

# EU Green Week **PARTNER EVENT**

## Urban and sustainable water solutions: tackling key challenges in the Nordic capital regions

#EUGreenWeek  
#NordicRegions  
#WaterWiseEU



# Agenda

- 10.00**      **Welcome**  
Mr. Janne Leino, Director, Helsinki EU Office
- 10.02**      **Welcome by moderator**  
Ms. Louise Coffineau, Senior Policy Advisor Environment, Eurocities
- 10.05**      **Keynote**  
Ms. Silvia Bartolini, Head of Unit Marine Environment and Clean Water Services,  
DG Environment
- 10.25**      **How we contribute to a clean and healthy Oslofjord**  
Ms. Solveig Schytz, Councilor for planning, cultural heritage, climate and  
environment, Akershus County
- 10.40**      **How to manage a rising sea level and lake water within a city**  
Mr. Peter Svärd, Project Director and Ms. Lisa Jacobsson, Deputy Project Director,  
from the project “The New Slussen”
- 11.00**      **PFAS challenges and solutions from a regional perspective.**  
Mr. John Flyvbjerg, Chief Consultant Environment, Capital Region of Denmark
- 11.15**      **Adapting to the changing climate in Helsinki**  
Ms. Hanna Wesslin, Climate Director, City of Helsinki
- 11.30**      **Panel discussion and Q&A**
- 11.55**      **Concluding remarks by moderator**  
Ms. Louise Coffineau, Senior Policy Advisor Environment, Eurocities
- 12.00**      **Networking lunch**



# Keynote

**Ms. Silvia Bartolini**, Head of Unit Marine Environment and  
Clean Water Services, DG Environment, European Commission





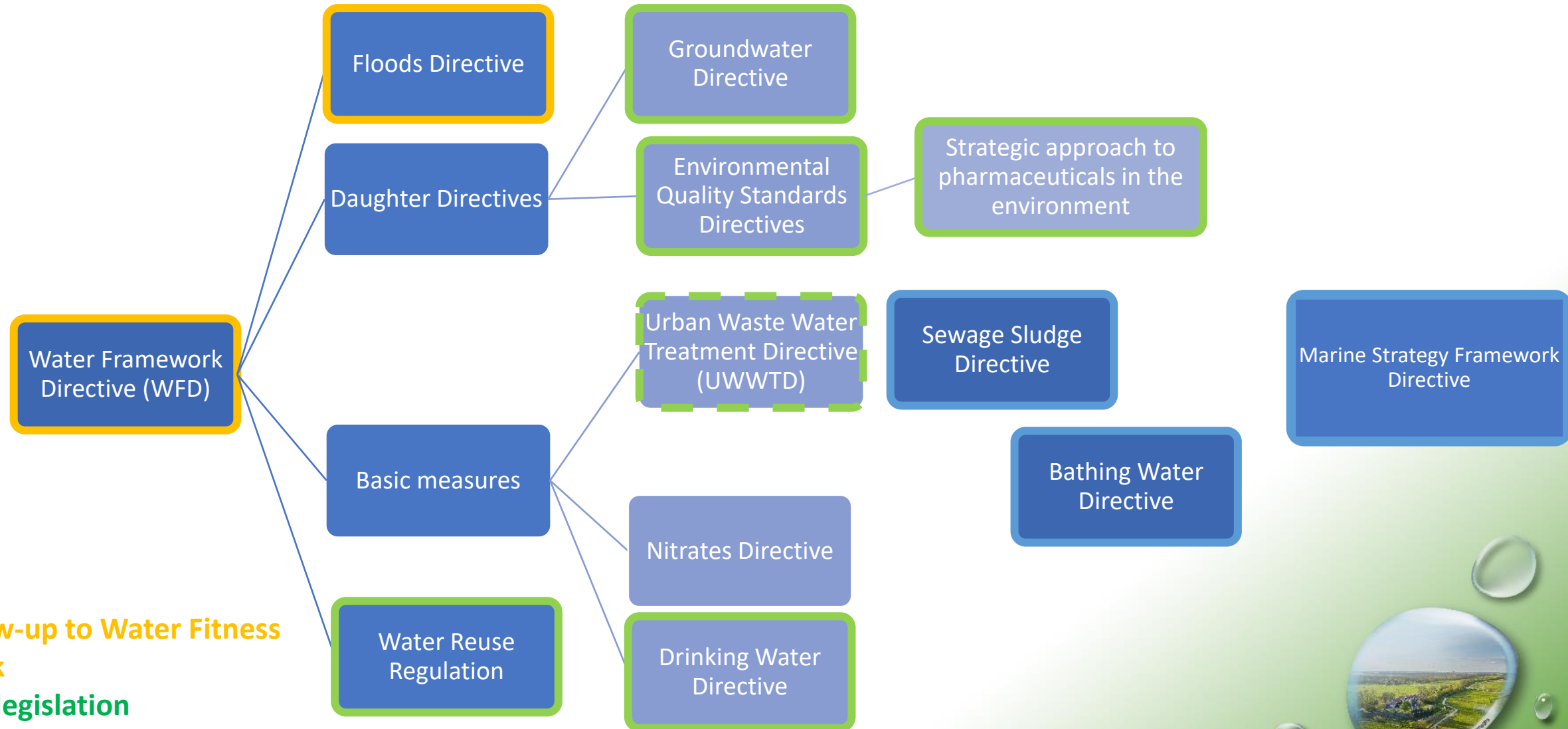
# Urban and Sustainable Water Solutions

EU Green Week Nordic partner event

*Silvia Bartolini – DG ENV, 30/05/2024*



# European Green Deal and Water



Follow-up to Water Fitness Check

New legislation

Review of legislation



# UWWTD – from evaluation to revision

## The Directive

**Collection**

**Treatment**

**Monitoring &  
Reporting**

## Room for improvement

Remaining pollution

Eutrophication

Energy use, sludge  
management

Governance –  
transparency/reportin  
g

Coherence with other  
legislation

## New Directive

Requirements for storm  
water, individual systems  
etc.

Stricter nutrient  
measures

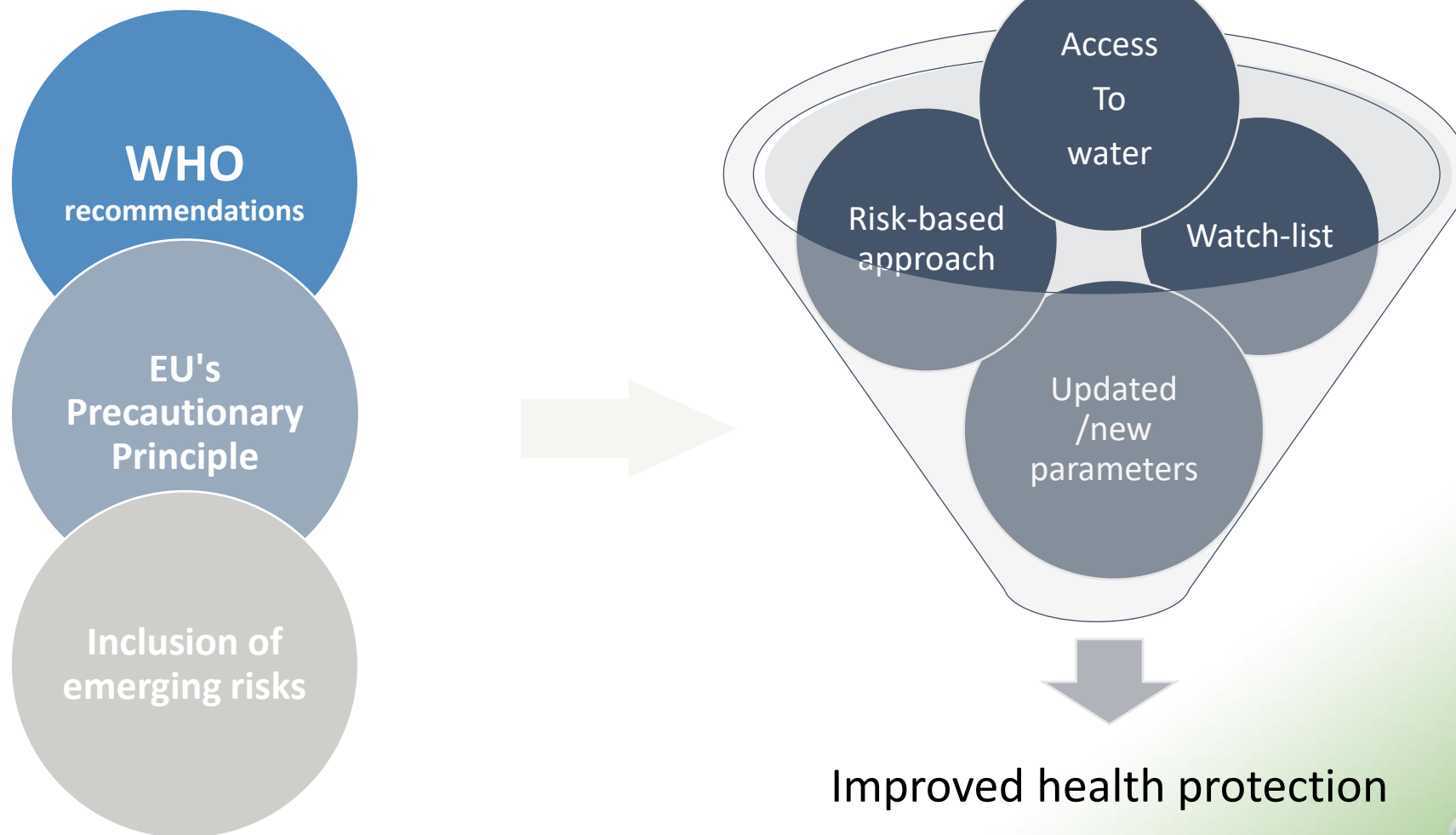
Quaternary treatment  
for micropollutants

Improved monitoring

Better coherence with  
other legislation



# Recast Drinking Water Directive – What's new?



# Materials in contact with drinking water

## ■ Implementing Acts (IA) :

- Establishing the European positive lists
- Methodologies for testing and accepting starting substances to be included in the EU positive lists
- Procedures and methods for testing and accepting final materials as used in a product

## ■ Delegated Acts (DA) :

- Procedure to include substances in the EU positive lists
- Conformity assessment procedure for products
- Harmonised specification for a marking of product





# Water leakage rate in the recast DWD



Source AWWA

- Member States shall make an **assessment of the leakage levels** in their distribution networks
- Member States shall **communicate assessment** results to COM by **Jan 2026**
- COM will set a **leakage threshold value (TV)** by **Jan 2028**
- Member States leakage value  $>$  TV then **MS action plan** is needed 2 years after setting TV
- New provisions on **public information** includes leakage rates

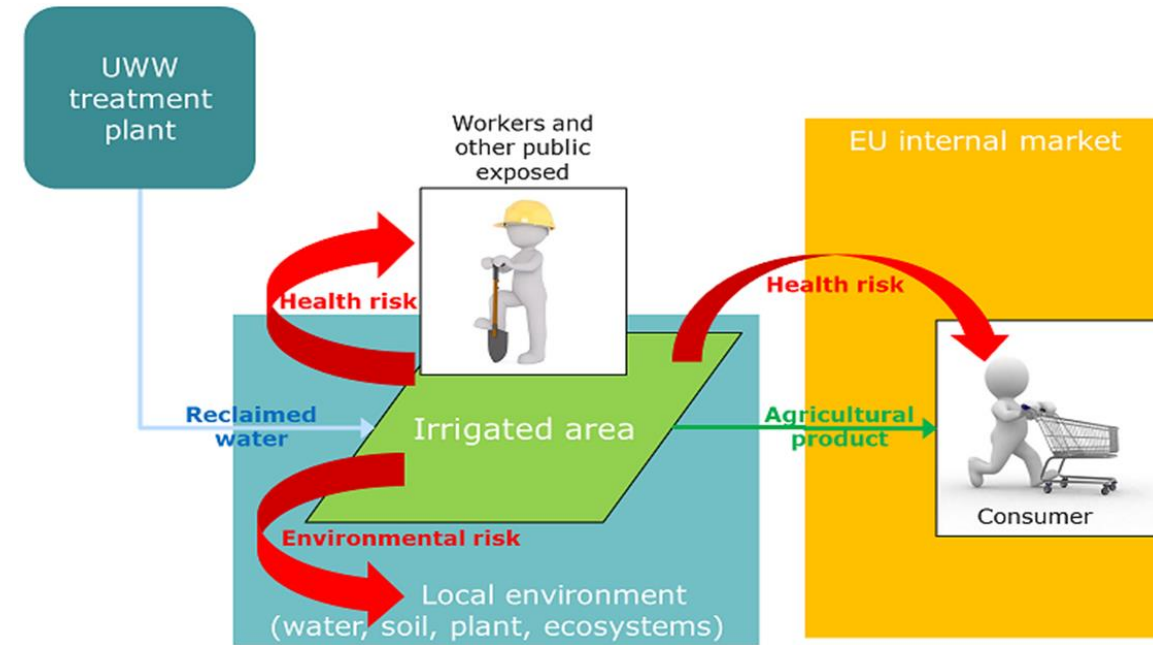
# Provisions on PFAS in the recast DWD

- Member States have until **January 2026** to ensure the **monitoring of PFAS** and ensure that the drinking water **complies with the parametric values** set for PFAS:  
    'Sum of PFAS' (100 ng/l) or 'PFAS Total (500 ng/l)
- Member States can add **additional parameters** and/or set more stringent parametric values in transposed national legislation
- By Q2 2024: COM shall **establish technical guidelines** regarding methods of analysis for monitoring PFAS'
- For the future, **work ongoing** with **WHO** / ENV contract (2024 – 2026):
  - Phase 1: identification relevant PFAS in DW + development in-depth HH assessment methodology (2024)
  - Phase 2: recommendations on health-based guidance values for relevant PFAS in DW (2024 - 2026)
- Study on **PFAS removal from DW** (and UWW) + **feasibility of an EPR scheme**



# Water Reuse Regulation (EU) 2020/741

- Aims:
  - address water scarcity and drought
  - increase efficiency in the use of resources
  - safeguard public health and the environment
- The Regulation:
  - regulates water reuse in agricultural irrigation
  - fit-for-purpose instrument – different quality classes
  - origin of water for reclamation – water already treated up to Urban Waste Water Treatment Directive standards





But also:

**Industrial Emission Directive (EID)**

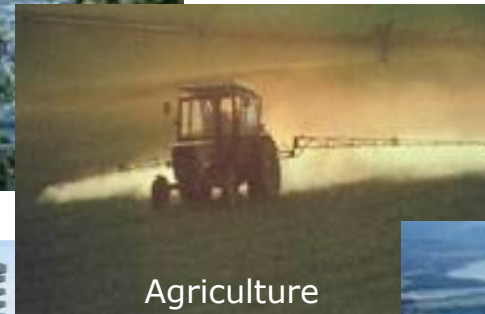
**Sustainable Products Regulation (ESPR)**

.....and still under discussion:

**Revision of the list of pollutants (ground and surface waters)**



# Various uses, demands, pressures and impacts. Water is a cross-cutting issue





# INCREASING WEATHER EXTREME EVENTS



March 2024 – **EU Climate Risk Assessment** (EEA):

*‘Europe is the fastest-warming continent in the world. Extreme heat is becoming more frequent, while downpours and other precipitation extremes are increasing in severity. These events, combined with other social and environmental risk drivers, threaten food, water and energy security’.*



# European policy context



## European Council - March 2023

- ✓ It acknowledged “[...] the **need for enhanced EU and global action on water** and the **importance of a strategic EU approach to water security**”

## European Parliament

- ✓ Resolution on droughts in 2022
- ✓ 2 plenary discussions on water crisis in 2023



## European Economic and Social Committee

- ✓ Call for a **EU BLUE DEAL**





UN WATER CONFERENCE 2023

# The EU vision for 2050 Water Resilience endorsed by the College

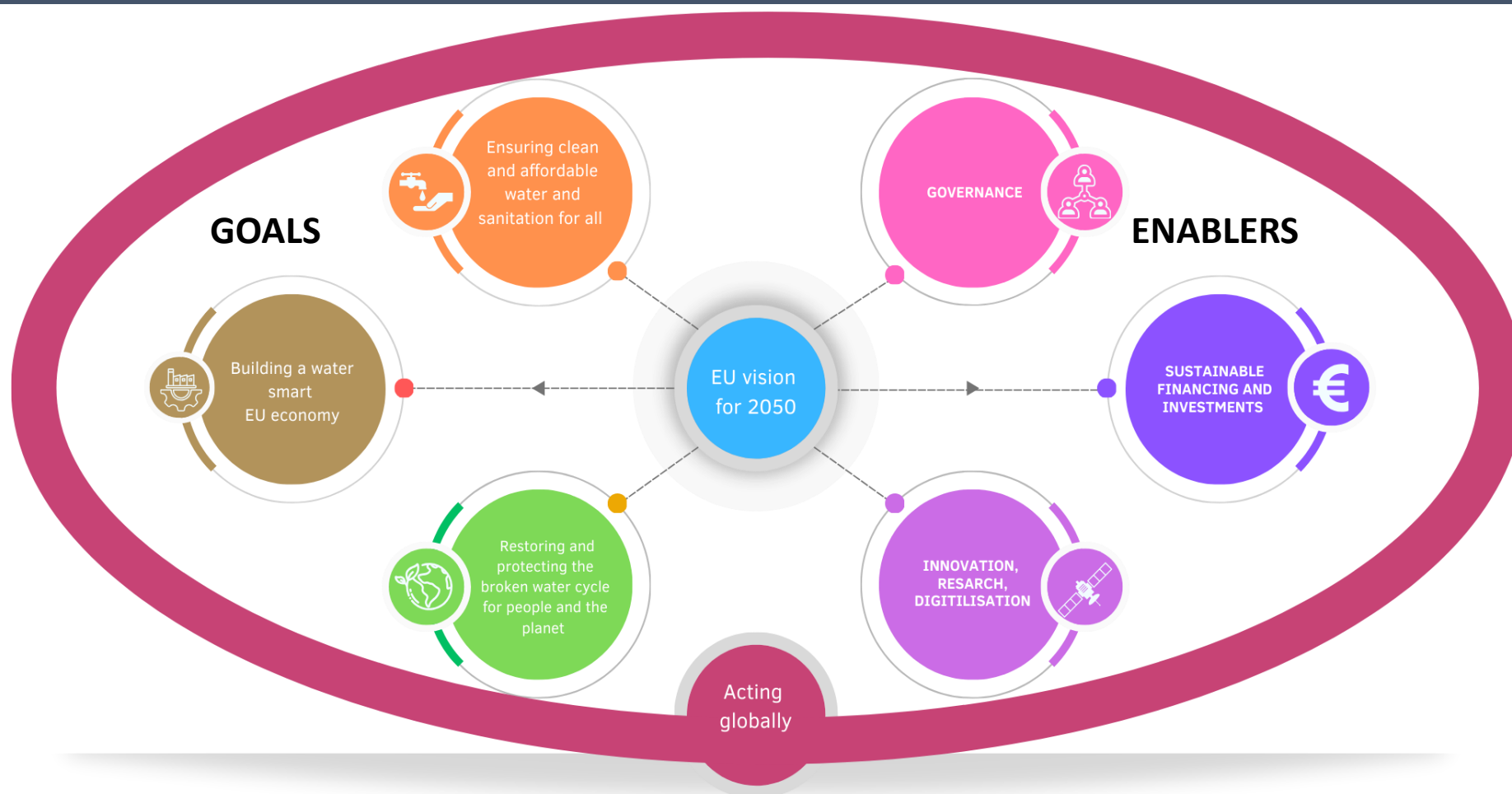
*“In 2050, global society will be water resilient, offering water security for all.*

*This entails the protection and restoration of aquatic ecosystems, and a fair balance between water supply and water demand responding to current needs, including the realization of the human right to safe drinking water and sanitation,*

*without compromising the rights of future generations.”*



# « Towards EU Water Resilience »



# Next steps

1. **#WaterWiseEU communication campaign** to raise awareness - “See Water Differently” – soft launch on 22.03.2024, World Water Day – full launch on 29.05.2024
2. **Green Week on Water Resilience** (29-30 May), with partner events from 29 May to 1 September
3. Commission assessment **report on implementation of the Water Framework and the Floods directives**, as well as Programme of Measures under the **Marine Strategy Framework Directive**; & the **EEA’s “State of European waters 2024”** report (Q2/Q3 2024);
4. Forthcoming **evaluations of the Marine Strategy Framework, the Nitrates and Bathing Water Directives**.
5. Internationally, **World Water Forum** (May 2024), **One Water Summit** (September 2024) and **CBD COP16** (October 2024).

# How we contribute to a clean and healthy Oslofjord

Ms. Solveig Schytz, Councilor for planning, cultural heritage, climate and environment, Akershus County





**AKERSHUS**  
FYLKESKOMMUNE

# How we contribute to a clean and healthy Oslofjord

Ms. Solveig Schytz

Vice Mayor for planning, cultural heritage,  
climate and environment, Akershus County, Norway



# Our contribution in solving the Oslofjord challenges

These challenges are among our most important regional cross-political priorities in Akershus

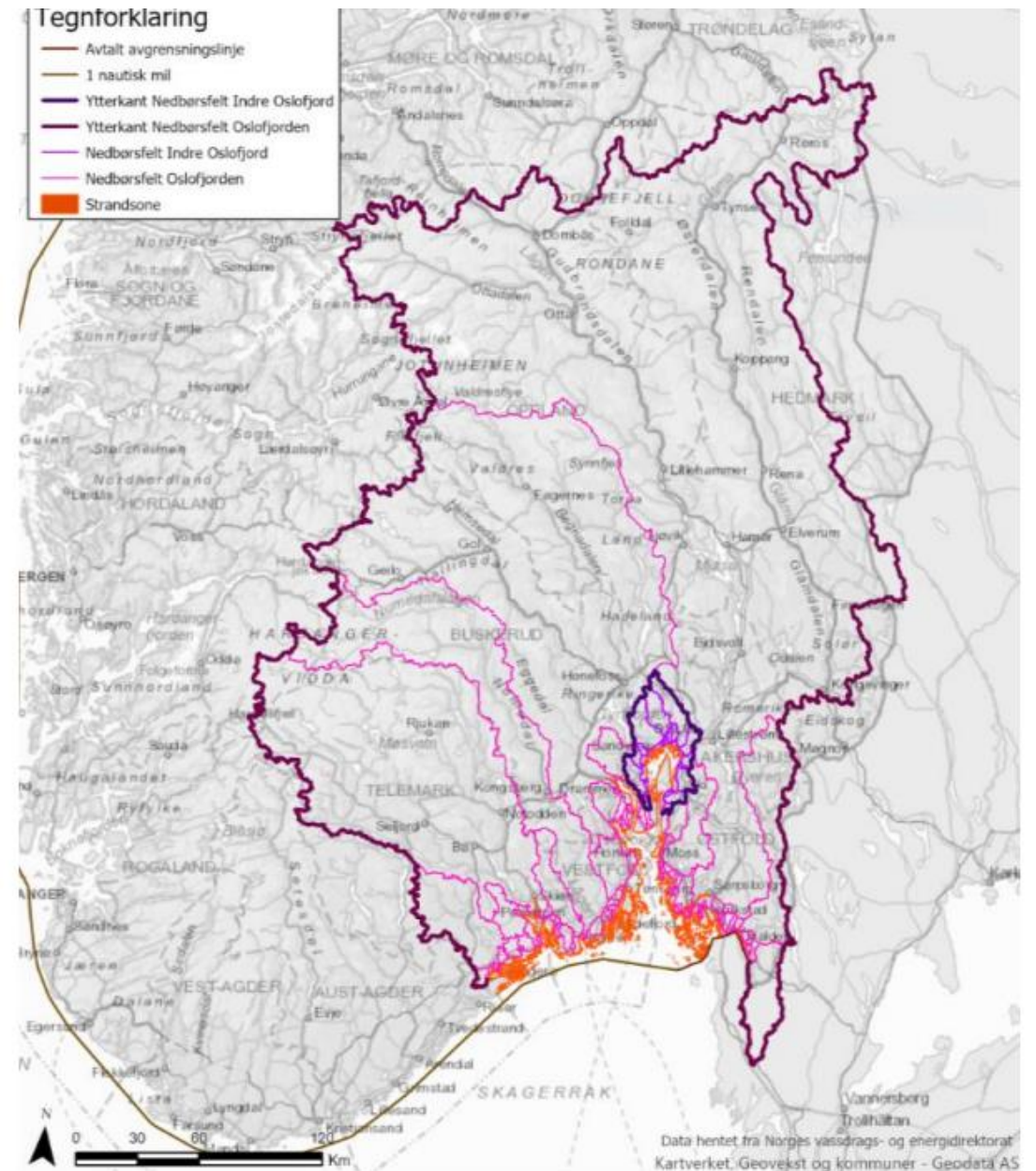
In short our priorities are to:

- ❖ Intensify our contribution in following up The National Action Plan for The Oslofjord
- ❖ Strengthen cross sectoral interaction and management between levels and branches
- ❖ Increase our ambitions and investment funds in the years ahead
- ❖ Increase and fill in the gaps through collaboration and actions



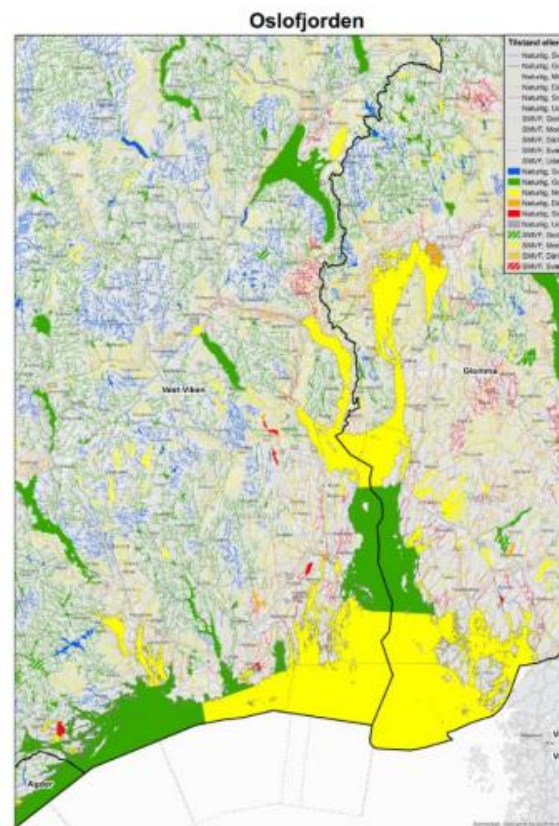
# The Oslofjord catchment area and Akershus County

- The goal is «good ecological water conditions» by 2027 in the whole catchment area – in rivers and the fjord
  - Most probably extended to 2033
- Turn around the situation where the public have no access to 71% of the coastline in inner parts of the Oslofjord.
  - **1,6 of Norways 5,5 million inhabitants live close by the Oslofjord**

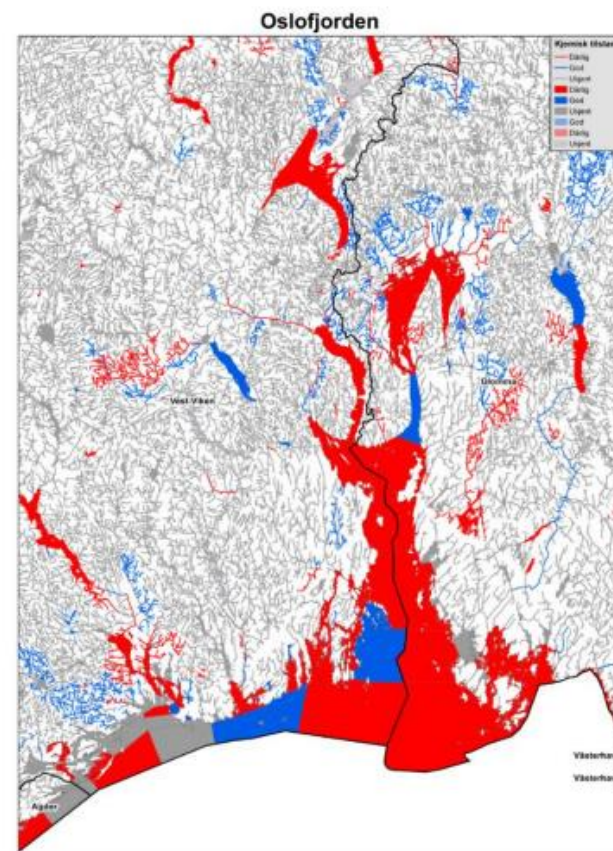


Figur 4: Nedbørsfeltene til hhv Indre- og Ytre Oslofjord samt, kystsonen (100m beltet i oransje). Brun strek er

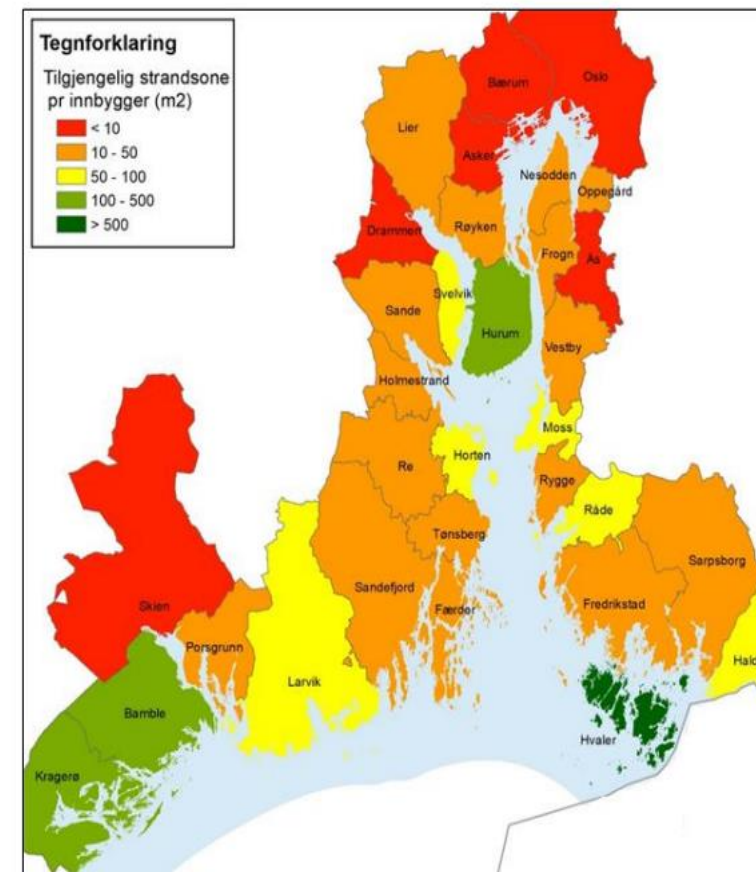




Figur 5a: Viser hhv økologisk- og kjemisk tilstand pr vannforekomst etter vannforskriftens kvalitetstels Oslofjorden. Tatt ut av Vann-Nett pr 31. oktober 2019. (Økologisk tilstand: blå = svært god tilstand, ; tilstand, gul = moderat tilstand, oransje = dårlig tilstand, rød = svært dårlig tilstand. Kilde: Vann-Nett.

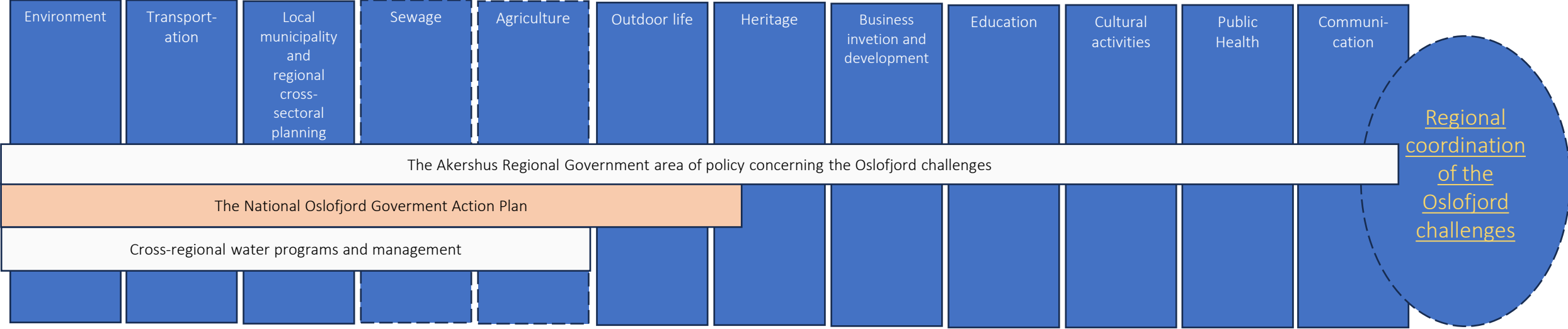


Figur 5b: Viser hhv kjemisk tilstand pr vannforekomst etter vannforskriftens kvalitetselementer i Oslofjorden. Tatt ut av Vann-Nett pr 31. oktober 2019. (Kjemisk tilstand: blå = god tilstand, rød = dårlig tilstand). Kilde: Vann-Nett.



Figur 9: Tilgjengelig landfast areal per innbygger i 100-metersbeltet. Kilde: SSB Statistikkbanken.

# Similarities and differences in the national and regional scopes meeting the Oslofjord challenges



# Regional contribution to the National Government Action Plan



- Strengthen our capacity and coordinate our responsibilities in carrying out the National Action Plan on the regional level
- Use our role in enhancing regional sustainable development in all policy areas
- Expose and utilize our underdeveloped possibilities of leverage and means





# In addition our County Government is contributing even more to a clean and healthy Oslofjord

- Akershus County builds on all the SDGs to define our contribution, with emphasize on the Planetary Boundaries
- The County Government gives The Oslofjord high priority in the 2023-2027 Political Platform
- And of course, in our regional planning, which for many areas will be in cooperation with Oslo, the Oslofjord will be central in many aspects.



# In addition our County Government is contributing even more to a clean and healthy Oslofjord (2)

In more detail The County Government and administration is

- Helping local authorities in their caretaking of vegetation zones, rivers, streams and wetland, and avoiding interventions
- Contributing to that peoples outdoor activities have longlasting access to the fjord
- Contributing to reduced reduction of natural areas along the coast and establish new areas for conservation
- Giving regional support to national expectations in the holistically planning of land and sea areas locally
- Contributing to the Norwegian fullfilment of The Kunming-Montreal Global Biodiversity Framework

# The Oslofjord fund 2024 – the main objectives

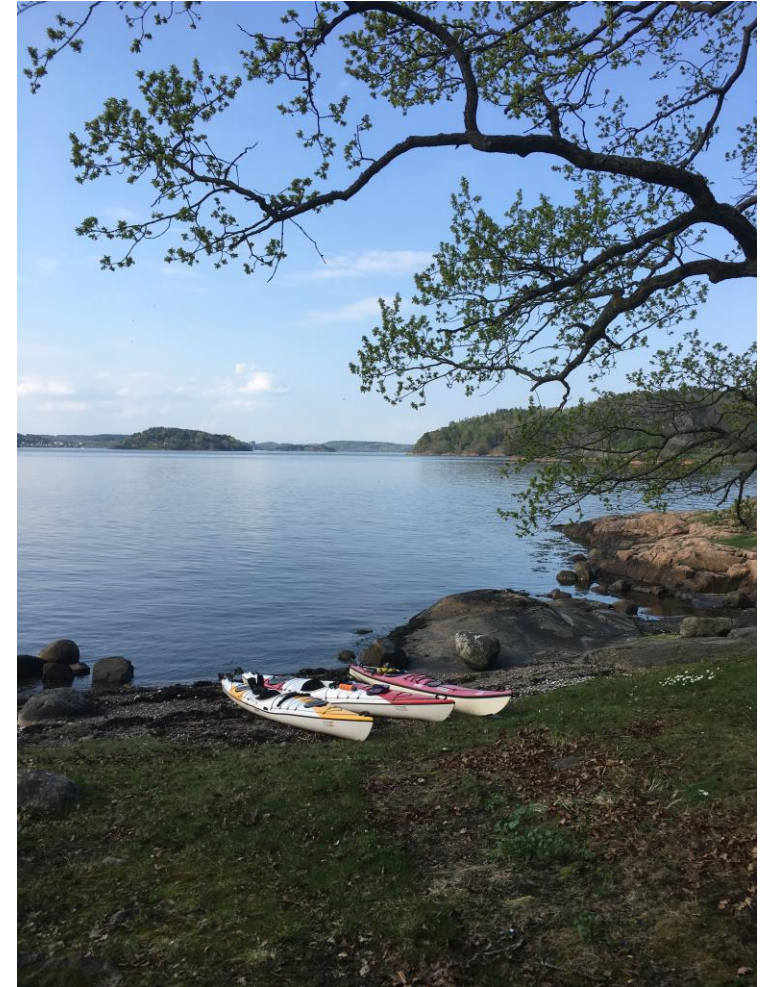
To spend 25 million NOK this year as a startup of our long term investment fund and increase the sum every year

**Accelleration and increased collaboration in projects with the aim**

- To contribute to a clean and healthy Oslofjord
- To contribute to better access for everyone to The Oslofjord

**Our approach:**

- Removing negative impact from the whole catchment area, rivers and in the fjord
- Reinforcing positive impacts
- Mobilization of engagement and support in the catchment area
- Ensuring necessary fundings





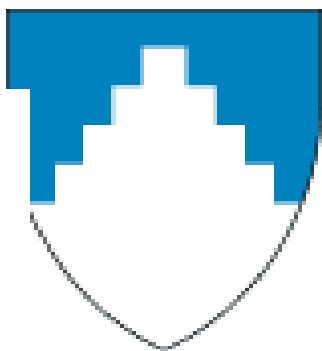
# We aim to increase our collaboration with partners and authorities on:

- Regional and local watermanagement
- Transportation
- Agriculture
- Sewage management
- Access to the Oslofjord
- Co-creative communication
- Cross-sectoral collaboration
- Better and more efficient use of our investment funds and financial support



**Thank you!**

**We look forward to be inspired with new  
knowledge from your presentations and are  
always open to new possibilities for cooperation.**



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# How to manage a rising sea level and lake water within a city

Mr. Peter Svärd, Project Director and Ms. Lisa Jacobsson, Deputy Project Director, from the project “The New Slussen





# New Slussen

City development, water regulation and climate adaption

Peter Svärd, Project Director, City of Stockholm

Lisa Jacobsson, Deputy Project Director, City of Stockholm



Stockholms  
stad





Project location







# Project location

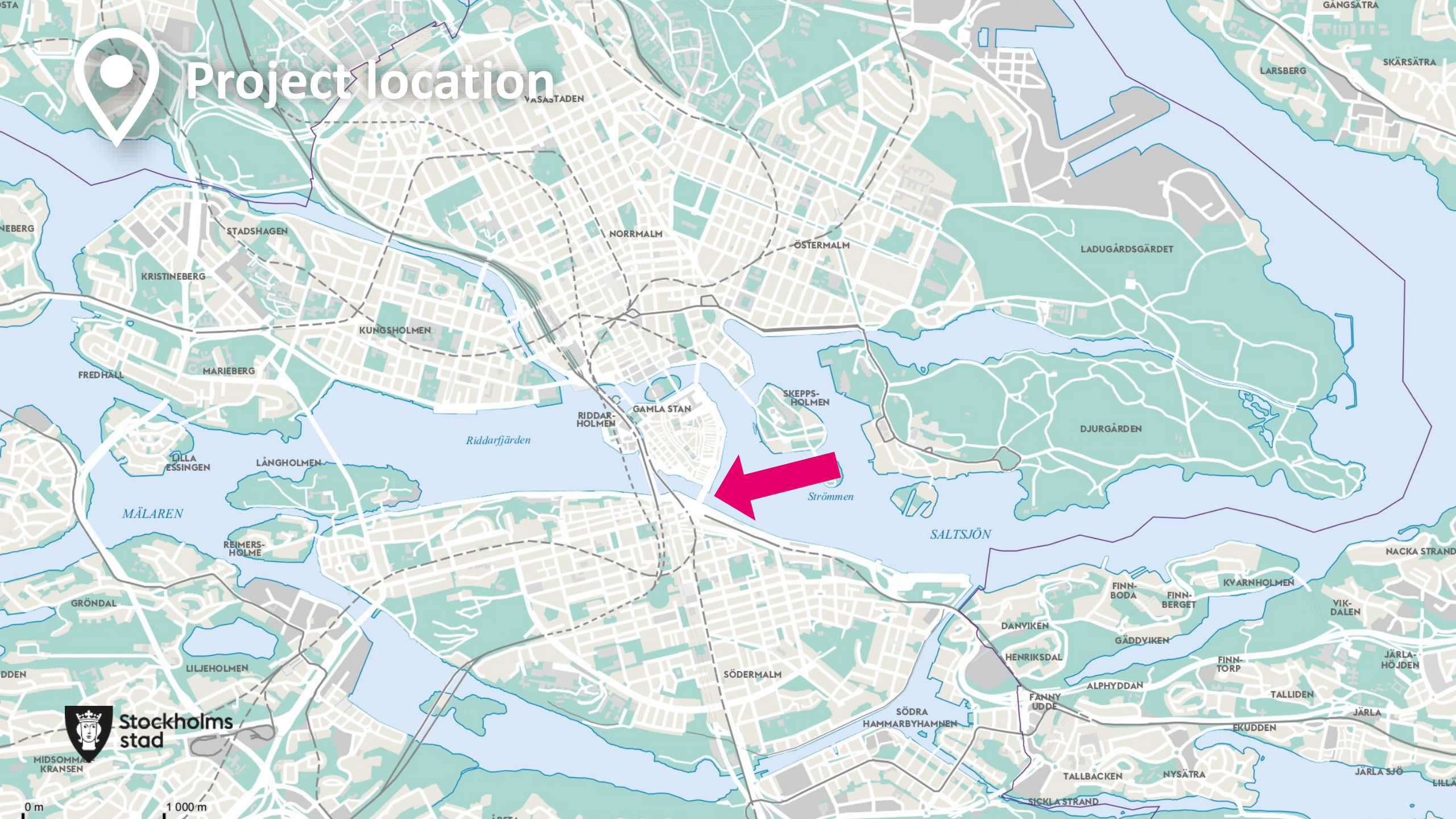


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# Project location





# Timeline

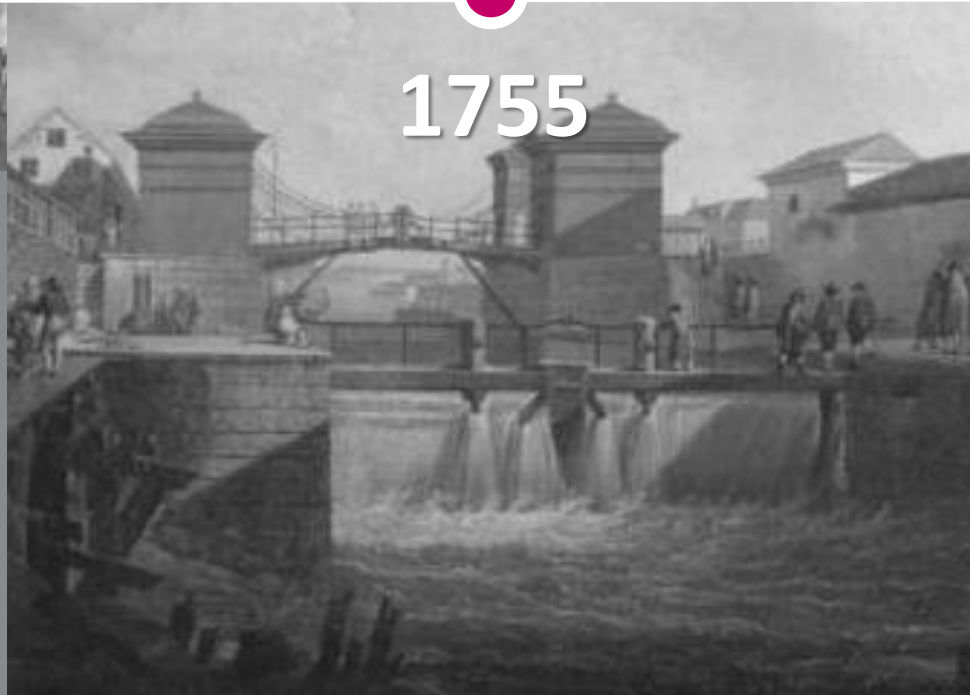
1642



1850



1755



1935







From traffic junction..







... to meeting place

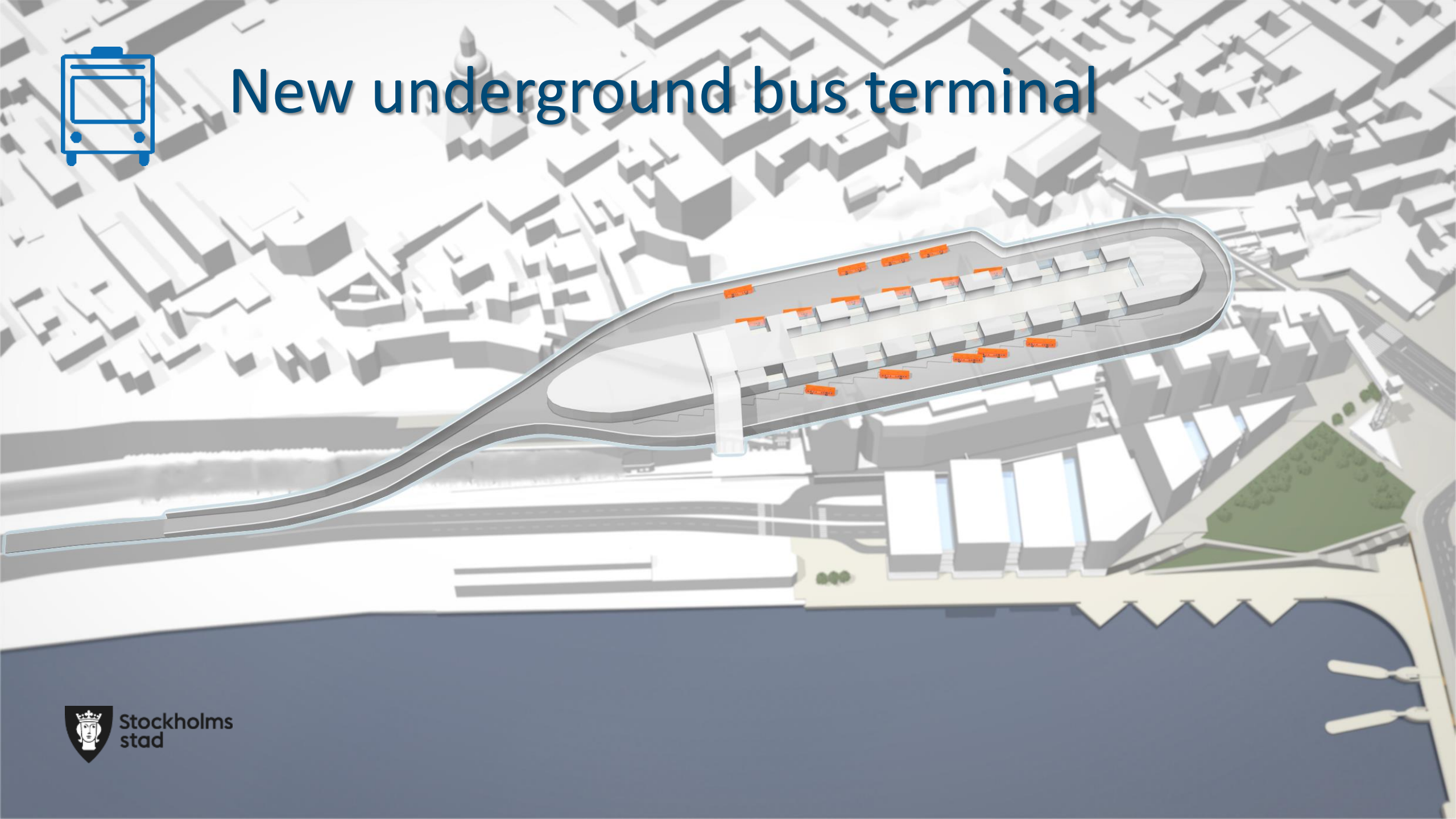


Stockholm  
Sweden





# New underground bus terminal





# The mission – objectives



## Potable water

Assure potable water for the region and safeguard infrastructure and buildings



## Traffic

Flexible opportunities to meet and travel



## City life

An attractive, safe and vibrant part of Stockholm



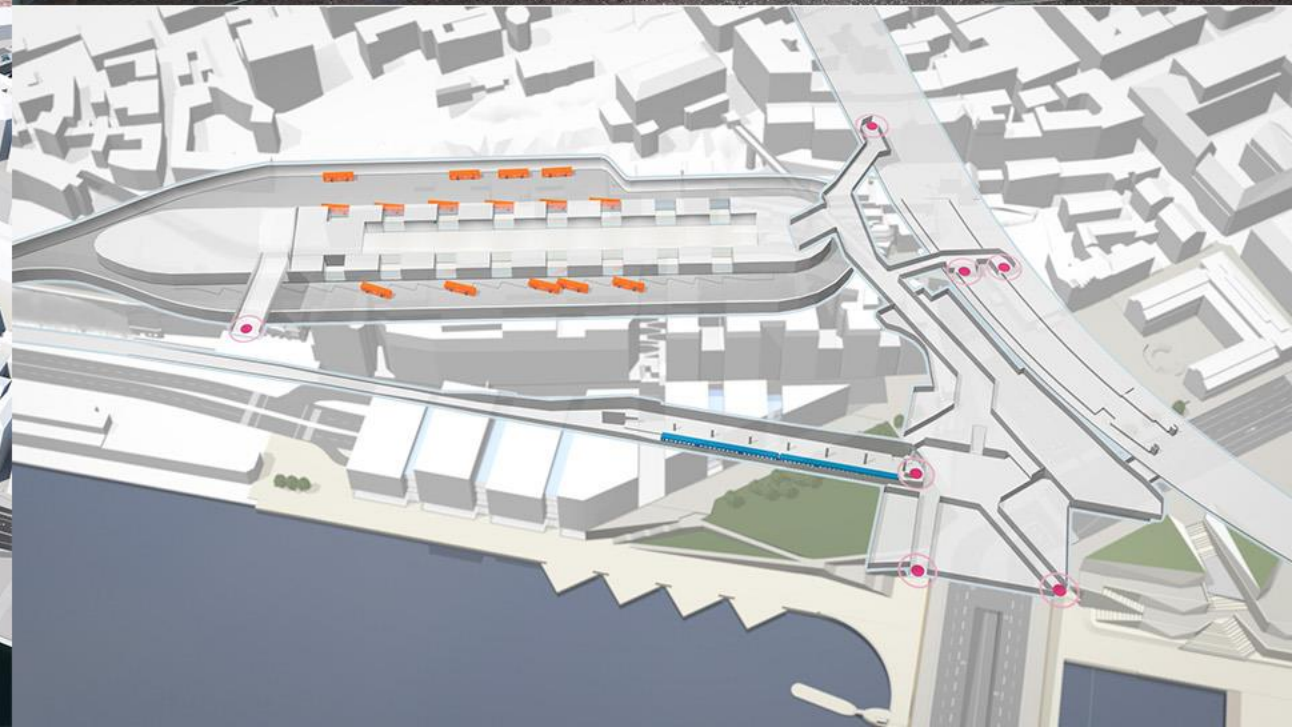
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# Traffic

Flexible opportunities to meet, live and travel

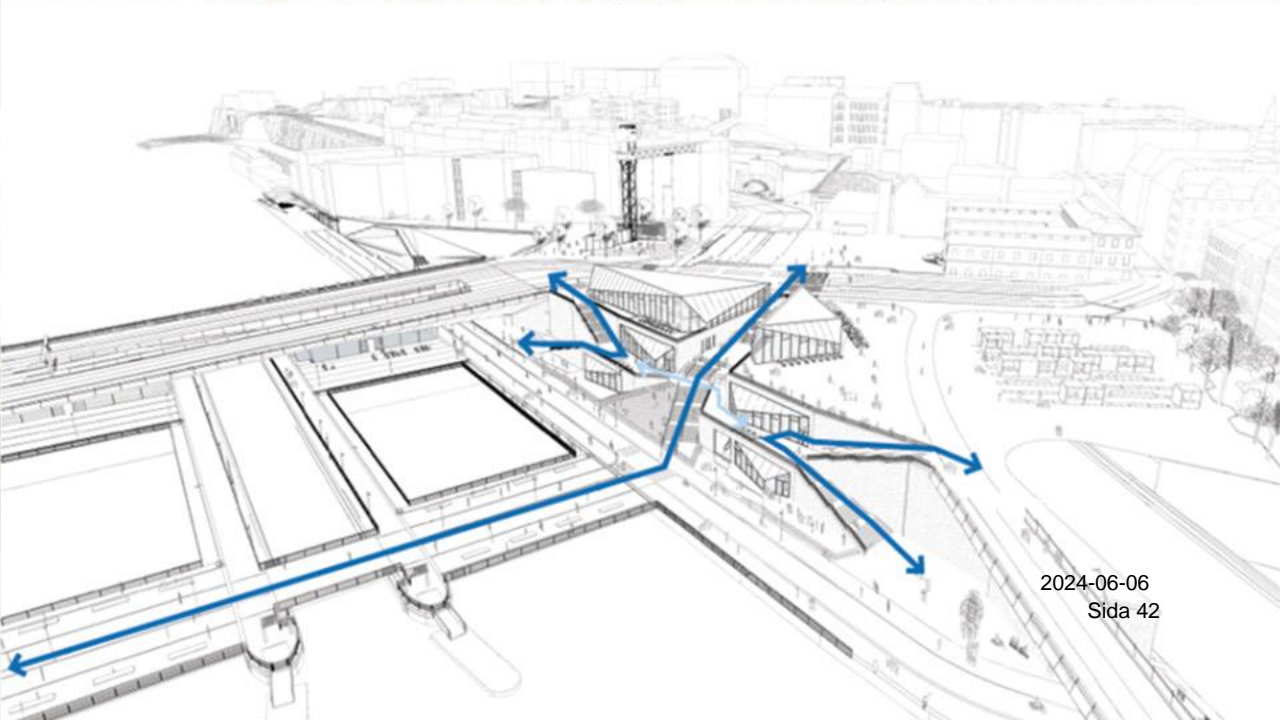






# City life

An attractive, safe and vibrant part of Stockholm







# Water

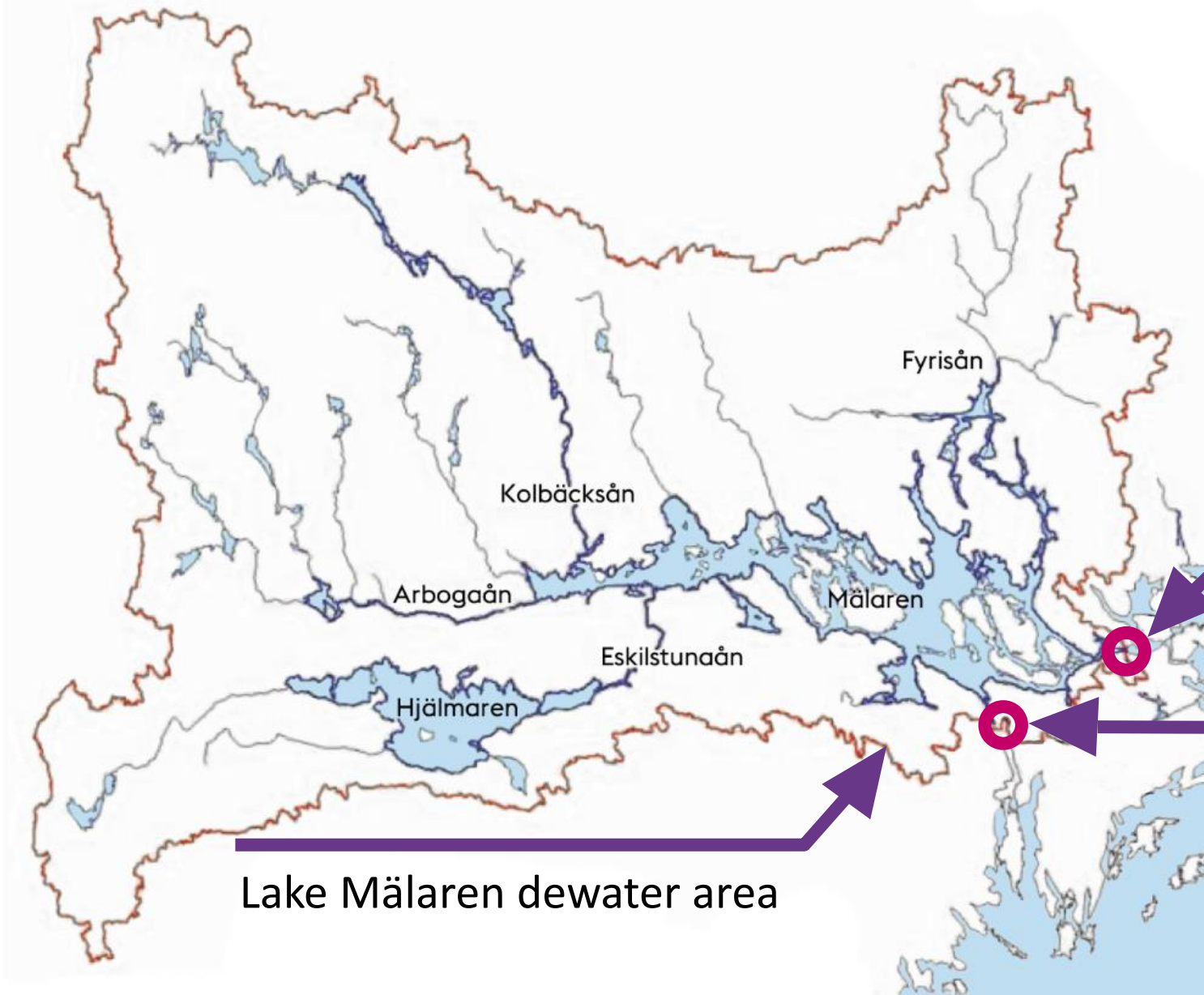
Assure potable water for the region and safeguard infrastructure and buildings





# Lake Mälaren

A regulated lake since the 1940's



Lake Mälaren dewater area



Stockholm

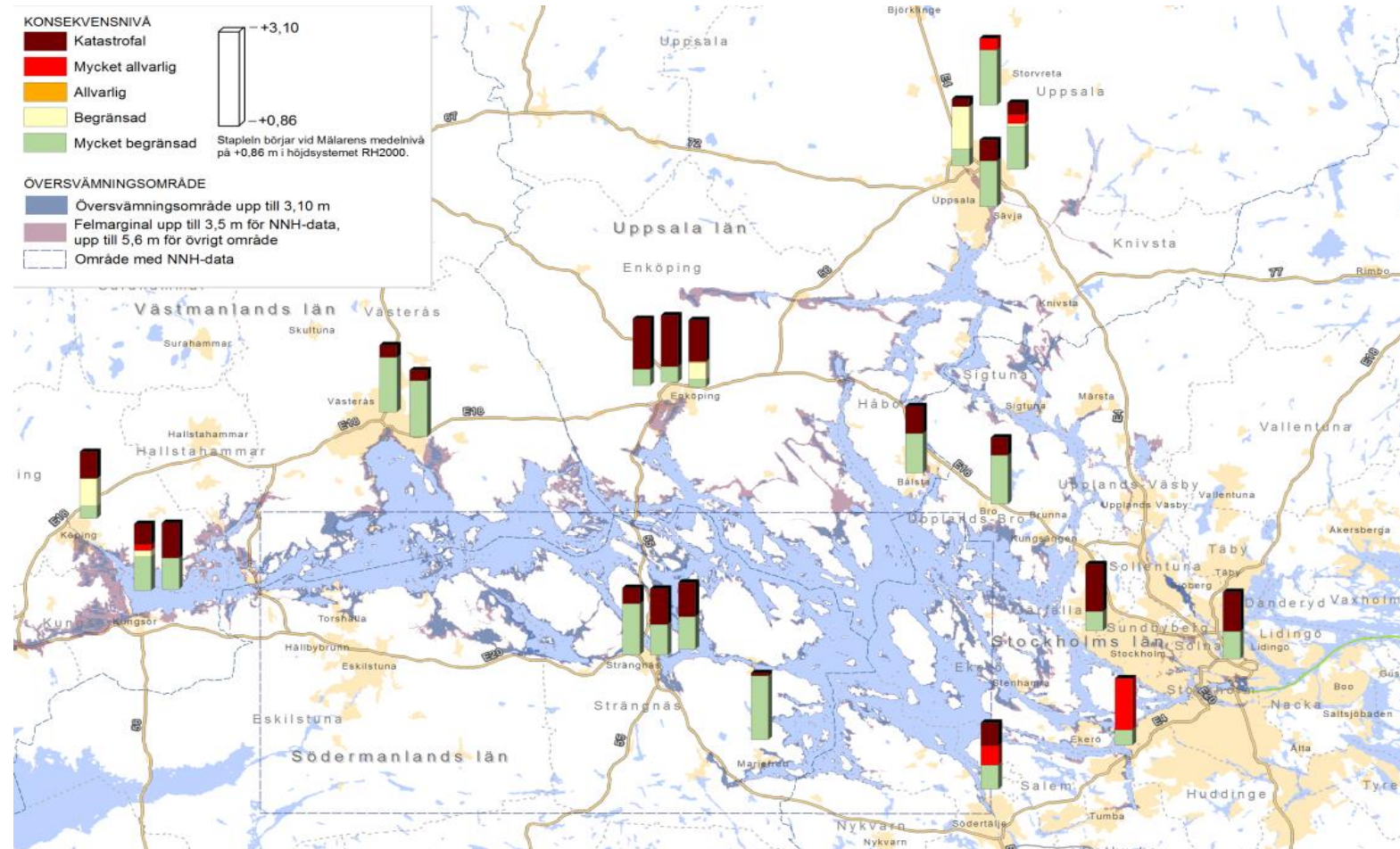


Södertälje



# Severe consequences around the lake

## Impact on important public functions

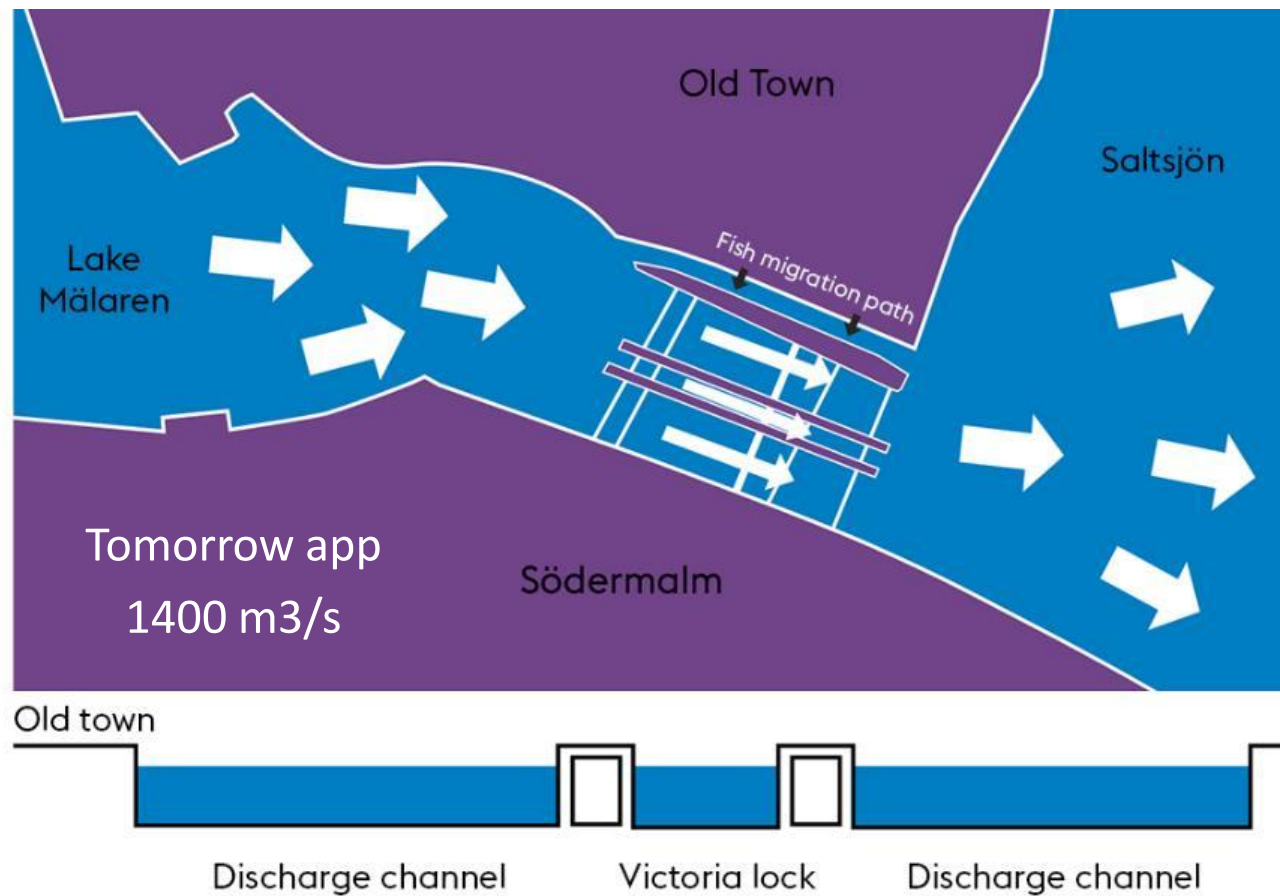
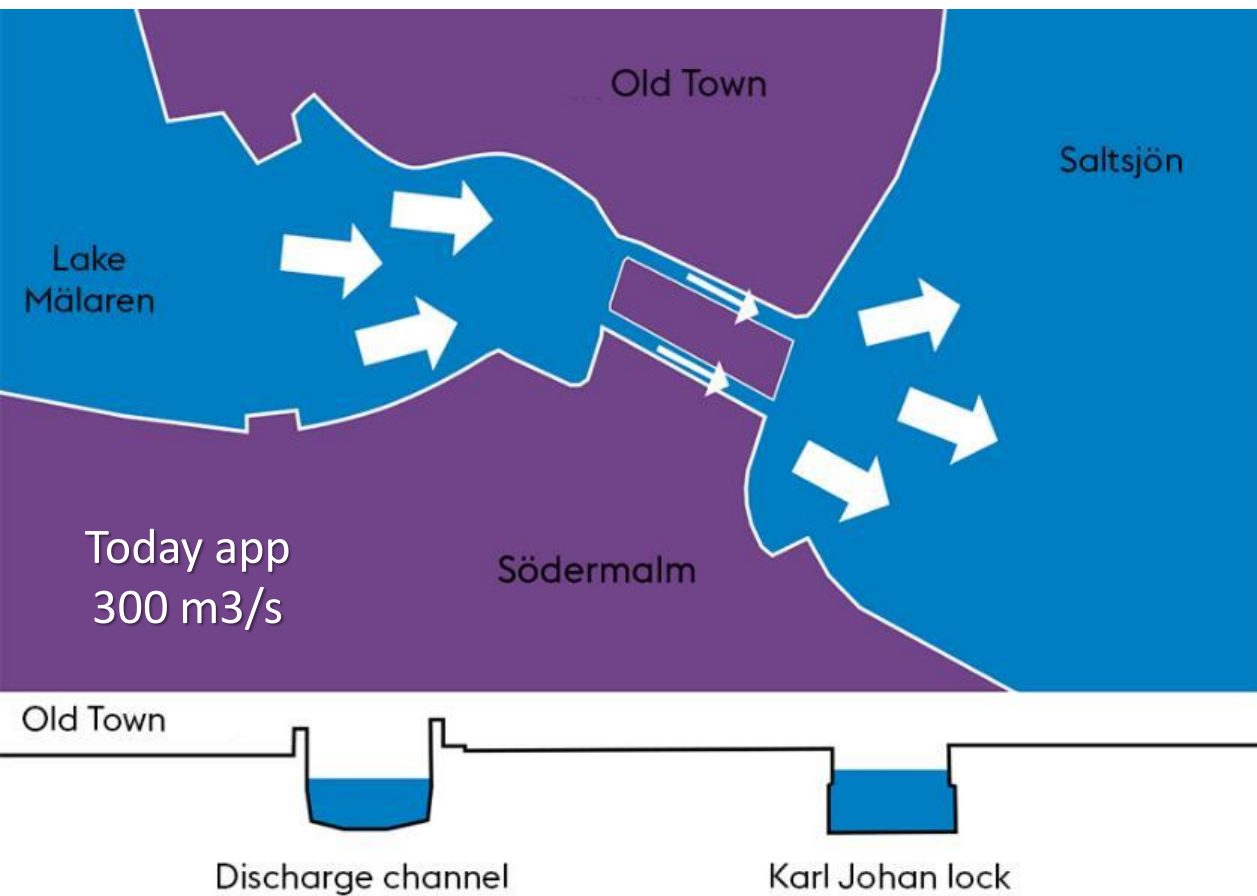






## Increased ability to regulate the water level

The new Slussen has 5 times the discharge capacity



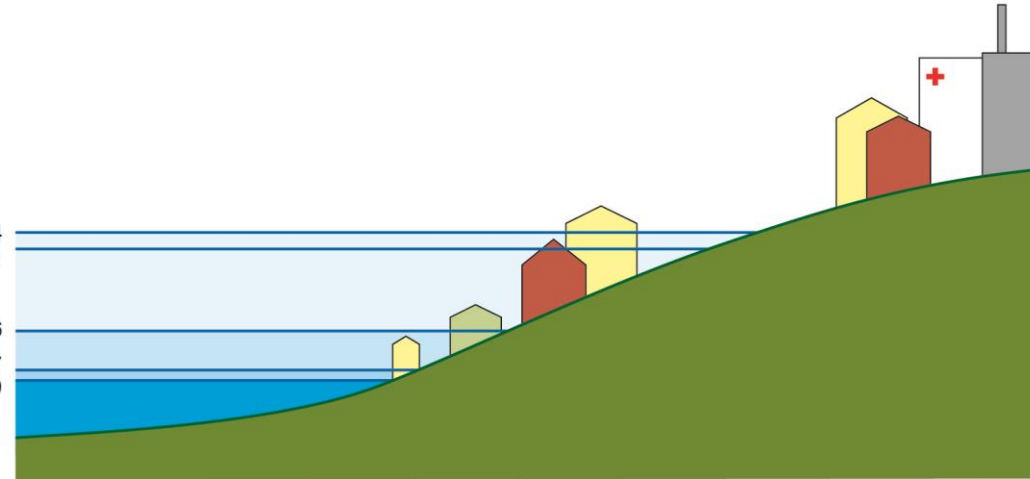


# A good safety margin according to SMHI\*

\*Swedish Meteorological and Hydrological Institute

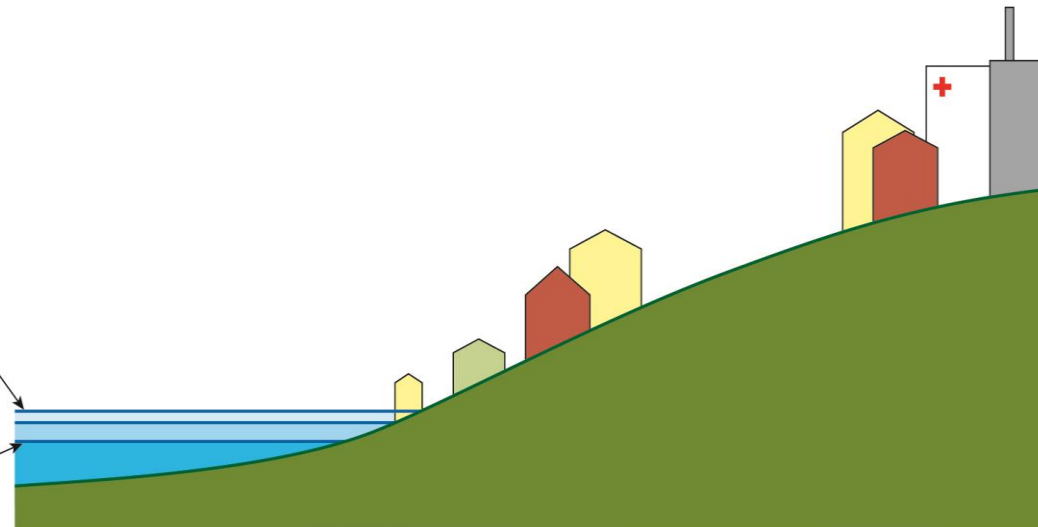
## Nollalternativ

Vattennivå vid 10 000-årsflöde 3,04  
Vattennivå vid 1000-årsflöde 2,88  
  
Vattennivå vid 100-årsflöde 1,86  
Högsta högvattennivå 1976-2005 1,47  
Mälarens högsta målnivå 1,39



## Huvudalternativ

Vattennivå vid 10 000-årsflöde 1,48  
Mälarens högsta målnivå 1,39  
Vattennivå vid 1000-årsflöde 1,33  
Vattennivå vid 100-årsflöde 1,28





# Improved conditions for the natural environment







# Provides vital ecosystem services and other values



6 counties, 40 municipalities within the watershed

Source of drinking water for more than 2 million people

Waterfront cities, cultural sites, industries and infrastructure



Fertile agricultural land and commercial fishing

Wetlands of national importance and high recreational value

About 70 Natura-2000 areas, of which 20 are in shoreline locations

Waterway and harbors of national interest



Lake Mälaren is the **third biggest lake in Sweden** and the dewater area covers 5% of Sweden.



## OECD highlights the climate adaptation in the Slussen project



The OECD highlights the climate adaptation in the Slussen project in their report "Climate-resilient infrastructure -GETTING THE POLICIES RIGHT".

The report provides a framework for governments to ensure that existing and new infrastructure is climate-adapted.

➔ <http://oe.cd/1U9>















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Sweden





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ABO  
SKANSKA





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# Thank you!



[vaxer.stockholm/  
slussen](http://vaxer.stockholm/slussen)



[@projektslussen](https://www.instagram.com/projektslussen)



# PFAS challenges and solutions from a regional perspective

Mr. John Flyvbjerg, Chief Consultant Environment,  
Capital Region of Denmark







# PFAS challenges and potential solutions seen from a regional perspective

*Urban and sustainable water solutions -  
tackling key challenges in the Nordic capital regions*

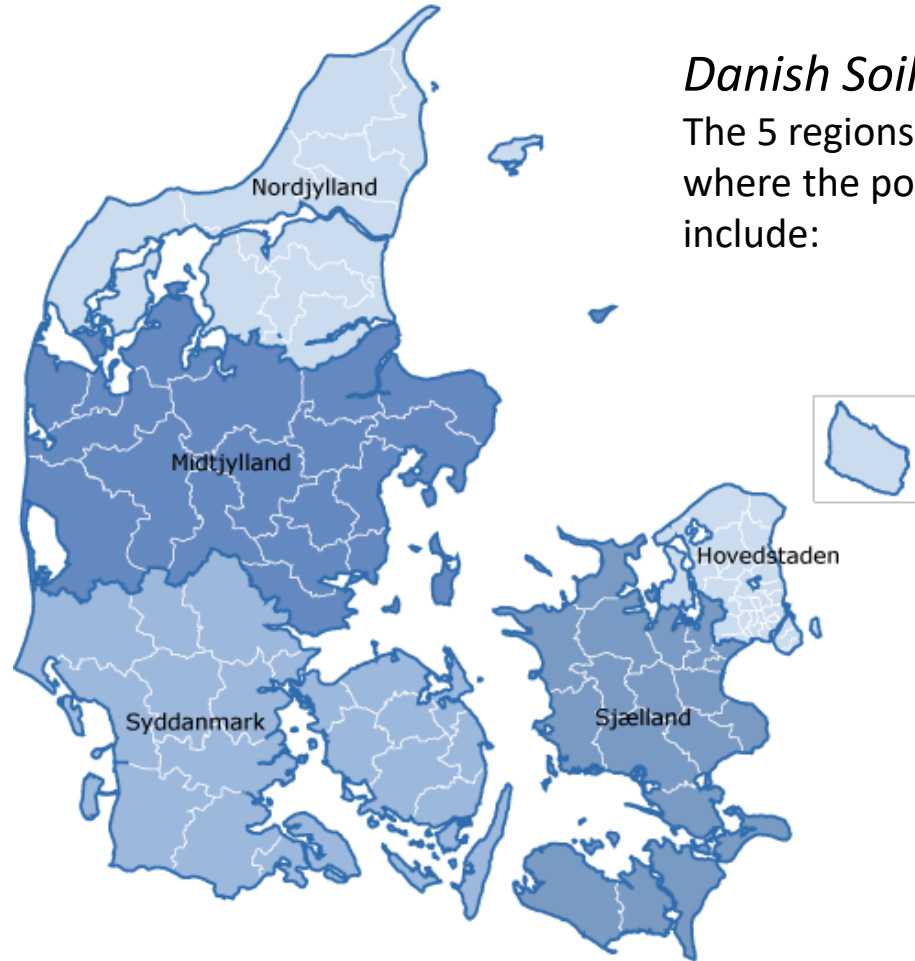
*EU Green Week 2024 Partner Event  
May 30, 2024*

John Flyvbjerg<sup>1</sup>, Niels Døssing Overheu<sup>1</sup> and Julie Kofoed<sup>2</sup>  
1: Dept. for Environment, Centre for Regional Development  
Capital Region of Denmark

2: Danish Regions



# Five Danish Regions – responsible for contaminated sites



## *Danish Soil Contamination Act:*

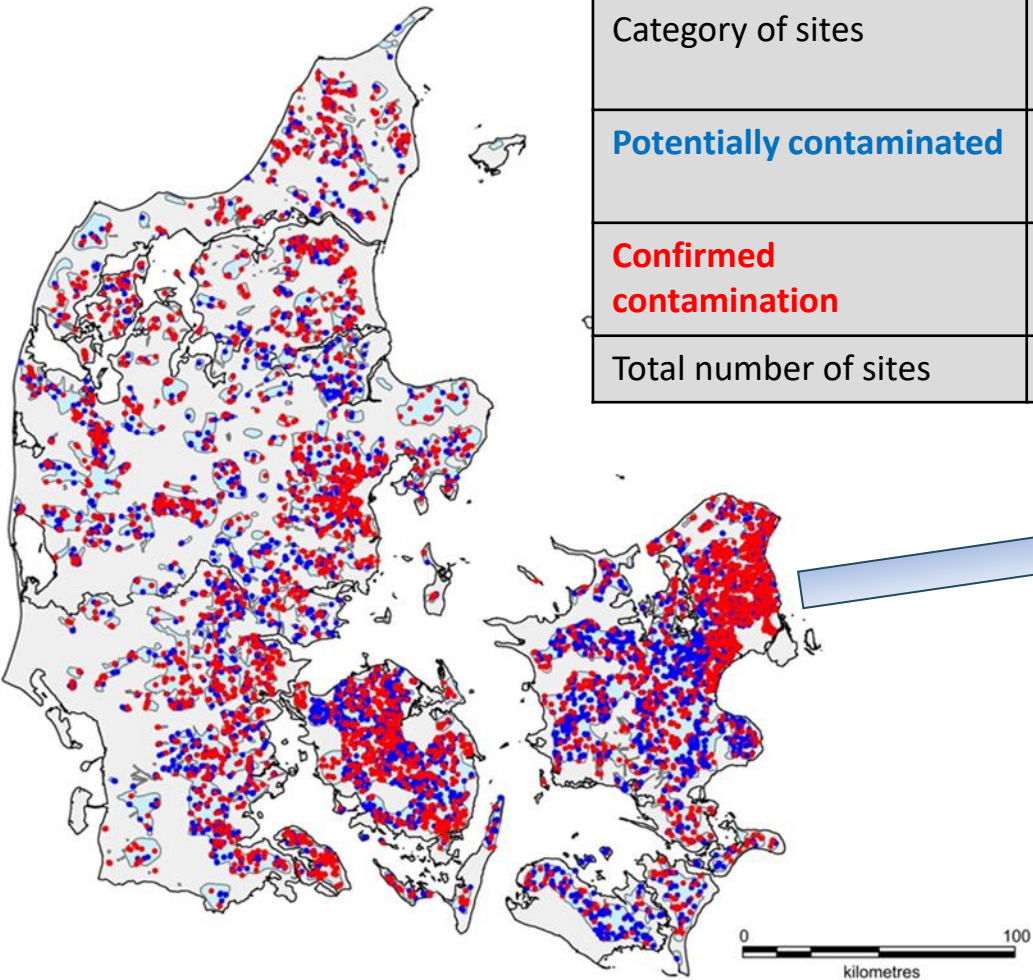
The 5 regions are responsible for “old contaminated sites”, i.e. sites where the polluter cannot be held responsible. Responsibilities include:

- Find and register sites
- Investigation and risk assessment
- Prioritization
- Remediation

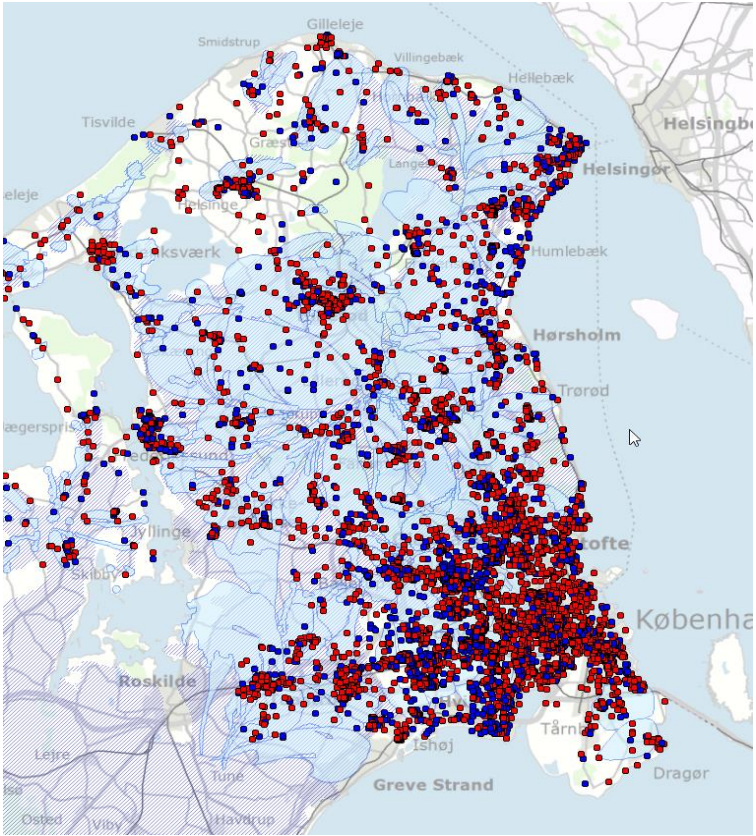




# The challenge

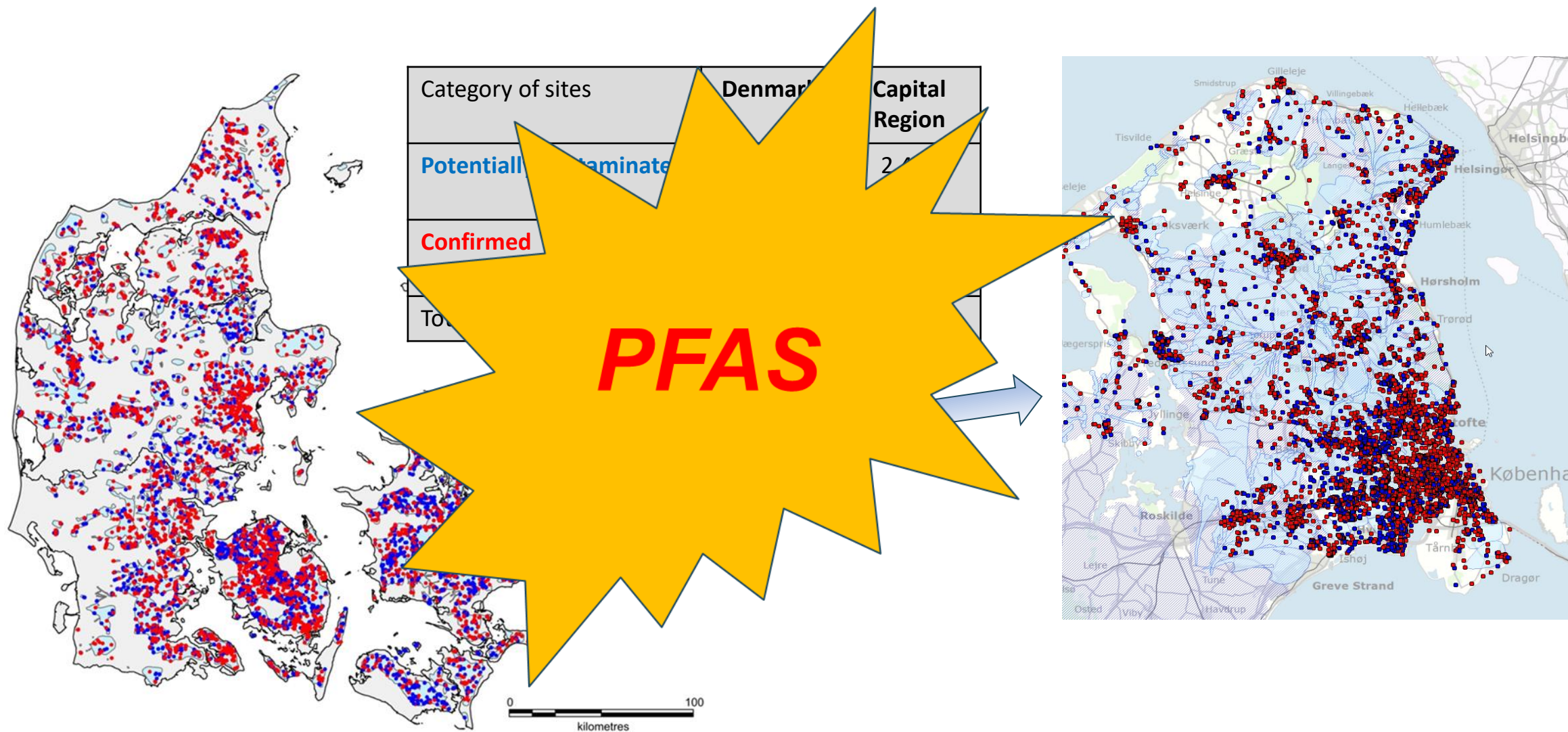


Category of sites	Denmark	Capital Region
Potentially contaminated	19.000	2.400
Confirmed contamination	20.000	5.200
Total number of sites	39.000	7.600



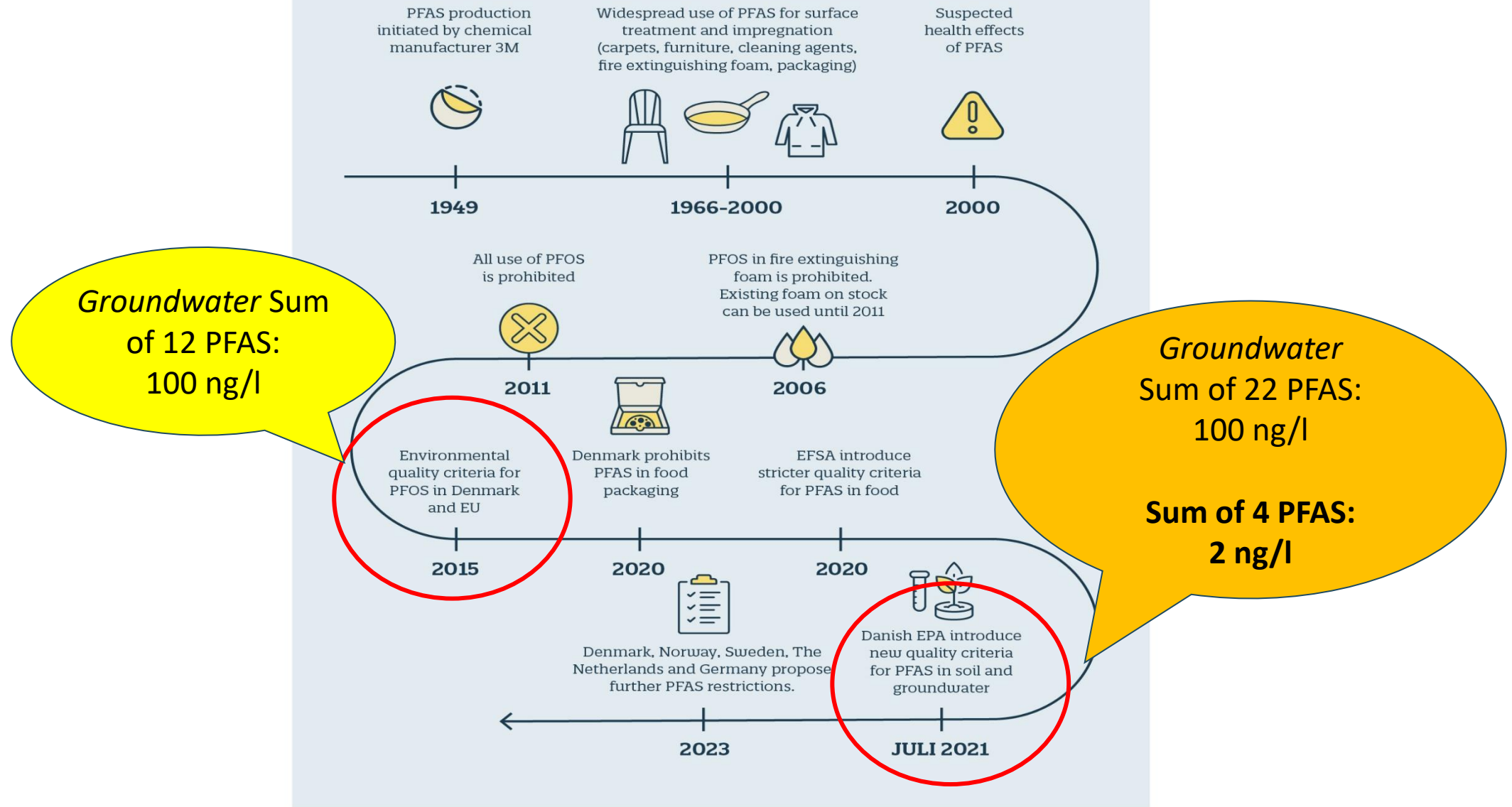


# The challenge





# PFAS substances historically





## Korsør case (2021): Extensive PFAS pollution near firefighting training area





# 2022/23: Suprising pathways for PFAS spreading



*PFAS in seawater concentrates in sea foam*



*PFAS contaminated sea foam is a source of ground-water contamination at well-fields near the coast*



# National PFAS action plan – on the way

*Important elements should be:*

- Ban/phase out/substitution of PFAS
- Overview of the problem
- Prioritisation
- Clear communication on risks etc.
- Research and development

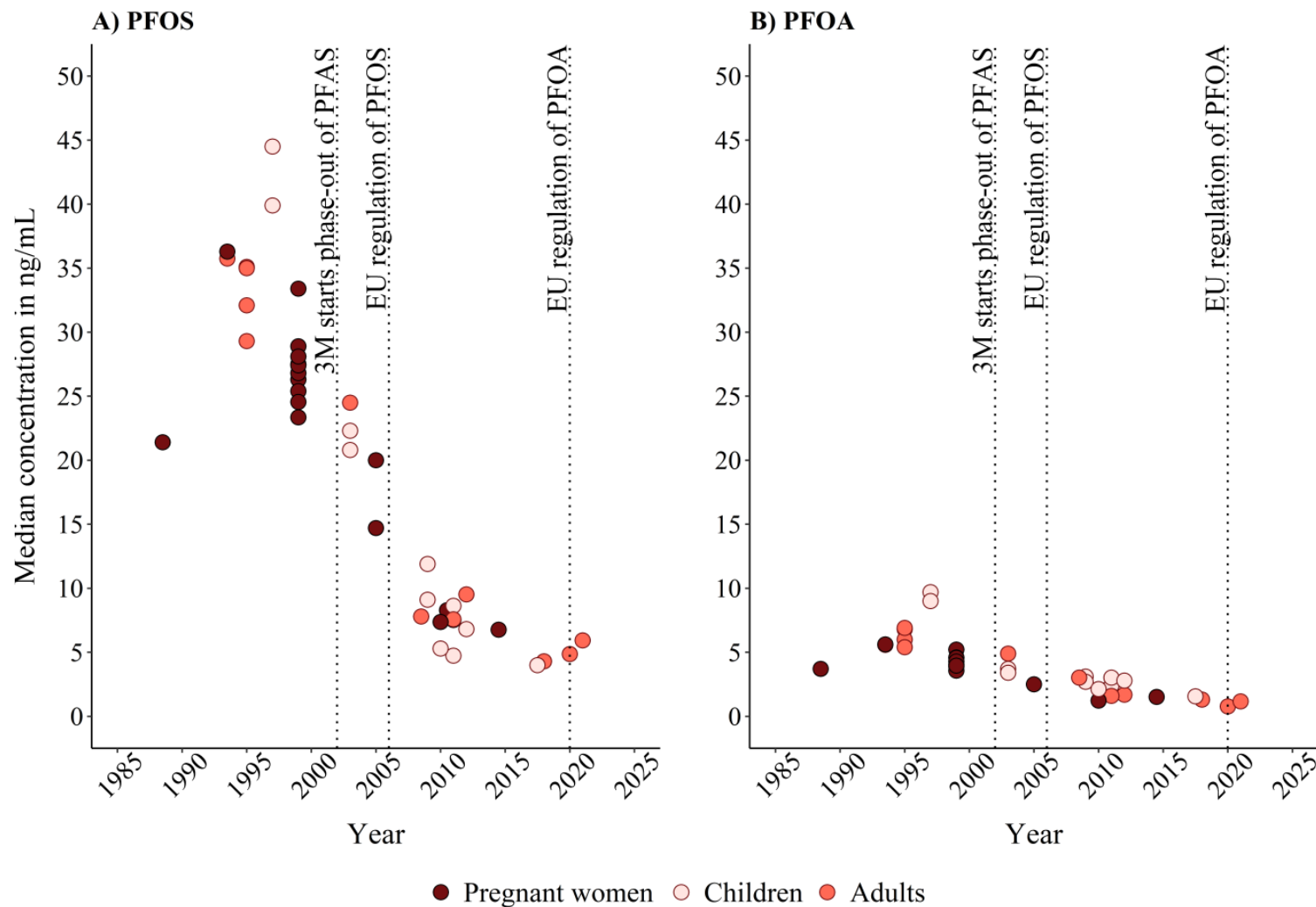
**2023:** Denmark, Germany, Norway, Sweden and the Netherlands propose restrictions of PFAS use in the EU.

**2024:** Danish government has proposed national ban of PFAS in shoes, clothing and impregnation products



# Regulation works!

Median concentration of PFOS and PFOA in blood samples from the Danish population, 1988-2021.



Hull, S.D., Deen, L., Petersen, K.U., Jensen, T.K., Hammer, P., Wils, R.S., Frankel, H. N., Ostrowski, S.R., Tøttenborg, S.S.: Time trends in per- and polyfluoroalkyl substances (PFAS) concentrations in the Danish population: A review based on published and newly analyzed data *Environmental Research* 237 (2023)

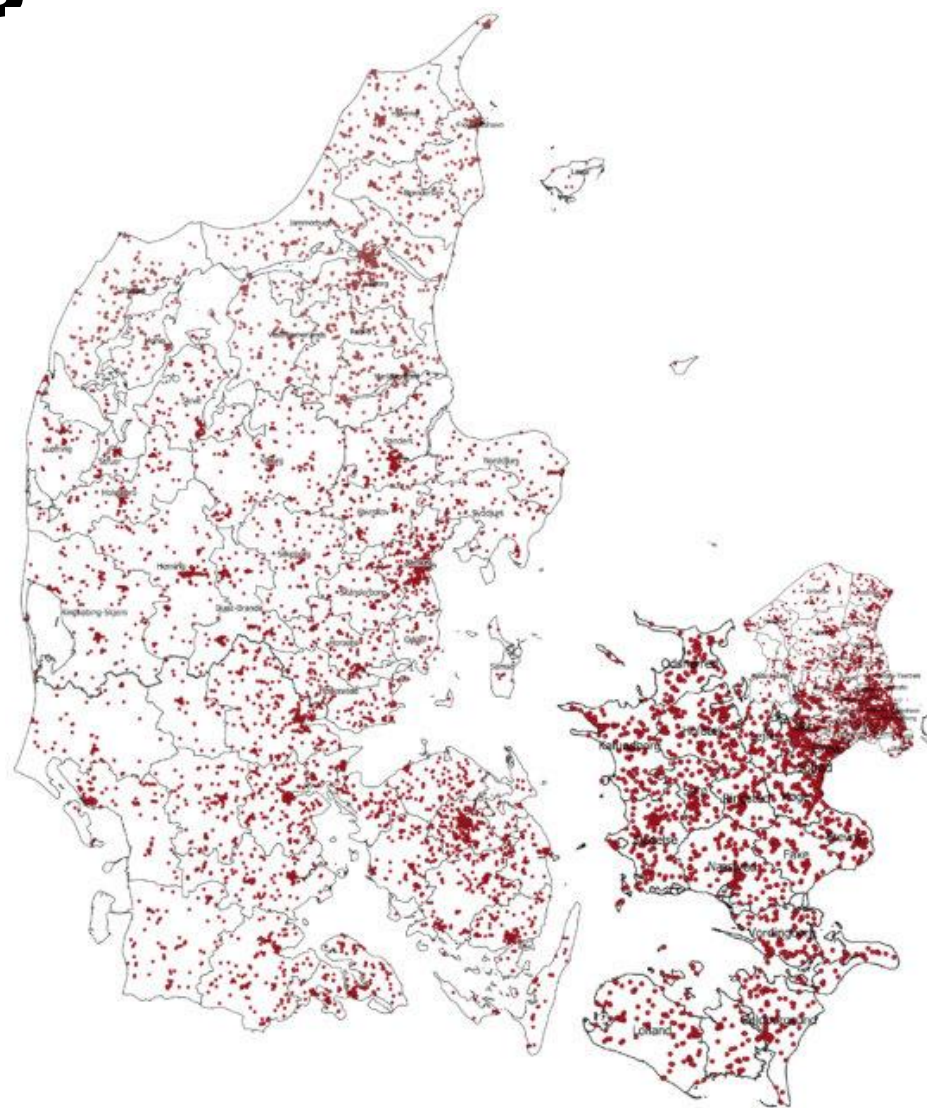


Overview:

# Potential PFAS risk sites in DK

*The regions have identified app. 15.000 sites:*

- Firefighting training sites
- Landfills
- Carpet and textile industry
- Chemical industry
- Carwash
- ....and many more





# PFAS - prioritization and investigation by the regions

- app. 15.000 potential risk sites identified
- app. 1.200 sites have been investigated (including 100 firefighting training sites)
- Prioritization strategies are being formulated
  - focus on:*
    - ✓ important pollution sources like fire fighting training areas
    - ✓ sensitive locations – e.g. childcare institutions
- Remediation – we are still at the very beginning





# PFAS - research and development

Danish regions have initiated and participate in several R&D projects – including:

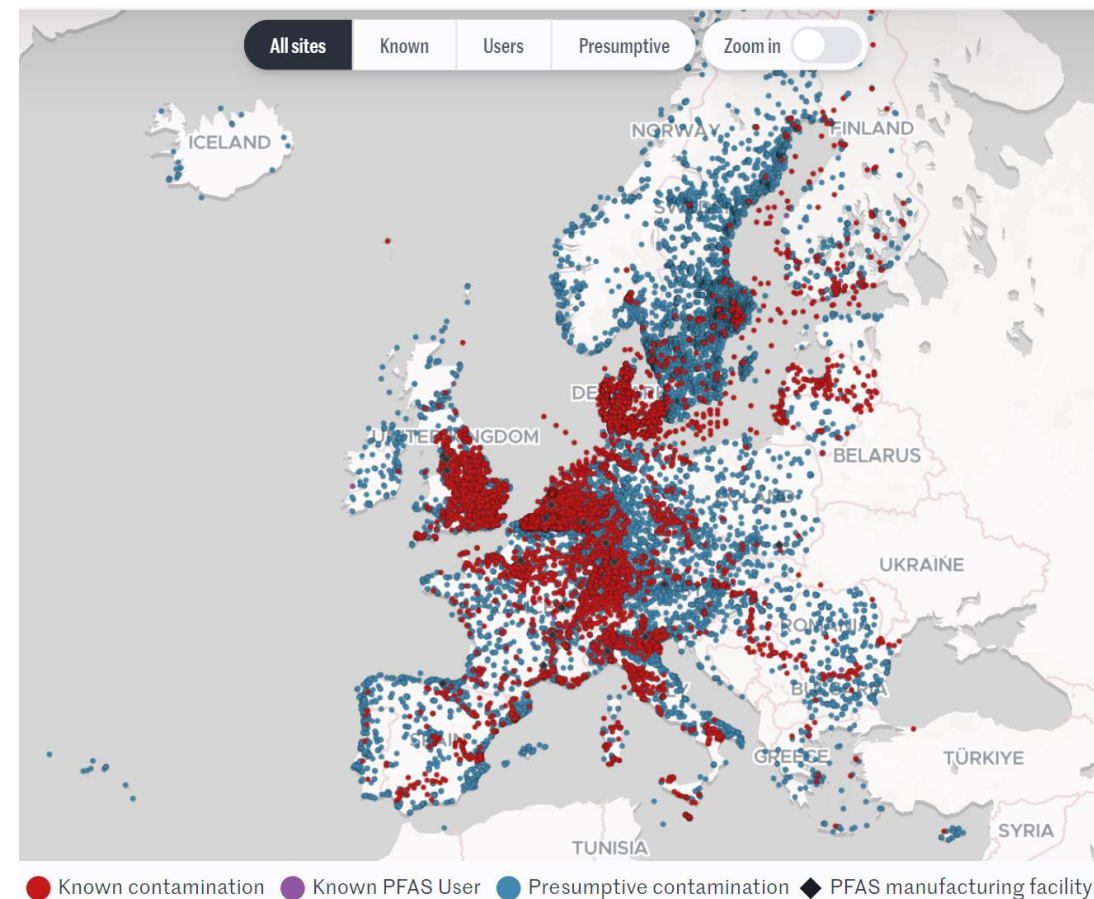
- Testcenter at Korsør firefighting school
- PFAS behaviour in the subsurface
- Risk assessment
- Remediation methods and technology
- Water treatment





# Conclusions/summary

- We have a problem – no need to panic – but action is needed
- Preventive action/phase out of PFAS – long term (national/EU)
- Overview of potential pollution sources
- Prioritisation of sources
- Remediation of sources with highest priority
- R&D in remediation and water treatment
- Monitoring (in environment and people)



[Source: The Forever Pollution Project – Journalists tracking PFAS across Europe](#)



# Adapting to the changing climate in Helsinki

Ms. Hanna Wesslin, Climate Director, City of Helsinki





# EU Green Week PARTNER EVENT

## Thank you!

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#NordicRegions  
#WaterWiseEU

