

CITY WATER RESILIENCE APPROACH (CWRA)



Principles of the 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

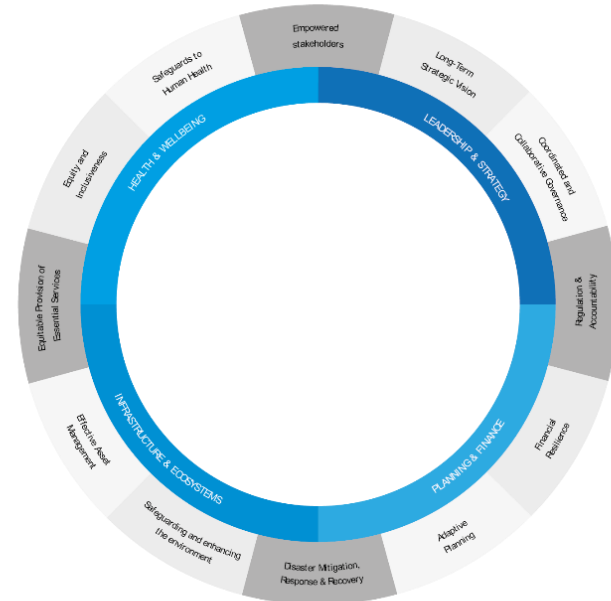
Includes leadership and strategy, planning and finance, infrastructure and ecosystems and personal, household and community resilience

Action-oriented

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

Scalable and global

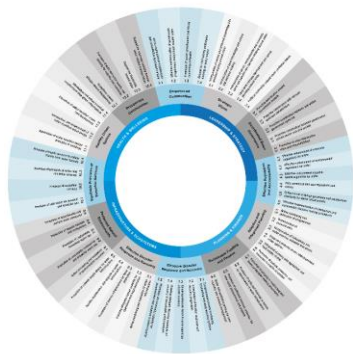
Scalable from towns through to mega cities and applicable to a global context



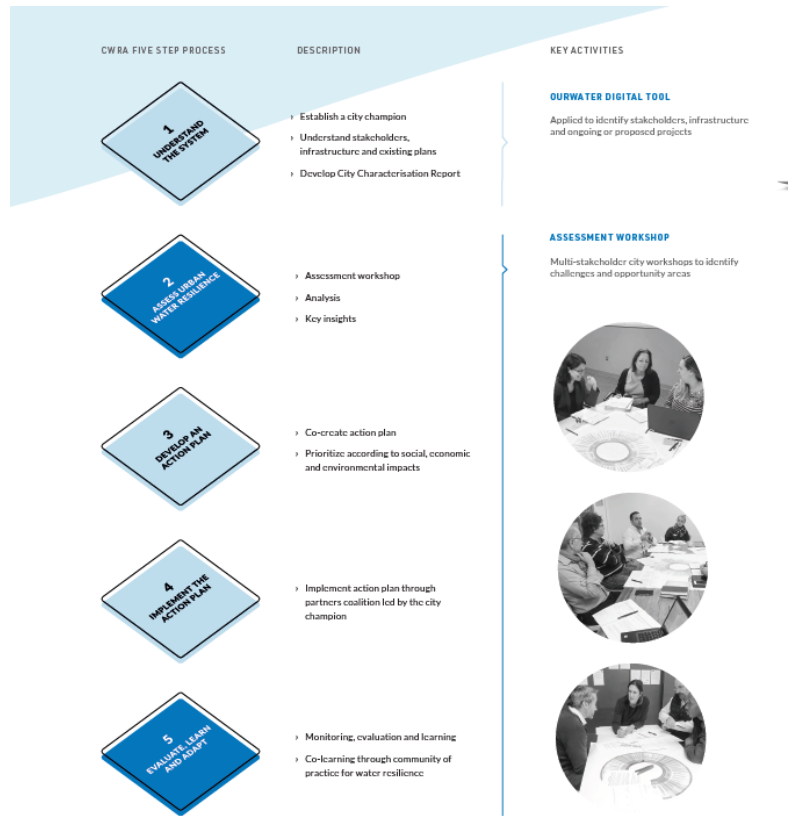
CWRA: Combination of different resources/tools



OurWater digital tool

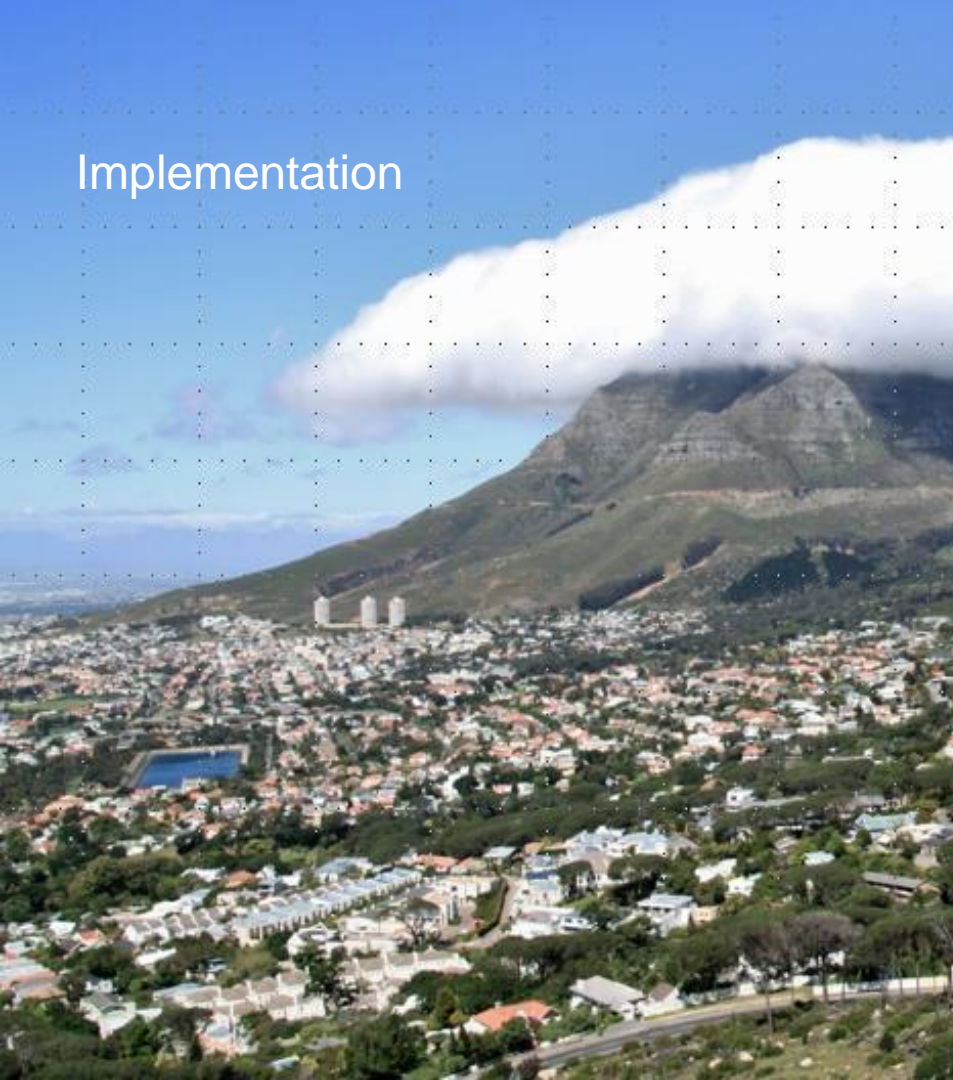


City Water Resilience Framework (CWRf)

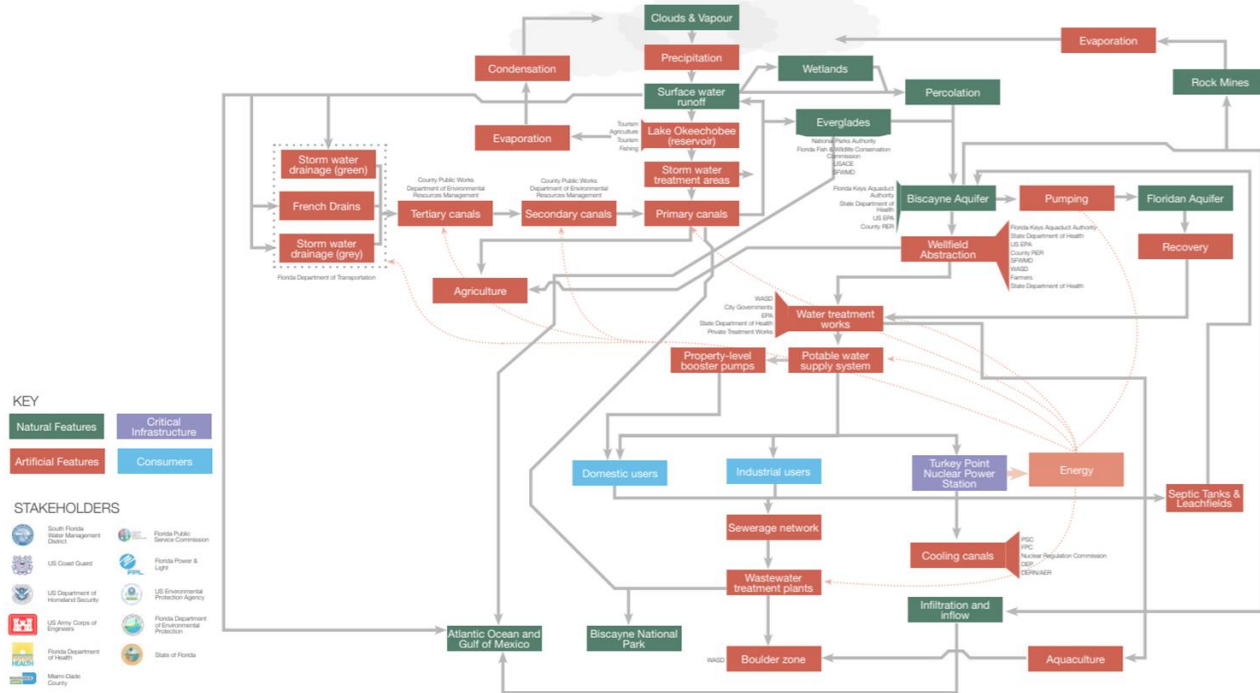
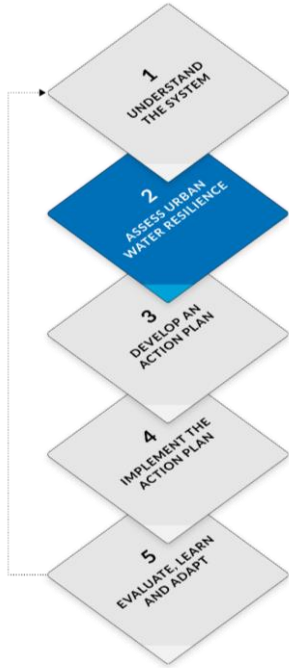


Five step approach

Implementation

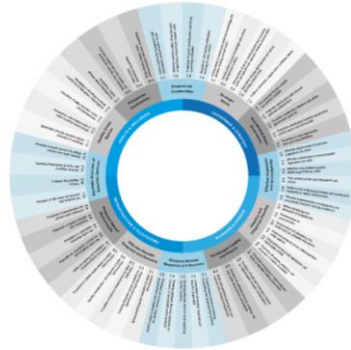
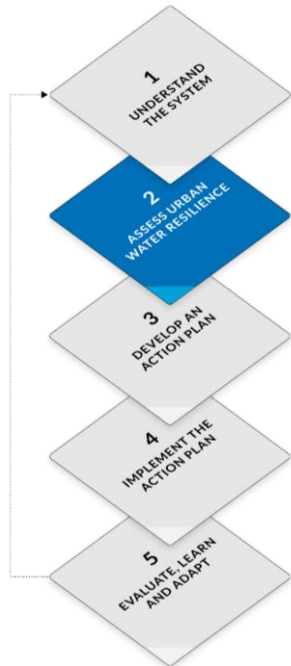


Step 1: Understand the system



OurWater Governance Tool

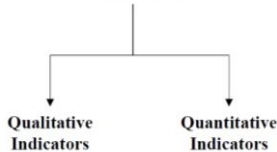
Step 2: Assess urban water resilience



4 Dimensions
 Leadership & Strategy
 Planning & Finance
 Infrastructure & Ecosystems
 Health & Wellbeing

12 Goals

57 Sub-Goals



sub-goal
indicator #

indicator name

guiding criteria

12 CITY WATER RESILIENCE FRAMEWORK

DIMENSION	GOAL	SUBGOAL
Infrastructure & Ecosystems	6.1	6.1.1
Leadership & Strategy	8	8.1
Planning & Finance	9	9.1
Health & Wellbeing	10	10.1
Infrastructure & Ecosystems	11	11.1
Leadership & Strategy	12	12.1
Planning & Finance	13	13.1
Health & Wellbeing	14	14.1

12.2

DIMENSION: Leadership & Strategy
GOAL: 12. Empowered Communities
SUBGOAL: 12.2 Effective communication of government programmes and policies around water

INDICATOR:
 12.2.1 population has sustainable access to safe drinking water.

GUIDING CRITERIA / GUIDING QUESTIONS:
 Access to drinking water is defined based on the five normative criteria of the HRWS:

- Availability:** The water supply for each person must be sufficient and continuous for personal and domestic uses.
Key concepts: acceptable quantity for domestic uses; continuity
- Physical Accessibility:** Water facilities must be physically accessible for everyone within, or in the immediate vicinity of, each household, health or educational institution, public institutions and places, and workplaces.
Key concepts: Distance from the dwelling to the water point; time spent on hauling water; source-to-person ratio; safe and convenient path for all; easy-to-use and adapted technology, etc.
- Quality / Safety:** Water must be of such a quality that it does not pose a threat to human health.

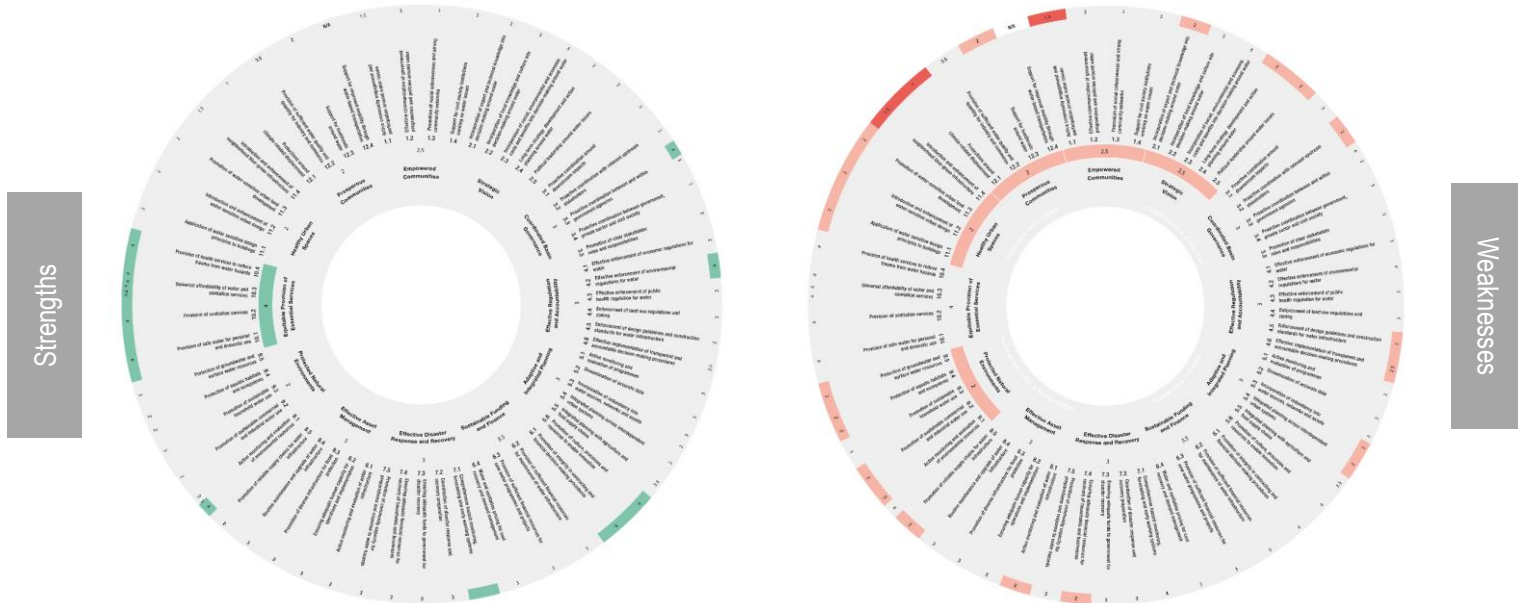
Key concepts: Safe drinking quality; guidelines for drinking-water quality

- Affordability:** Water facilities and services must be available for use at a price that is affordable to all people. Measures must be in place to ensure that such users are not deprived of access to safe water to meet their most basic personal and domestic needs.
Key concepts: Reasonable price (water connections and water services) for all; capacity of people to pay for water in addition to acquiring other basic goods
- Acceptability:** Perceptions differ with regard to which water supply solutions are acceptable in a given context. In particular, water should be of an acceptable colour, odour, and taste.
Key concepts: Colour; odour; taste; cultural issues related to the service.

NOTES:

5 OPTIMAL	4 GOOD	3 FAIR	2 LOW	1 POOR	N/A
The indicator fully reflects current conditions in the city. No improvement is required.	The indicator mostly reflects current conditions in the city. Minimal improvement is required.	The indicator somewhat reflects current conditions in the city. Some improvement is required.	The indicator mostly does not reflect conditions in the city. Significant improvement is required.	The indicator does not at all reflect current conditions in the city.	The indicator is not relevant to the city.

Water Resilience Workshops • July 2019 • Miami, Florida



The City Water Resilience Assessment for Greater Miami and the Beaches was a collaborative effort based on a multi-stakeholder approach with the end goal of achieving a holistic evaluation of the region.

Highlights from the Workshops



Leadership & Strategy

- Resilience is increasingly well-recognized by Miami leadership but long-term planning for resilience is needed
- Efforts are needed to promote coordination with upstream stakeholders (agriculture, SFWMD, etc.)

Health & Wellbeing

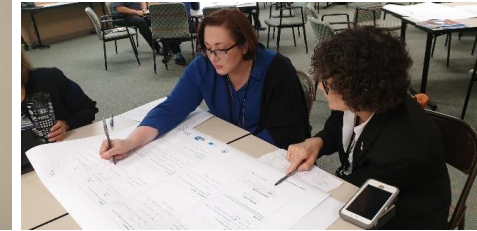
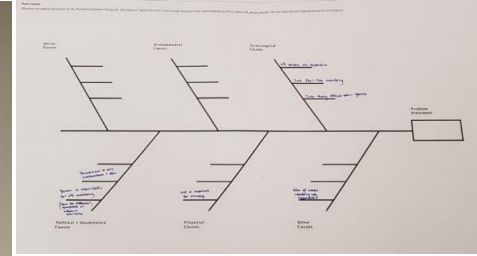
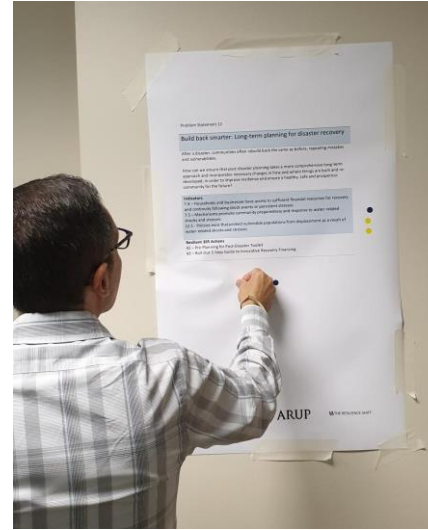
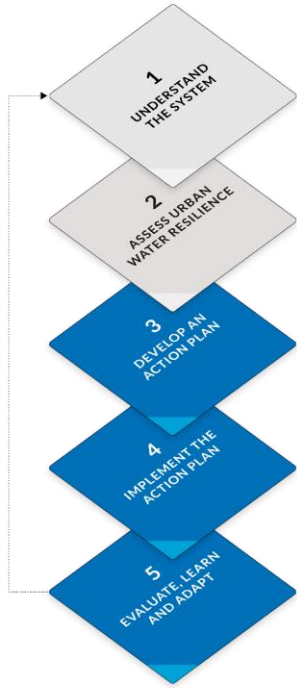
- GMB needs strategies to integrate community voices into policy and planning around water
- Focused outreach is needed to include vulnerable and disadvantaged groups in planning efforts

Infrastructure & Ecosystems

- Early warning systems and preparedness programs are generally good for shocks & disasters, but communities are often less equipped to respond to chronic stresses
- Emphasis is needed to promote green infrastructure in GMB

Planning & Finance

- More can be done to integrate planning across different regional agencies (e.g. transportation, water and sewer, urban planning, etc.)
- There is more to do to promote post-recovery plans



Step 3: Develop an action plan

Priority Actions

- The Challenge**
Evidence-based decisions:
Water & environmental data
for decision-making

- ▶ Create an **open-data portal** to improve data accessibility and sharing between key stakeholders to support sound decision-making



- The Challenge**
Institutionalizing
Resilience

- ▶ **Build collaboration** between governmental, community, academia, and other stakeholder groups to monitor advancement of actions addressing areas of lower-scoring quantitative and qualitative indicators, as well as to advance key joint projects to achieve outcomes that benefit all



Resources needed

Main items	Amount of resources
Consultative and preparatory meetings	\$
Per diem for facilitators and rapporteurs for pre-workshop training	\$
Training of facilitators and rapporteurs including meeting facilities rental	\$\$
Moderation fee and cost (depending on length of workshop)	\$\$
Venue and related equipment, depending on the overall size of the workshop in terms of participation and scope	\$\$\$ ¹
Lunch cost for all participants	\$\$
Residential workshop (acommodations and full board for residents)	\$\$\$
Transportation for participants	\$\$
Training of facilitators and rapporteurs including meeting facilities rental	\$\$

... but also, and mainly, it is important to allocate sufficient resources in terms of **staff time** and **dedicated efforts** to sustain ownership at all levels and scales, to ensure successful and sustainable implementation

THE CLIMATE IS
CHANGING
WHY AREN'T WE?

Thank you

