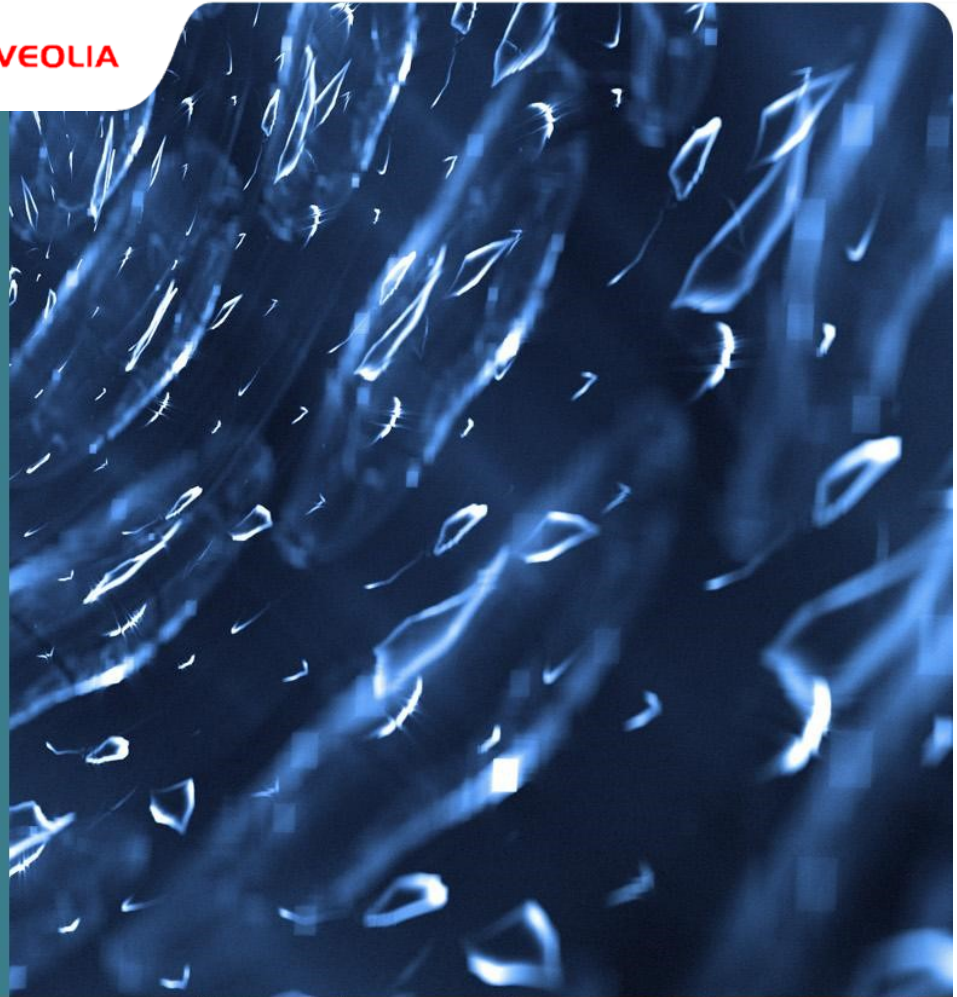


GLOBAL AND REGIONAL MEGATRENDS

WATER SCARCITY

May 2024
Marina Arnaldos, PhD, MBA



Some Facts

2 to 3 billion people globally experience water shortages annually

Urban population facing water scarcity is projected to double by 2050, reaching 1.7 to 2.4 billion people

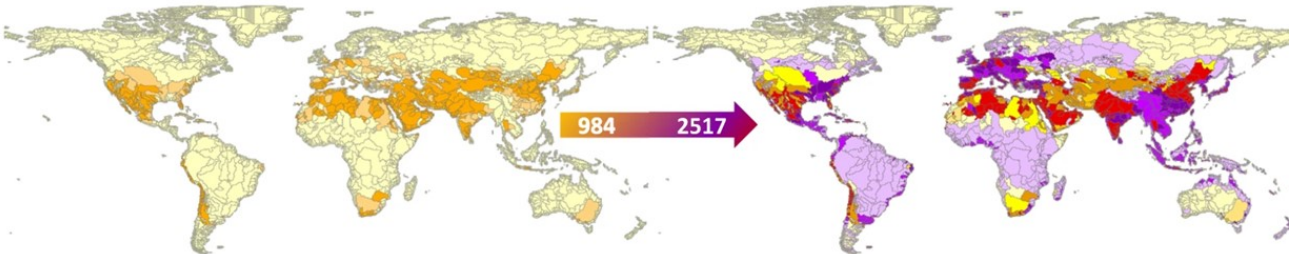
26% of the global population lacks safe drinking water, and 46% do not have access to safely managed sanitation



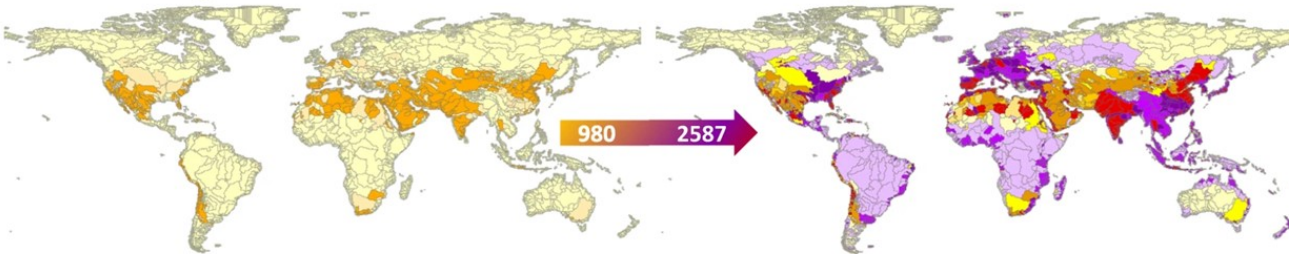
Water Scarcity (WS)

Clean Water Scarcity (CWS)

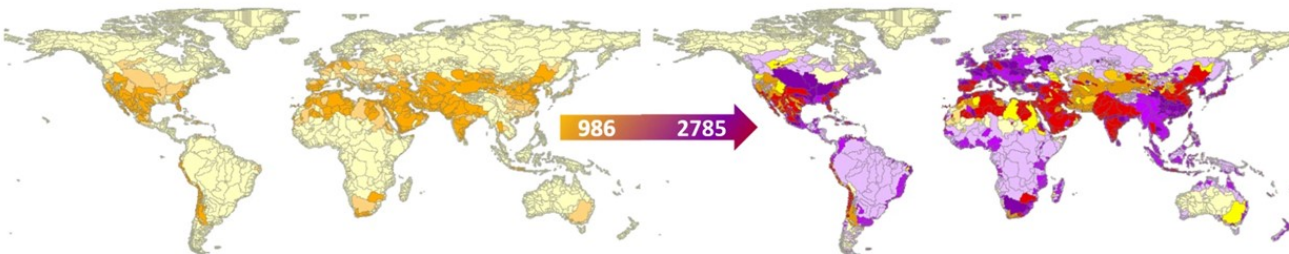
2010



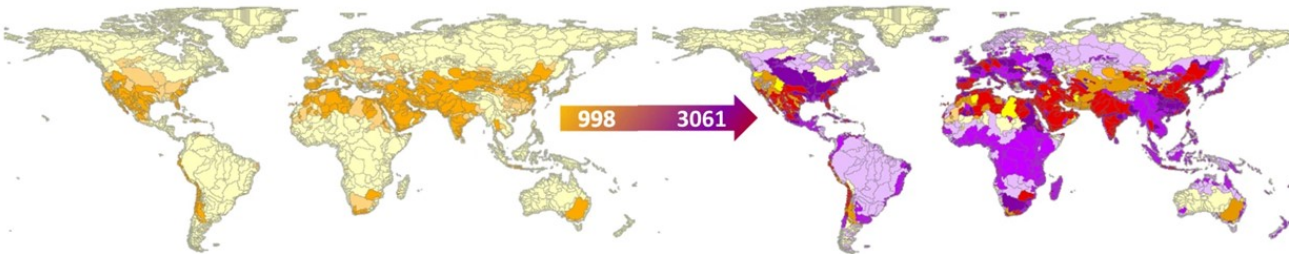
2050 SSP1-RCP2p6



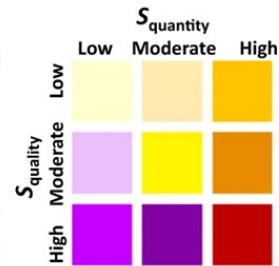
2050 SSP2-RCP2p6



2050 SSP5-RCP8p5



Number of hotspots:



Key Sectors Impacted

Agriculture:

Impact extends to food security, influencing both local markets and global food prices.

Water-intensive industries:

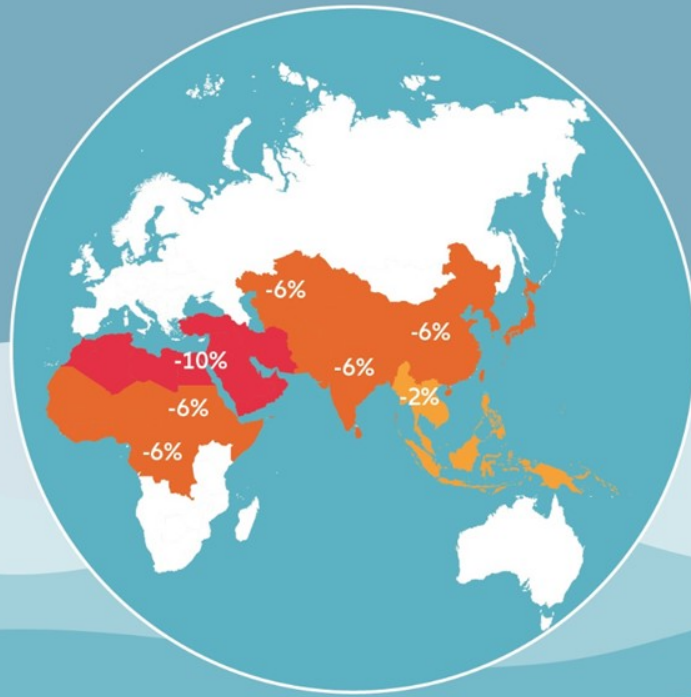
Potential disruptions in manufacturing processes can lead to decreased production efficiency.

Municipal Water Systems:

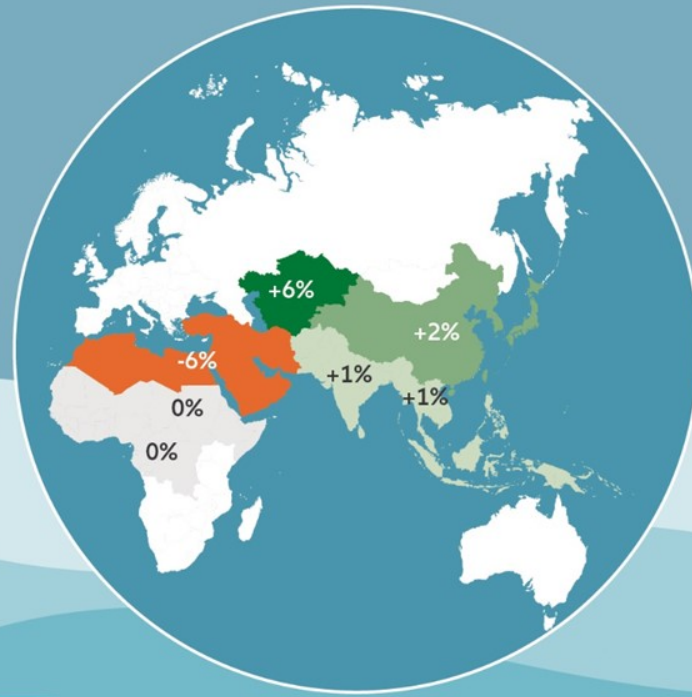
Rising costs for water treatment and infrastructure maintenance.



Estimated change in 2050 GDP due to water scarcity

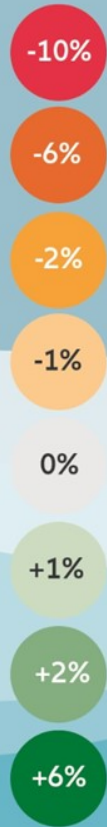


Business As Usual



Efficient Water Policies

Change in GDP:



Tipping Points

Unsustainable Water Withdrawal:

Economic implications include increased competition for water resources.

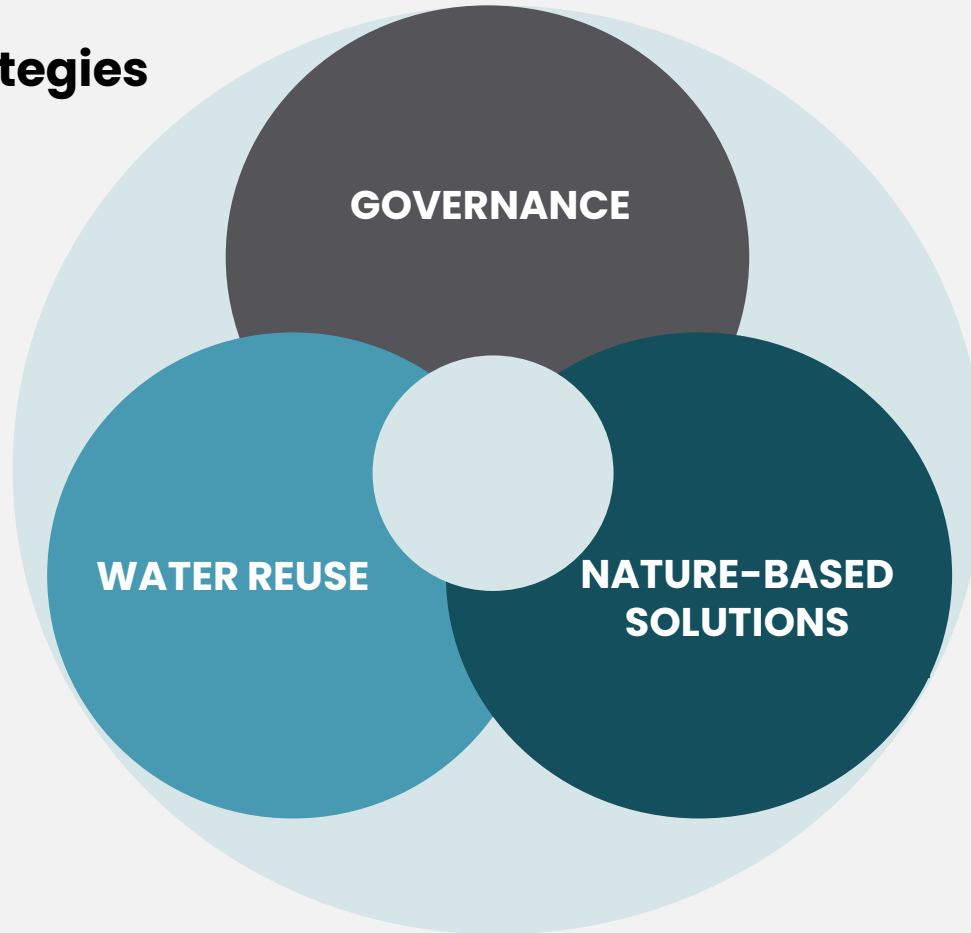
Aging and Failing Infrastructure:

Urgent need for investments in infrastructure to prevent widespread water service disruptions.



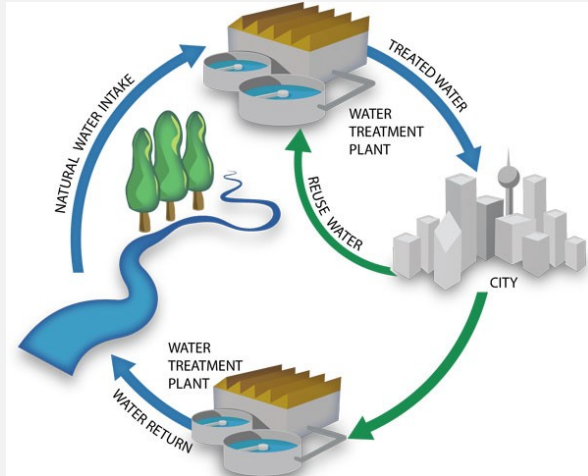
@MarinaArnalDOS

Mitigation and Adaptation Strategies



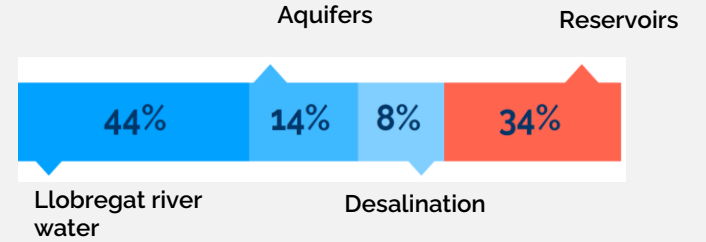
Focus on Water Reuse

What is Water Reuse? We provide an additional treatment to wastewater so it can be used again (and again, and again).

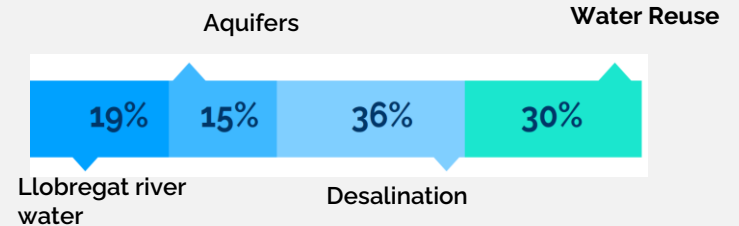


Barcelona's New Paradigm (severe drought)

Normal Year



Current Situation



Nature Based Solutions



**Watershed
ecological
management**



**Urban drainage
& floods
protection with
wetlands, ponds
& floodparks**



**Resources
preservation
through aquifer
recharge &
natural storage**



**Ecosystems
protection with
vegetated
buffer at WWTP
outlet**



**Industrial
waste water
management**



**River &
coastal
renaturation**



Moving Forward

Improvements in **water** governance have been key in solving previous world crises
Together, we will make it! But we need to act NOW

Public-Private partnerships at the heart of the solutions in the **new water paradigm**
Key to enabling fast deployment of financing, innovation and capacity building



THANK YOU!