



MAWAC-ENA WORKSHOP

PARIS

November
2025



Session 2 the parisian context - Water



Greater Paris urban metropolis created in 2016

Population

7,2 M inhabitants

8 600 p./km²

Economy

1 M companies

4,2 M jobs

Administration

130 cities

11 cities alliances

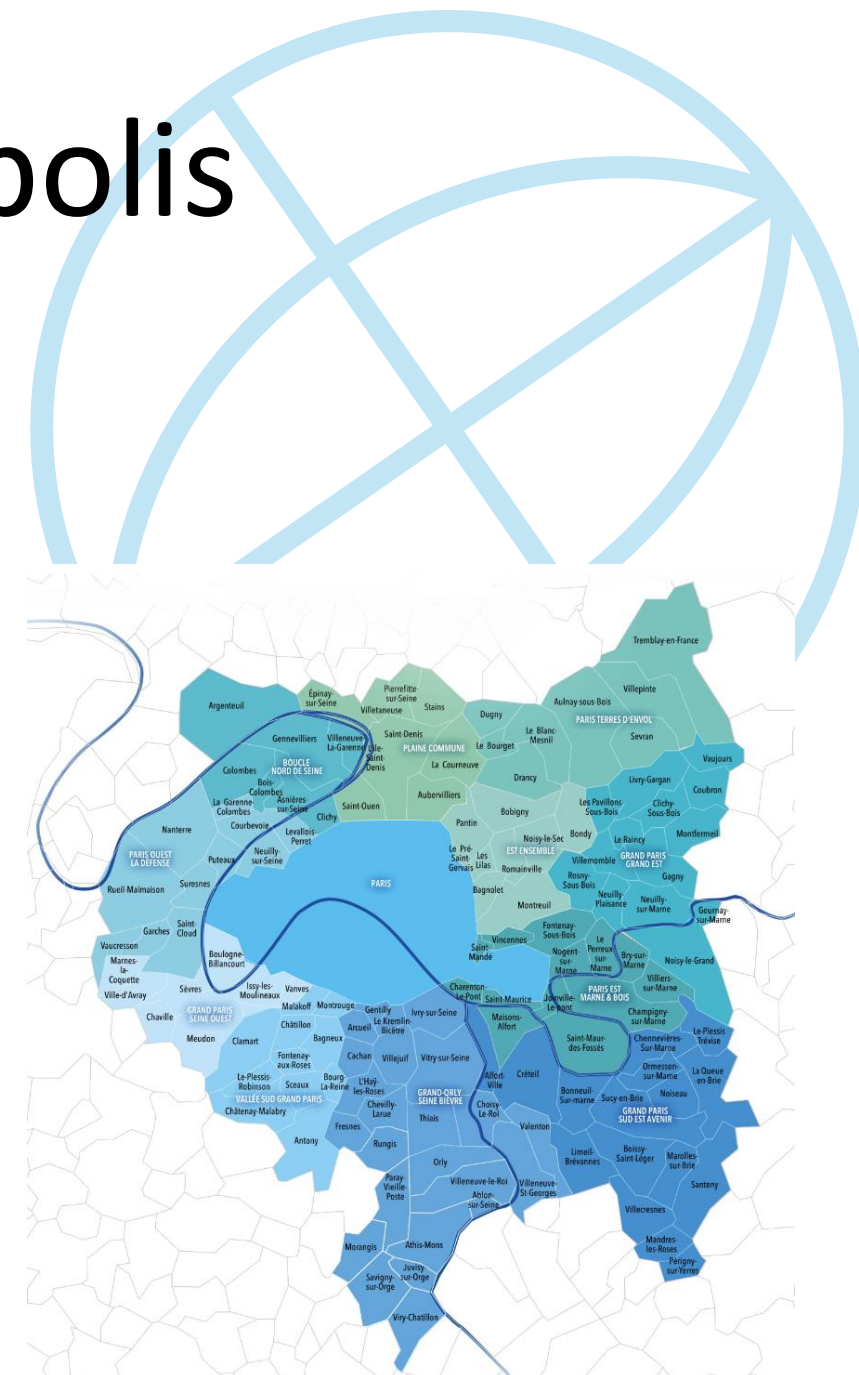
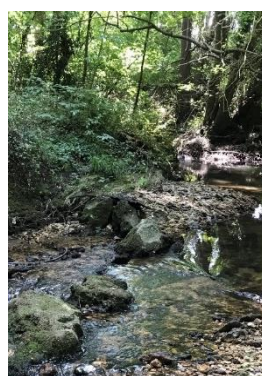
3 departments

1 metropolis

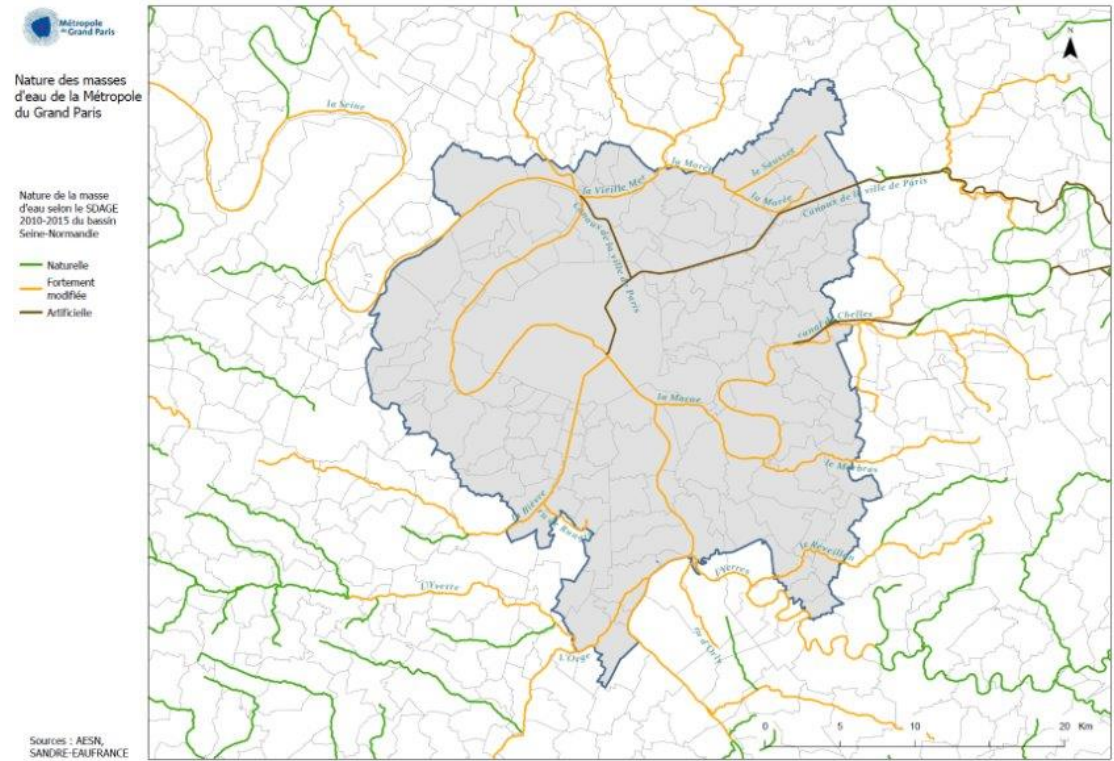
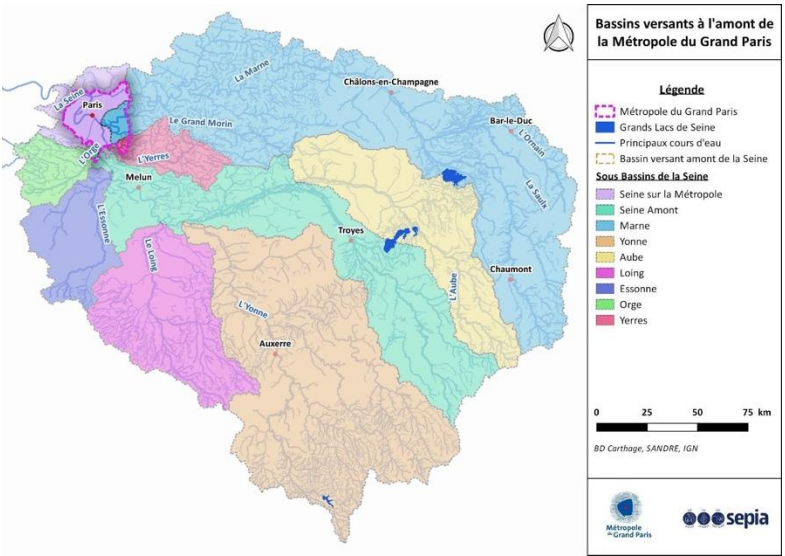
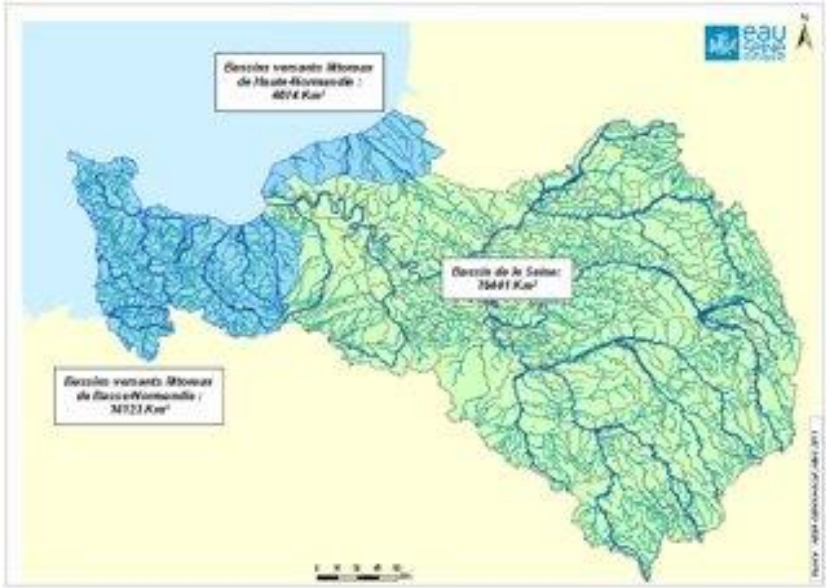
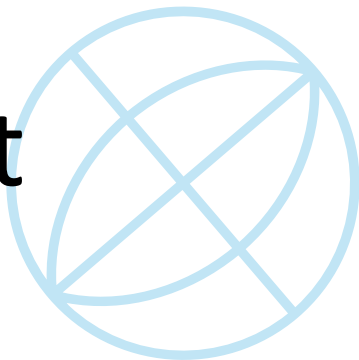
Natural resources

135 km of rivers

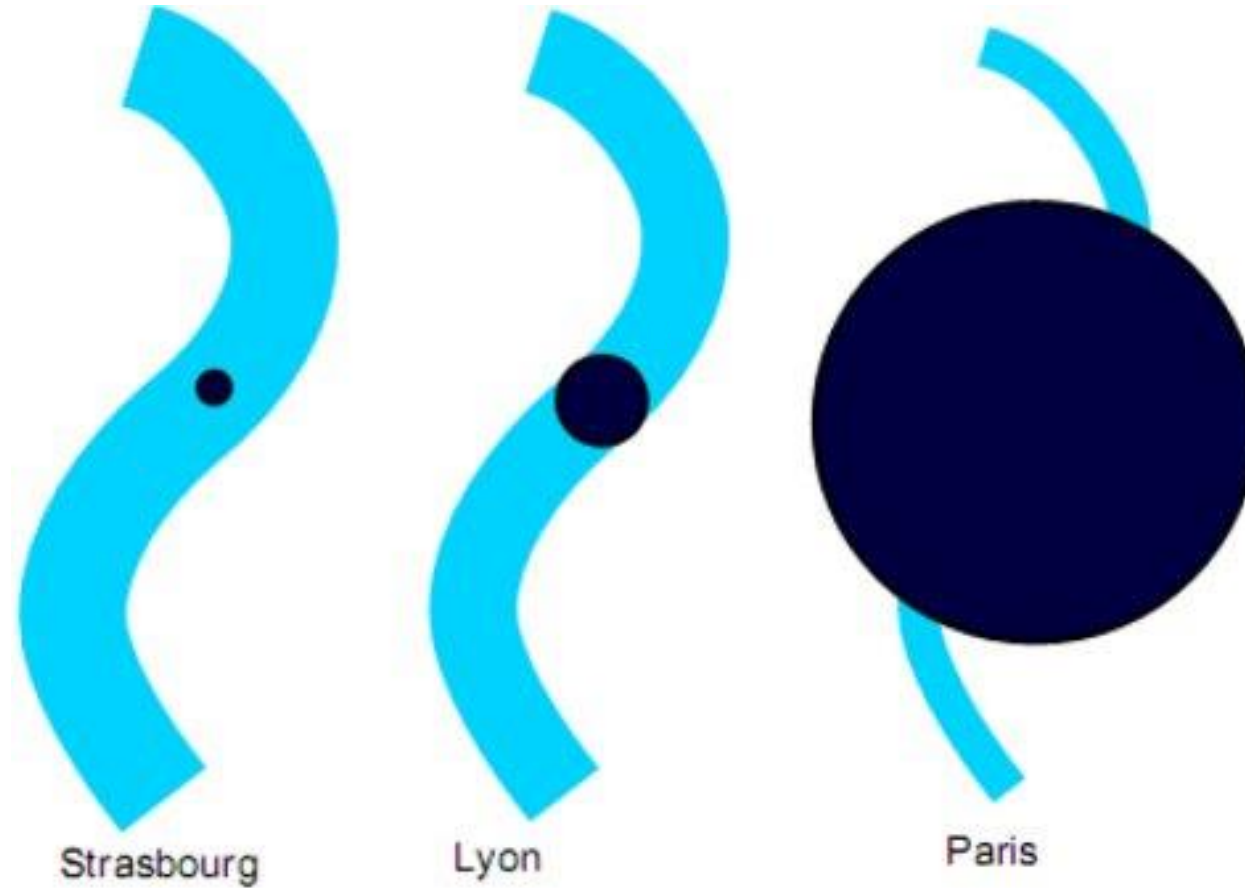
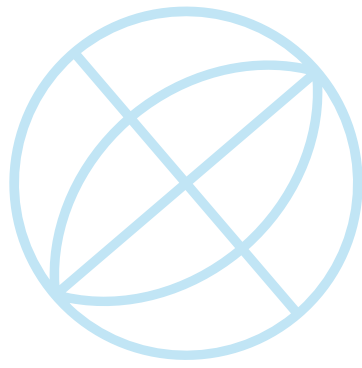
110 km² of forest



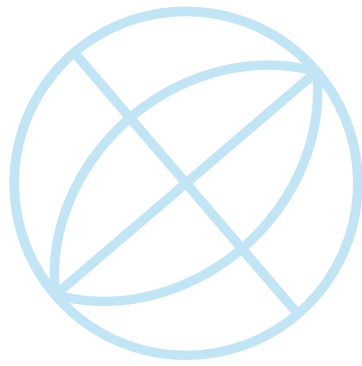
The metropolitan area/The water catchment area



The river Seine under a strong urban pressure



Water Supply



3 public entities supply 90% of the population

SEDIF (285 Mm³/year), operated by Veolia

Eau de Paris (171 Mm³/year), 900 employees

Seneo (35 Mm³/year), operated by Suez

Average production

~1,5 Mm³/day

2 plants > 300 000 m³/day (up to 650k)

Resources

50 % Seine

20 % groundwater

30% other rivers

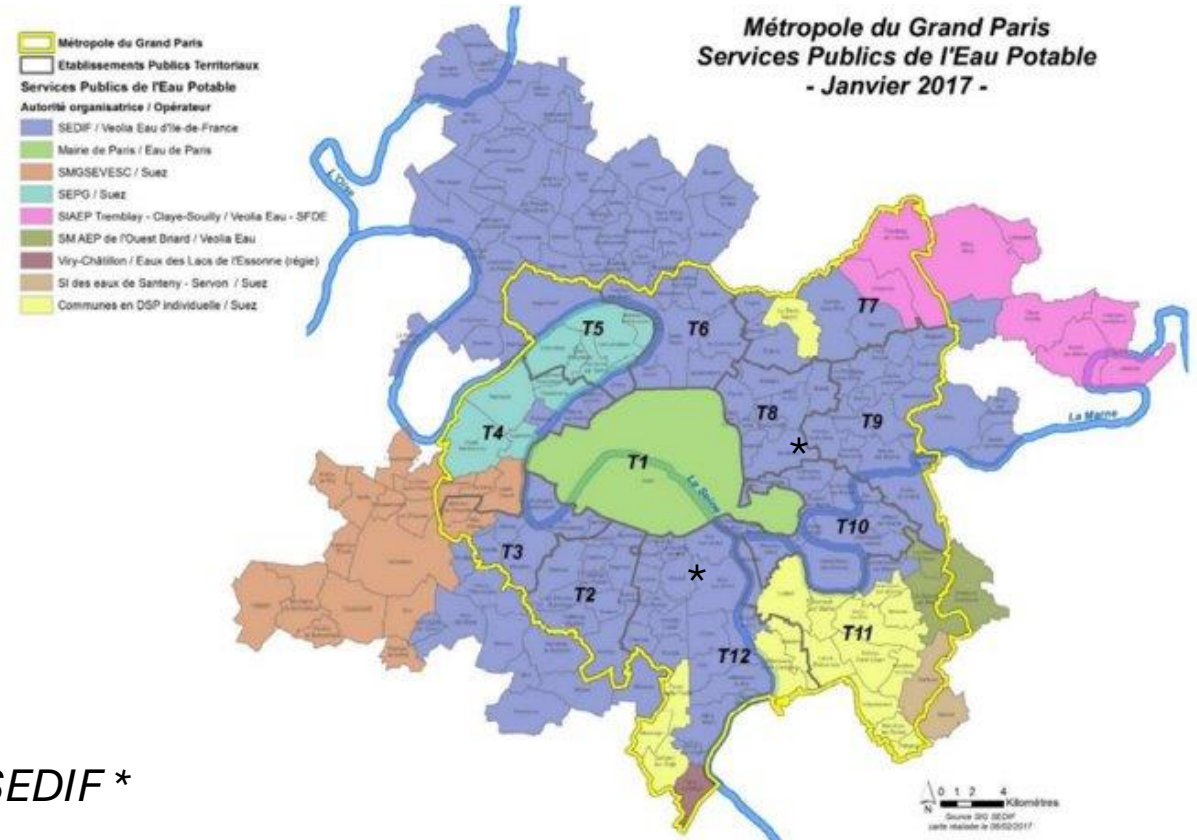
Distribution

Storage ~ 2 Mm³

> 13 000 km of pipes

Efficiency >90%

*Some recent changes : some territorial governments quit SEDIF **



Source : Sedif

Degradation of water quality due to increased water temperature
Sharing water in times of scarcity

Sewers and sewers systems

1 public company for treatment: SIAAP

Internally operated (1800 employees)

Large conurbation (9,2 million users)

Average production

~2,4 Mm³/day

6 plants (up to 1,5 Mm³/day)

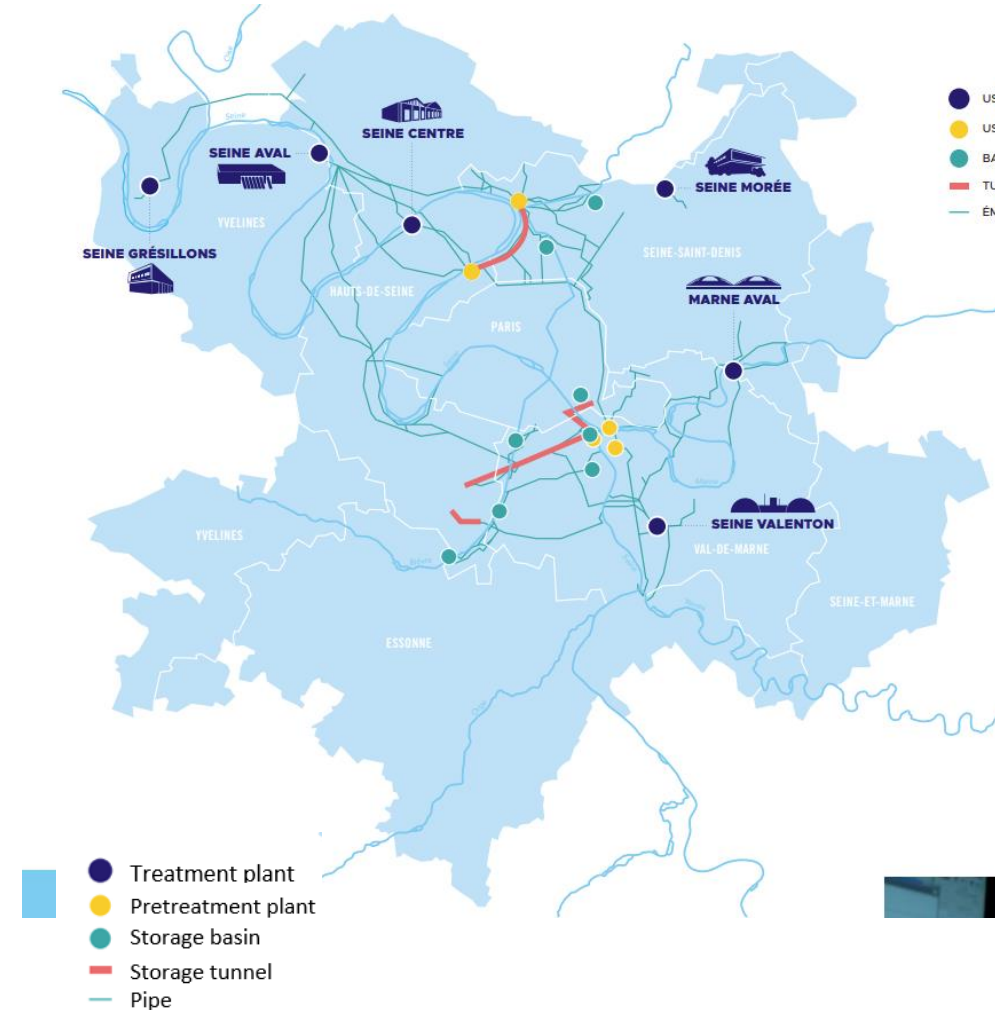
Local collection : cities alliances

And SIAAP

> 400 km of pipes

0,9 Mm³ for stormwater storage
(tunnel and basins)

Networks saturation during heavy rain
Decrease in self-purification and dilution
properties of the environment



Water resource and floods

Protections

> 100 km dikes

Inter-seasonal Storage : 830 Mm^3

Temporary storage : 10 M^3 in La Bassée

Flood expansion area : increasing capacity

Floods

Main natural hazard

Countrywide consequences

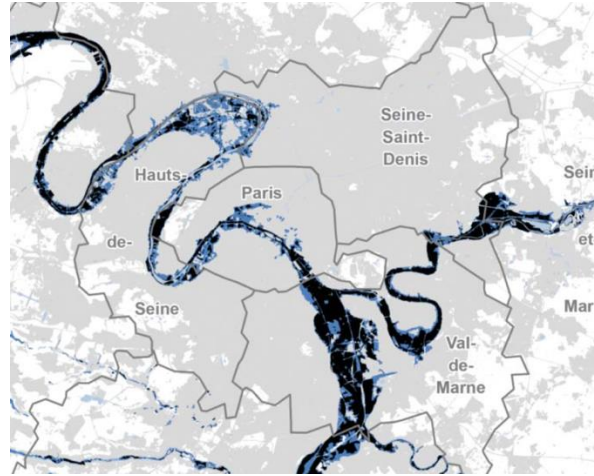
100-year flood : € 30 Md (OCDE)

Drought

Seine controlled downstream by locks

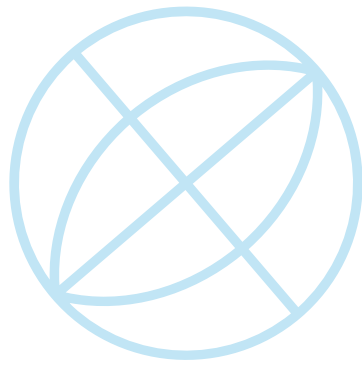
Support from lakes (2022):

- 55% of the Seine flow in Paris
- 70% of the flow of tributaries



Increased flooding (high uncertainties)
20 % decrease in natural low flows by 2050
Risk of not filling reservoir lakes for low flows support

What climate futur for the metropolis ?

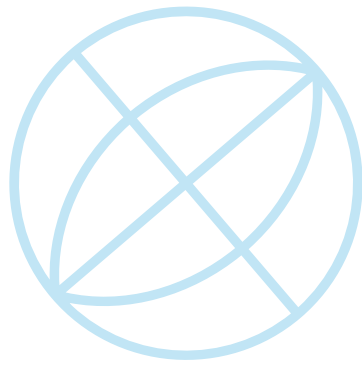


+2.1°C average by 2050	+2.5°C average max summer temperatures in summer by 2050
More frequent and long heat waves heat islands phenomenon increase	x2 to x3 number of days with the maximum temperature of 30°C (86°F) until 2050

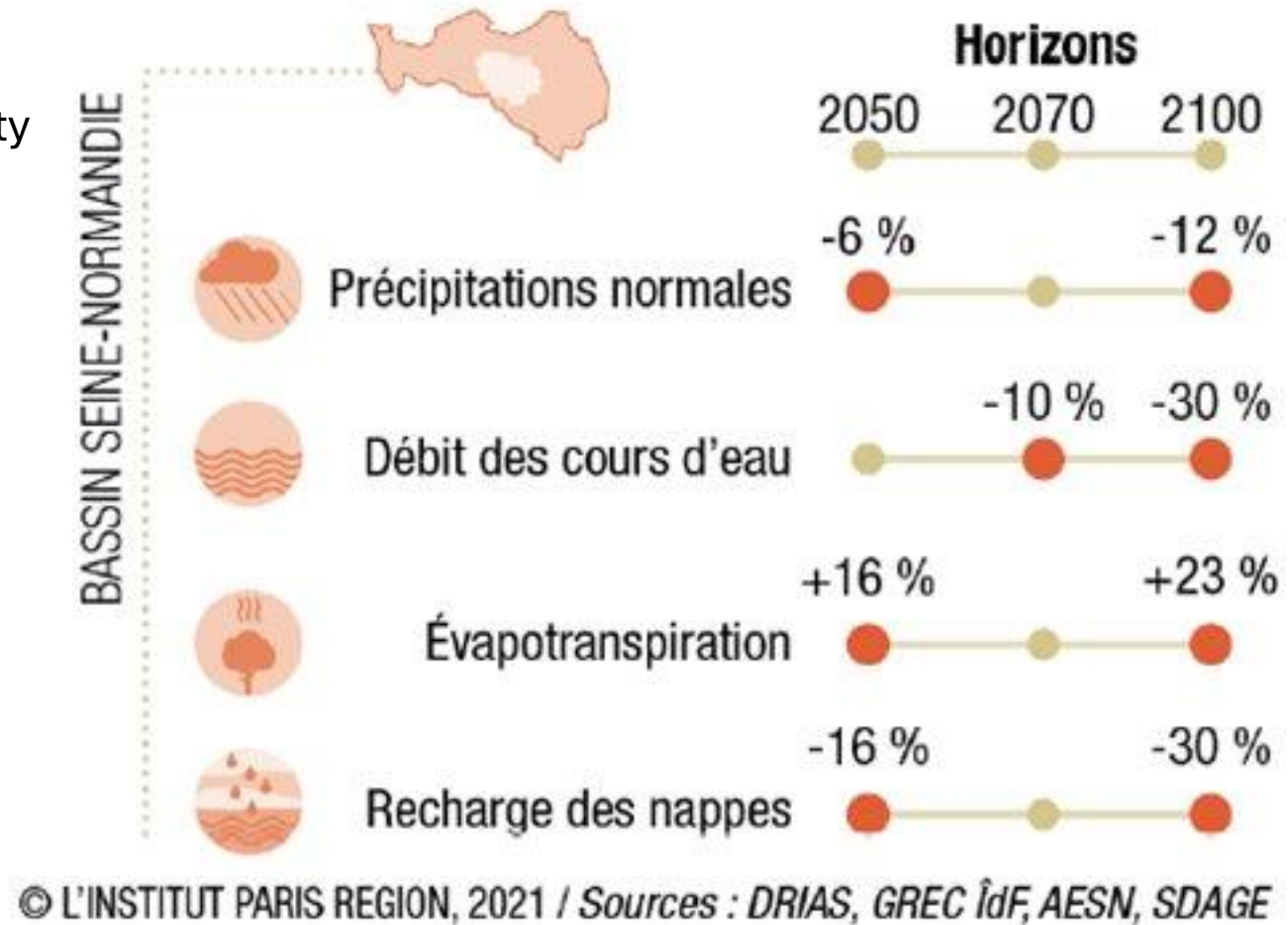
+10% average per year increase in precipitation	+10 à 20% in winter by 2050
+20 à 40% increase in days of strong rain by 2050	+10 à 20% increase of dry days by 2030

Now the Ile de France région recognized for fire risk
x2 to x3 the very high risk for fire by 2050

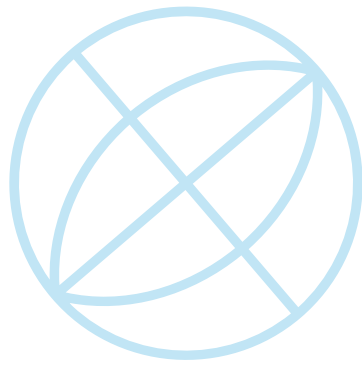
What climate for the futur ?



- Temperature increase : +18% mortality risk
- Water resource quantity tensions
- Water quality decrease
- Decrease in natural environment and ecosystemic services



Our priorities



Rethink the Metropole land planning to create a more pleasant and sustainable place for its inhabitants

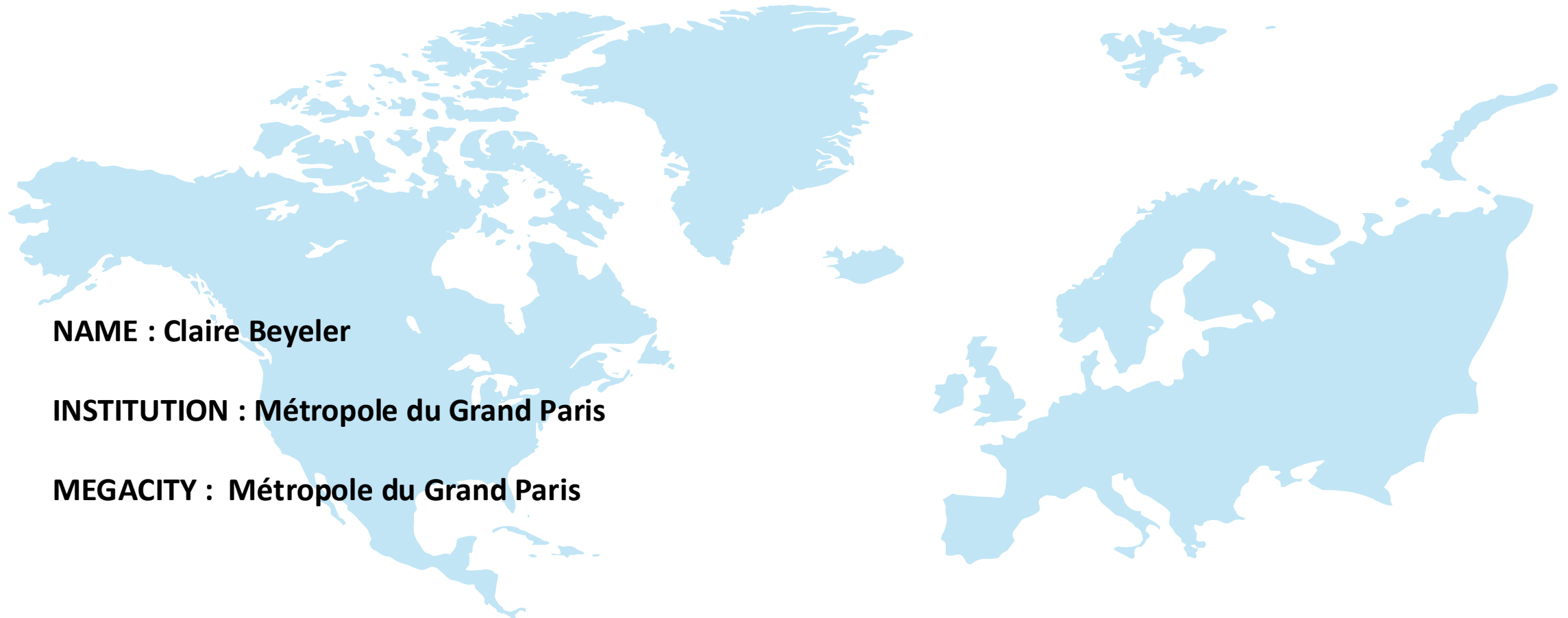


Protect and restore natural metropolitan environment to increase resiliency and guarantee ecosystemic services



Guarantee the continuity of collective/public services and mobilise the stake holders to address a crisis

Thank you for your attention



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Water Security Management
Assessment, Research & Technology

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