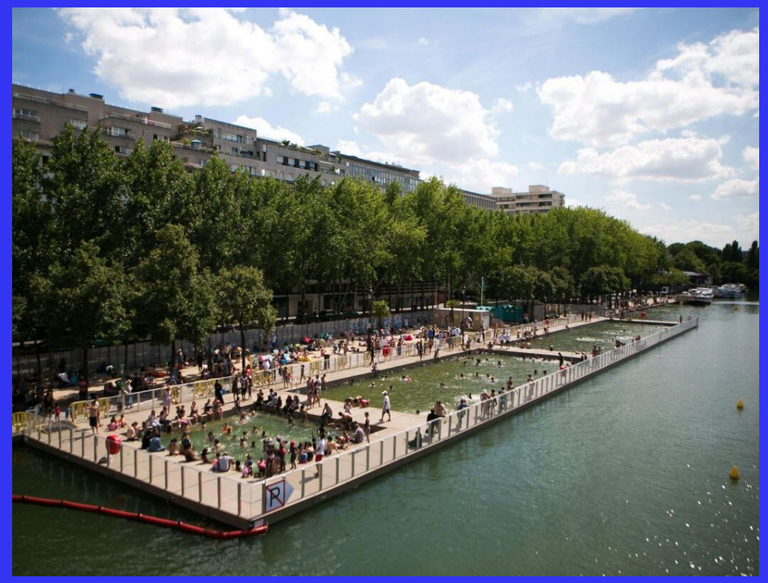
Nice to haves: flexible governance, information (data), connection to (spatial) urban transitions

*"No, the behaviour. **Diving, doing crazy stunts, jumping, swimming where you're not supposed to**, that is what's really dangerous."*

implementation lessons

case studies

Le Parisien (2017)



la baignade, PAR

The Protected Plunge

take-aways

Must haves: safety, accessibility, water quality, financial feasibility + governance

Nice to haves: space for use, infrastructure, common goal between stakeholders, connection to public space, political support

*"It's why, [...] actually, it's our reflection for 2027 in order to **reduce the cost, and the mobile logistics for civil servants** and for public collectivity is even."*

implementation lessons

case studies

The Floating Pool Lady (2010)

the floating pool lady, NYC

The Dip in a Bowl

take-aways

Must haves: accessibility, space for use, infrastructure, social urgency, financial feasibility + governance

Nice to haves: connection to public space and social agendas, political support

"[There was] a city agency that was doing some expansion that the community didn't like and so the Parks Department Commissioner said, [...] ***the community will be set for the floating pool, [they] will be happy and they will extend to what you're doing."***

rotterdam case studies

J. Wildeboer (2019). *Flickr.*

spoorweghaven

The Free Style

F. Blok (n.d.). *3develop.*

coolhaven

The Protected Plunge

Author unkown (2008). Uploaded on Flickr by 'ourendhard1'.

persoonshaven

The Dip in a Bowl

What place- and actor-related challenges and opportunities are leading in implementing urban bathing in the inner city harbours of Rotterdam?

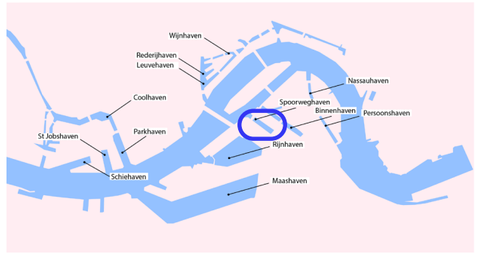
implementation challenges & opportunities

case studies

spoorweghaven

(The Free Style)

"Yes, and the quays are also minimal, [...] hard, little green. ***There is a lot of demand from the residents to make that more attractive****, so the more life there would actually be around the water and on the water, the more attractive it would be to live there."*



challenges

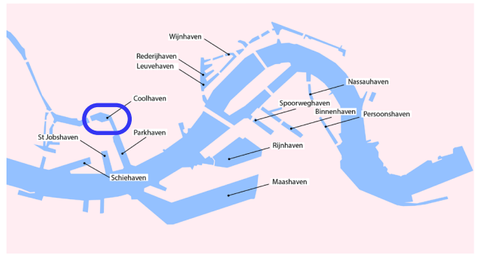
governance & space for use
accessibility
physical safety
financial feasibility

opportunities

public space, accessibility & social demand
mobility
socio-cultural connection
economic opportunity

implementation challenges & opportunities

case studies



coolhaven

(*The Protected Plunge)*

*"And **I really see this area as a place where a lot of different activities should come together,** so that you serve different types of residents, but perhaps also different types of visitors, and you get a very diverse group here."*

challenges

governance & financial feasibility
governance & social safety
infrastructure
physical safety

opportunities

public space, mobility & accessibility
financial feasibility in urban development
social urgency

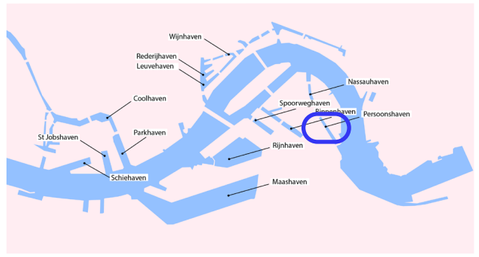
implementation challenges & opportunities

case studies

persoonshaven

(The Dip in a Bowl)

"If you want to ensure that you have a resilient neighbourhood, in all aspects, [...] maybe the exploitation can round up to zero [...], but that balances out, because we reach so many young people with it, we have children who start swimming again, [...], who play sports, who live healthier. ***You just have to link those kinds of programs to it."***



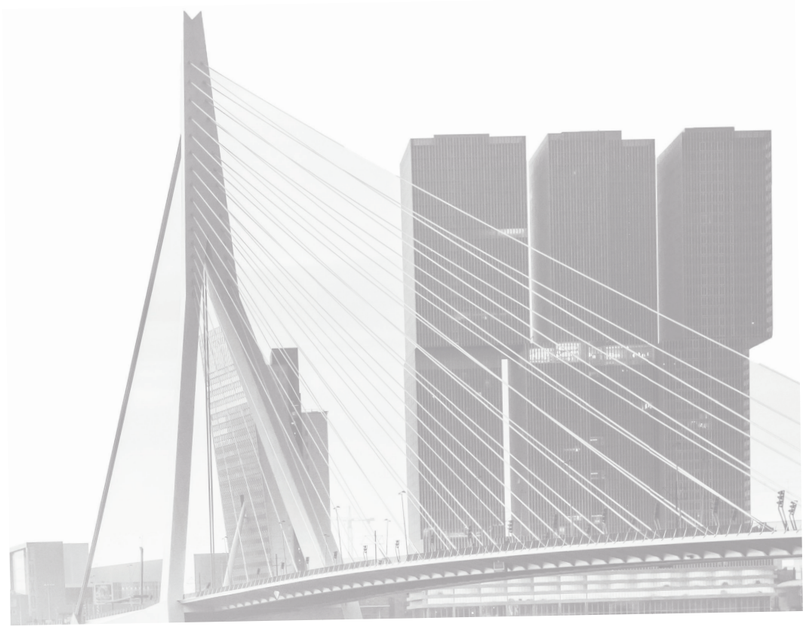
challenges

accessibility
governance & financial feasibility
infrastructure

opportunities

public space, mobility & accessibility
financial feasibility & governance in urban development
social urgency & connection to city agendas

conclusion



urban bathing = (desired) outcome

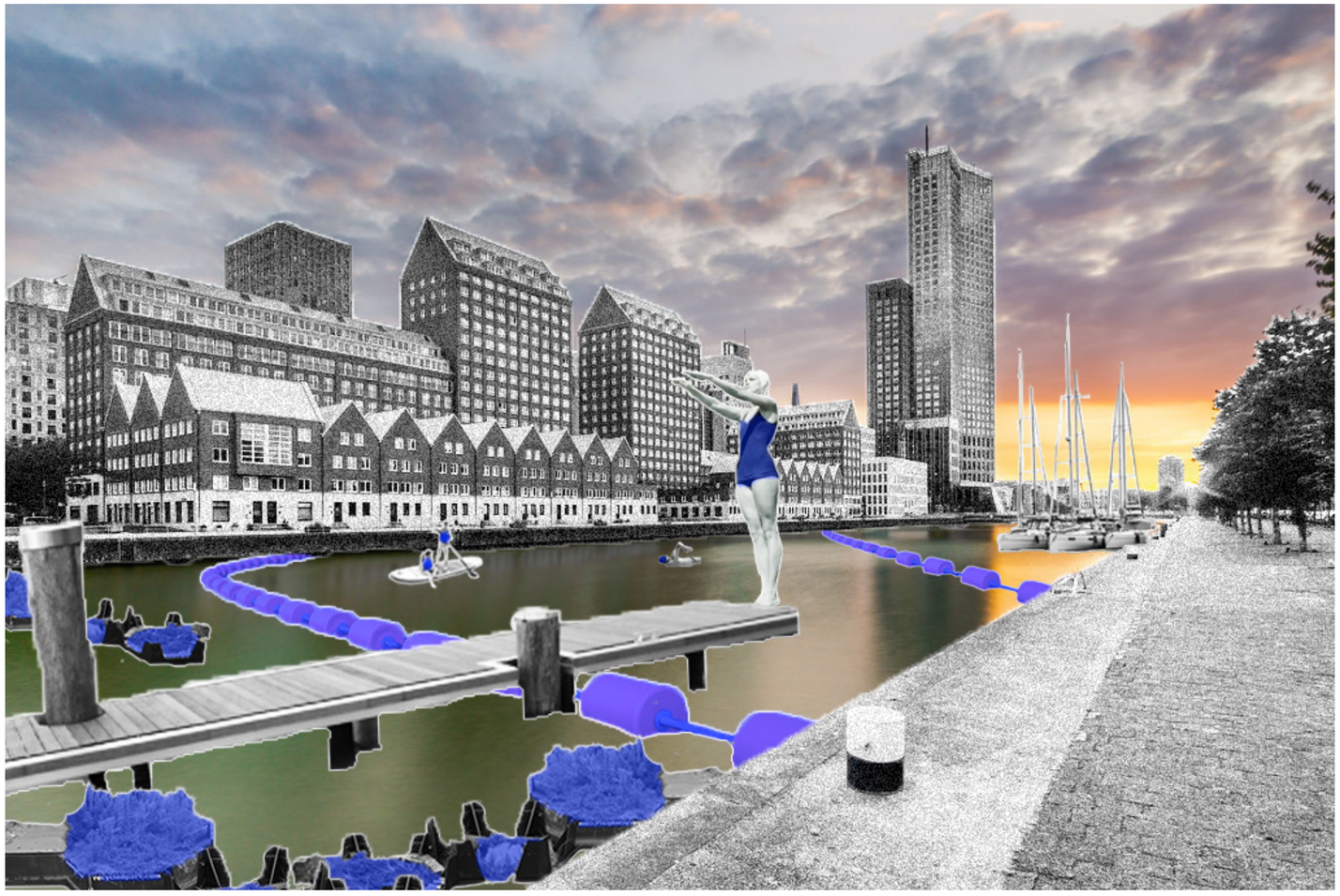
adjust place to facilitate urban bathing

urban bathing = (strategic) output

adjust place through urban bathing

spoorweghaven

The Free Style



urban bathing as (temporary) output

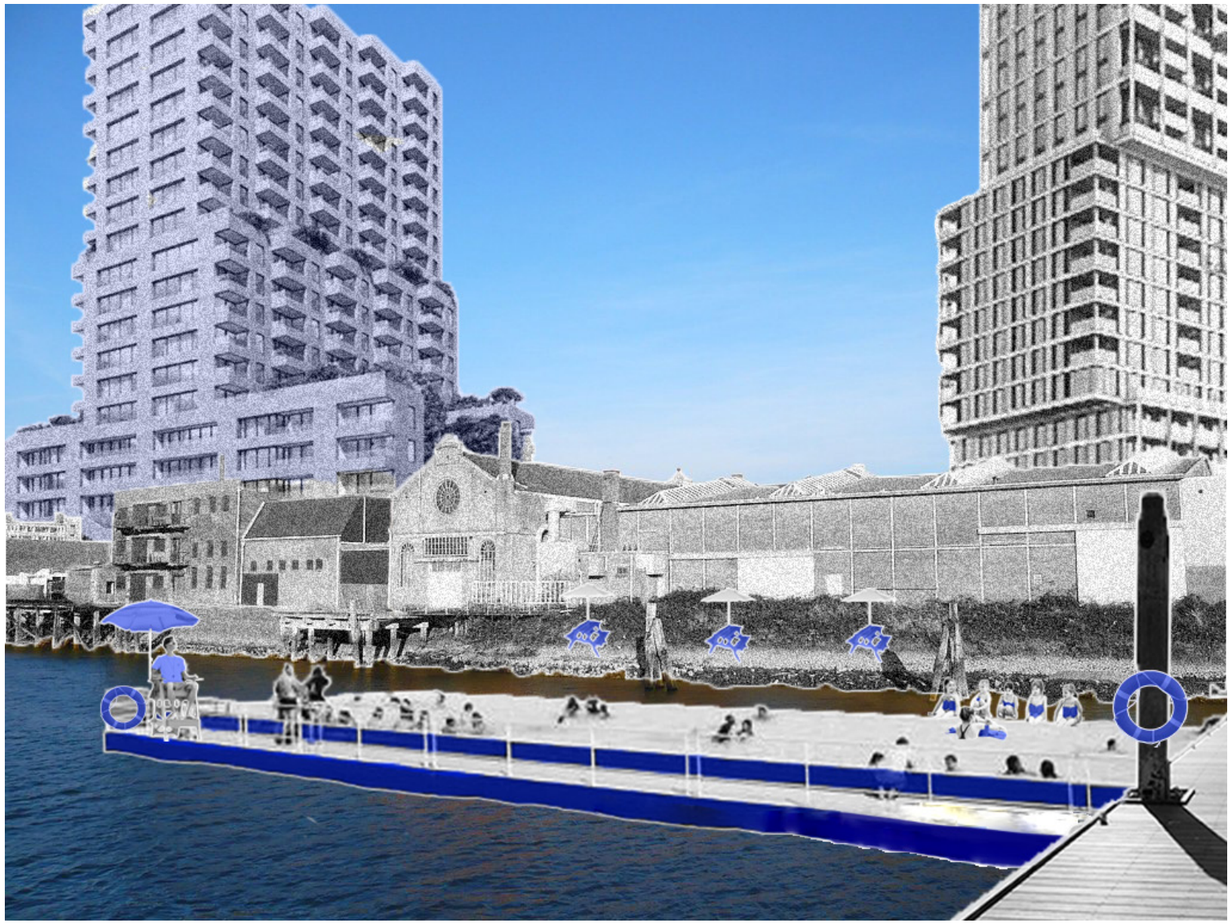
coolhaven

The Protected Plunge

urban bathing as a desired outcome

persoonshaven

The Dip in a Bowl



urban bathing as (temporary) output

what is the future of urban bathing in rotterdam?

more than swimming...

Photography by Jan de Groen

thank you for your attention!

swimmable rotterdam harbours

case study lessons in overcoming urban bathing implementation challenges, following an urban systems-based approach

Marilotte Stemerdink
P5 Presentation Graduation Management in the Built Environment
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