



Financing, private sector participation, and stakeholder engagement

Water as a sustainable resource

Partnerships for Building Water Resilience

10 August 2022 | 9:00 a.m. - 10:30 a.m. (GMT+08)

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1 in 4

large cities are already facing water stress

Global water consumption has

doubled every 20 years.

That's twice the rate of population growth.¹¹

+55%

Water demand increase by 2050

Lost water through leaks or unbilled usage in 2013:

30%

Average American city

~53%

New Delhi

38%

Most developing nations

Many Pacific Island nations are

less than 5m above sea level

thousands of inhabitants are at risk

By 2030, If efficiency does not improve, worldwide water demand will outstrip supply by¹⁰

40%

It is estimated that between

1.6 and 2.4 billion

people live in river basins that experience water scarcity.⁴

3.2 million m³

The amount of water the 100 largest cities in the world transfer approximately 5,700km through artificial channels per day.²



Blue-Green Abuja: City Water Resilience Approach

Inclusive and transparent

Brings together different perspectives from water and city stakeholders and encourages collective action

Systems-based

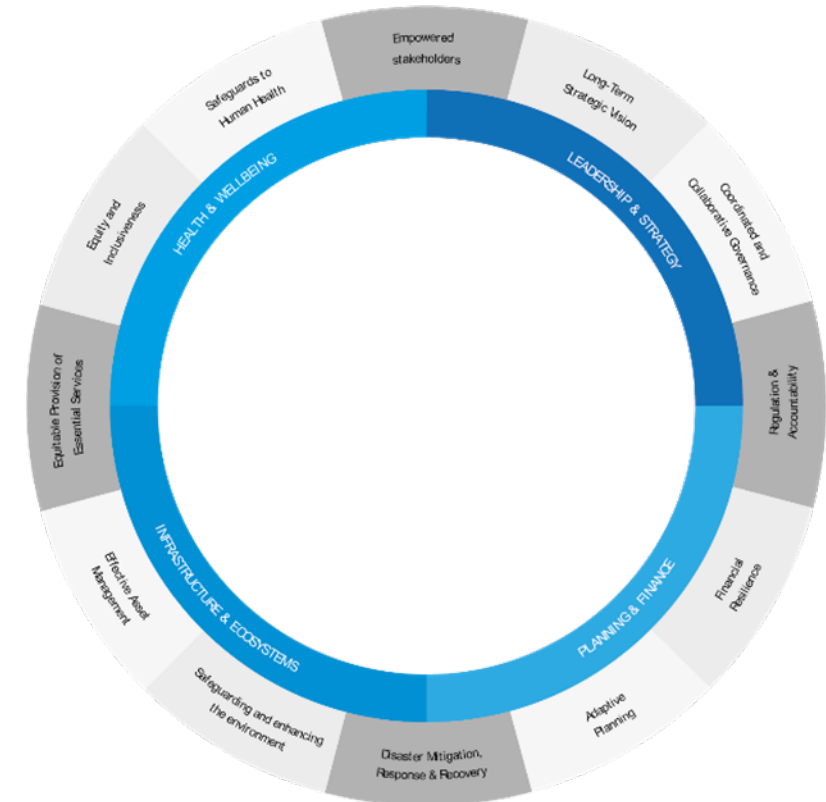
Takes account of inter-dependencies with other systems

Holistic

Includes leadership and strategy, planning and finance, infrastructure and ecosystems and personal, household and community resilience

Action-oriented

Encourages the ownership, development and progression of actions to improve water resilience

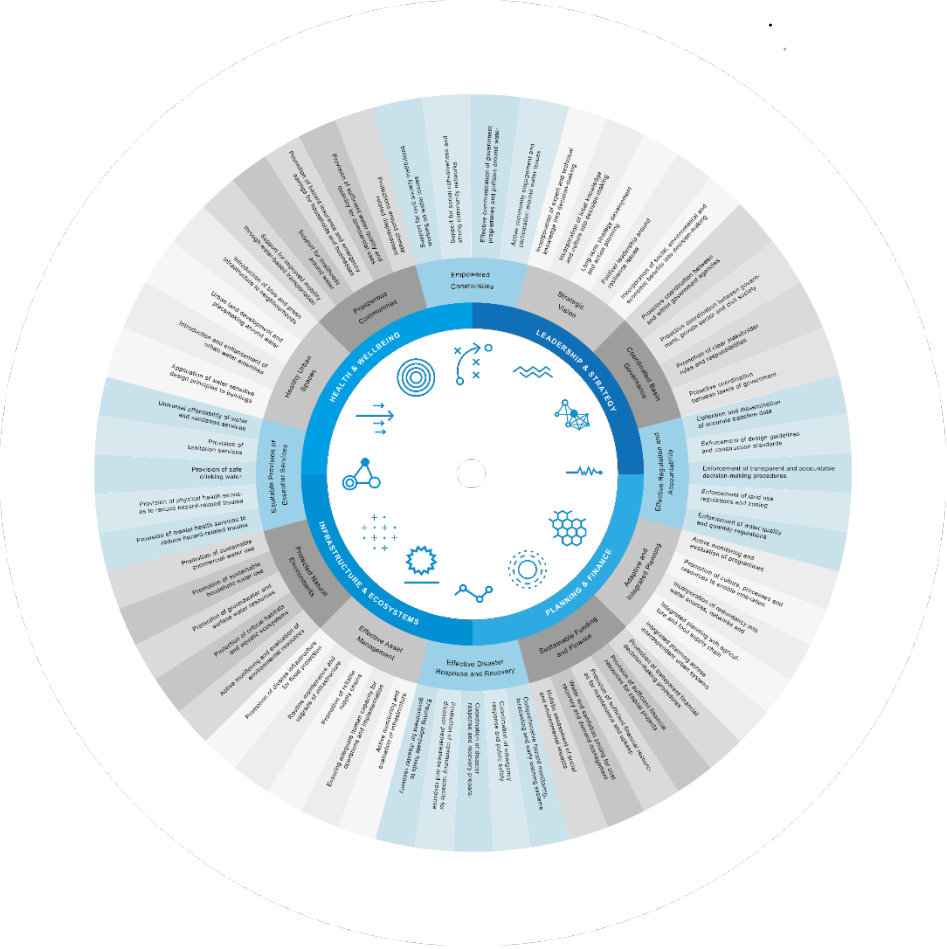


City Water Resilience Approach – track record

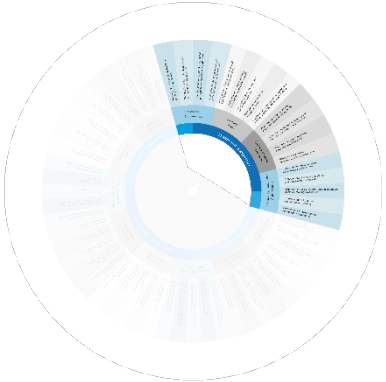


City Water Resilience Framework

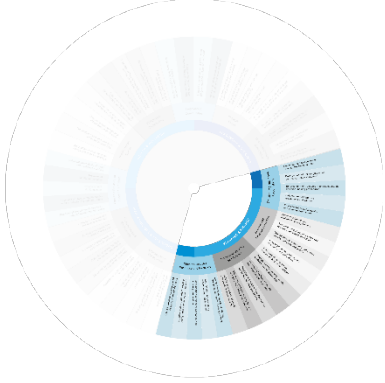
THE RESILIENCE SHIFT



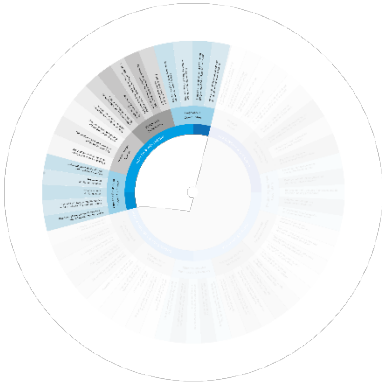
Leadership & Strategy



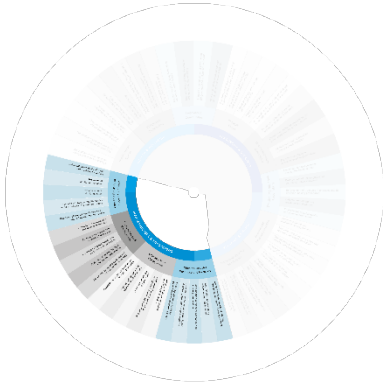
Planning & Finance



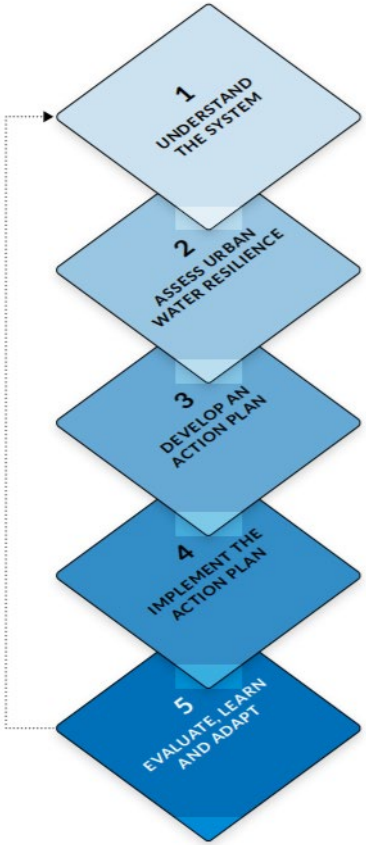
Infrastructure & Ecosystems



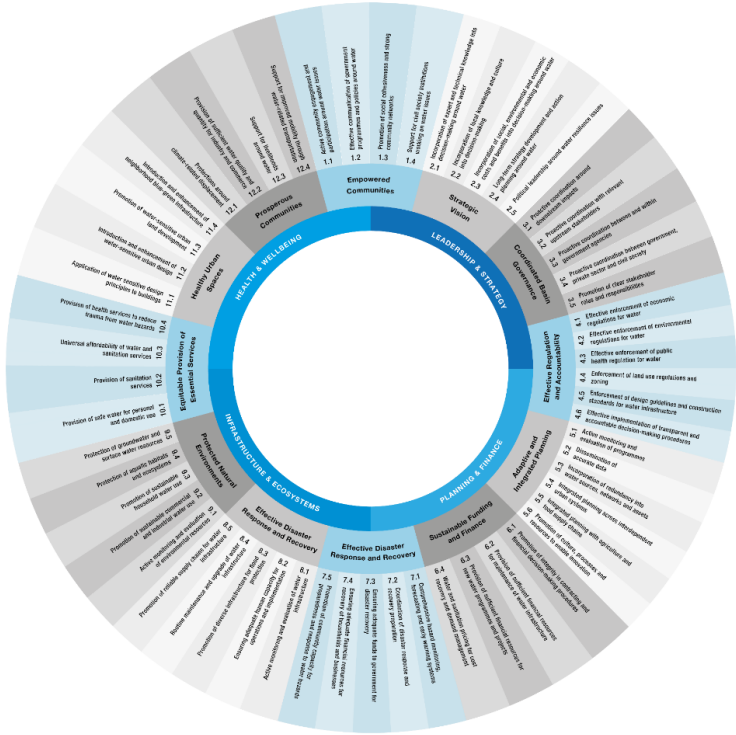
Health & Wellbeing



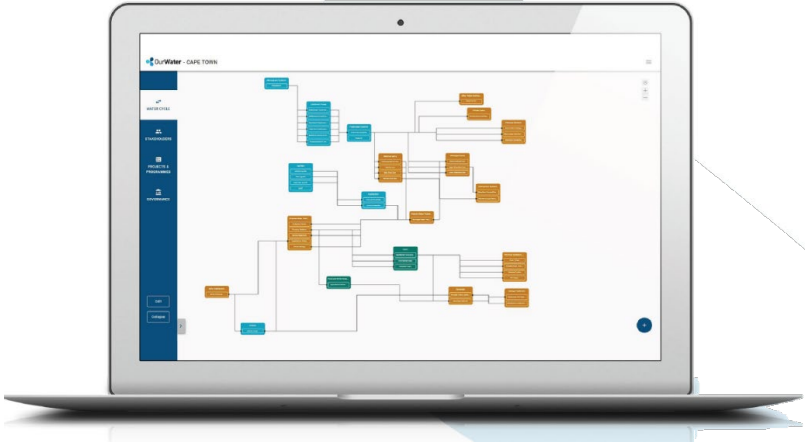
City Water Resilience Approach



City Water Resilience Approach



City Water Resilience Framework



OurWater Governance Tool



▲ Amman flood

Amman

Water challenge: located away from sources of water and regularly suffers drought. Experiences unusually heavy rain causing flash floods in low-lying areas of the city.

Jordan's water scarcity is largely seen as the foremost restriction on the country's sustainable economic growth, especially in consideration of the rapid population growth of approximately 3.22% a year.



LOCATION: Amman,
Jordan
POPULATION: 4 million



▲ Hull flood

Hull

Water challenge: 90% of Hull lies below the high-tide line. Consequently, the city is highly vulnerable to sea-level rise and has recently experienced extensive flooding. A recent study on the well-being benefits of a 'blue-green approach' to food alleviation concluded that improved access to, and availability of, blue and green infrastructure could reduce NHS spending on mental health medication and therapies by between £12m and £61m in Hull over a 100 year period.²³



LOCATION: Hull, UK
POPULATION:
323,000



▲ Mexico City



LOCATION: Mexico City, Mexico
POPULATION: 21.3 million

Mexico City

Water challenge: Historically a lake, Mexico City is prone to flooding. The rapidly growing city is also reliant on depleted underground aquifers for their water supply.

Large volumes of water are drawn from neighbouring states and virtually all its wastewater is discharged through an expensive drainage system into rivers. These rivers flow through arable land which in turn provides the city with its food.



▲ Miami flood

Miami

Water challenge: Its coastal location makes the city vulnerable to increasingly frequent tidal floods. Sea level rise is also a major threat, especially in conjunction with the high groundwater table and complex canal system.

A report by the National Wildlife Federation²⁴ estimated that Miami stands to lose US\$3.5 trillion in financial assets from coastal flooding by 2070. This makes it the most vulnerable city in the world, beyond even Guangzhou and New York, and a prime candidate for coastal adaptation measures.



LOCATION: Miami, USA
POPULATION: 5.9 million



▲ Theewaterskloof dam



LOCATION: Cape Town, South Africa

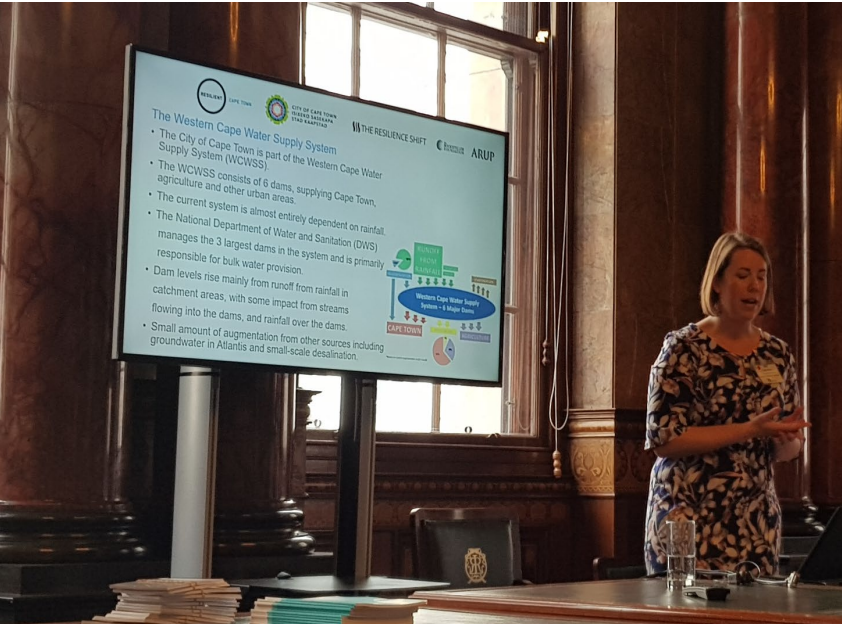
POPULATION: 3.7 million

Cape Town

Water challenge: Severe drought conditions, especially due to low rainfall since 2015. ‘Day Zero’, when household taps will run dry from lack of resources, was at one time predicted to occur on April 12th 2018 but was pushed back to 2019 as residents used less than 50 litres a day.

The city has previously been lauded for its environmental and sustainability practices and, in 2008, was voted one of 10 cities in the world most likely to become a global sustainability centre by 2020.

Peer to Peer sharing and learning: Global Knowledge Exchange



Asia Water Forum 2022

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