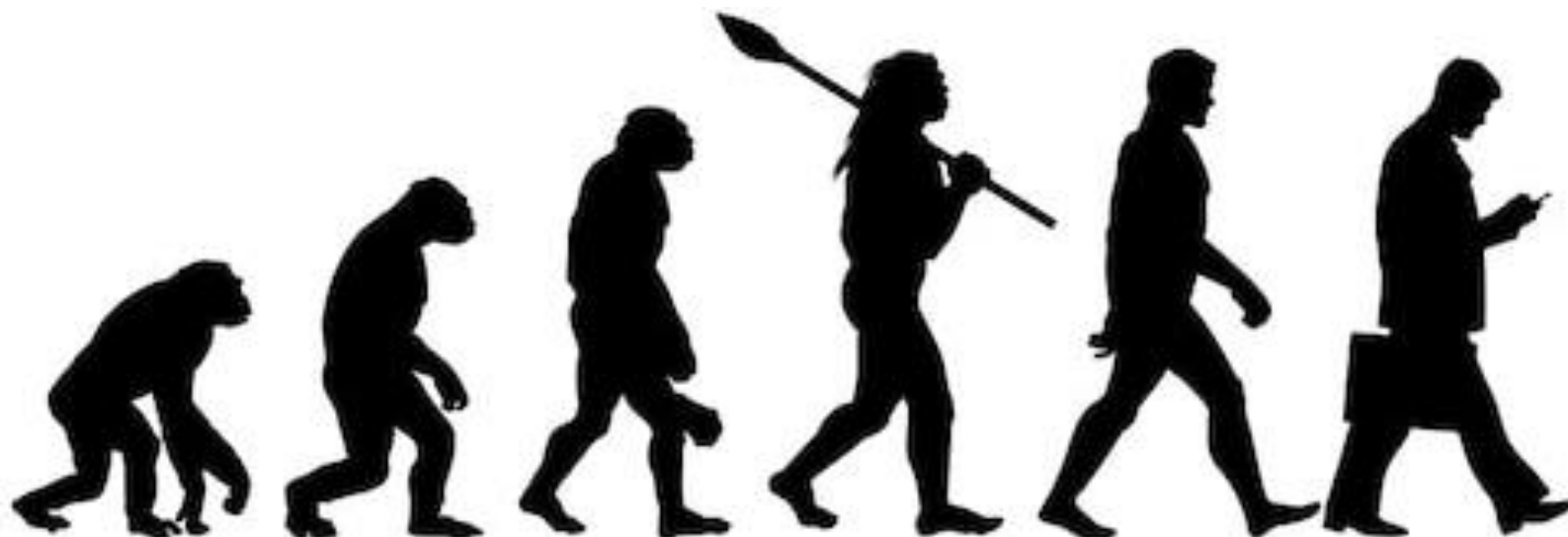


Combining Green and Grey Infrastructure for Water-Wise Cities

CORINNE TROMMSDORFF, 9 APRIL 2019

Combining Green and Grey Infrastructure





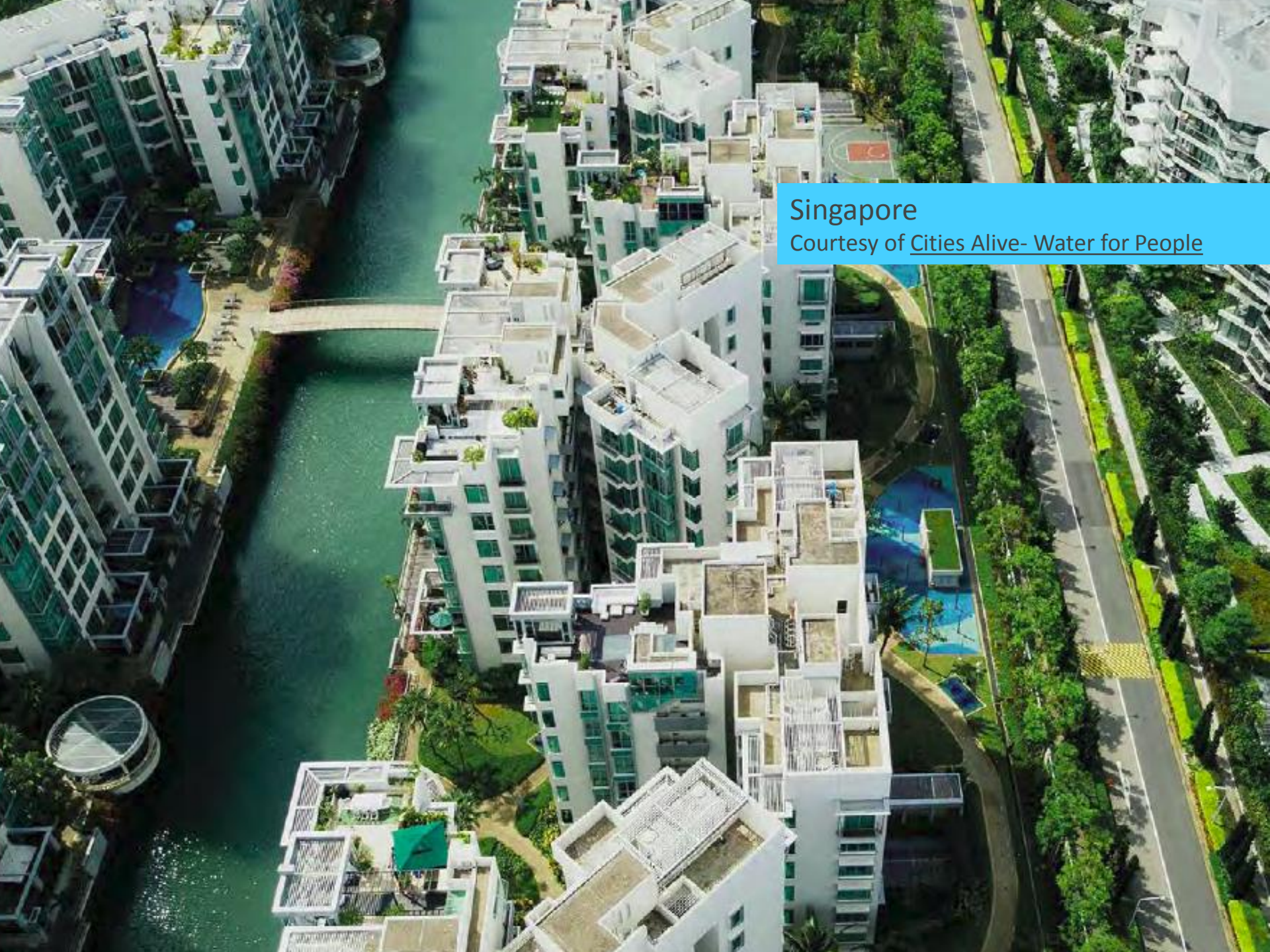
Survival = connected to Nature

Survival ≠
connected
nature



Seoul, Cheonggyecheon River
Courtesy of [Cities Alive- Water for People](#)





Singapore
Courtesy of [Cities Alive- Water for People](#)

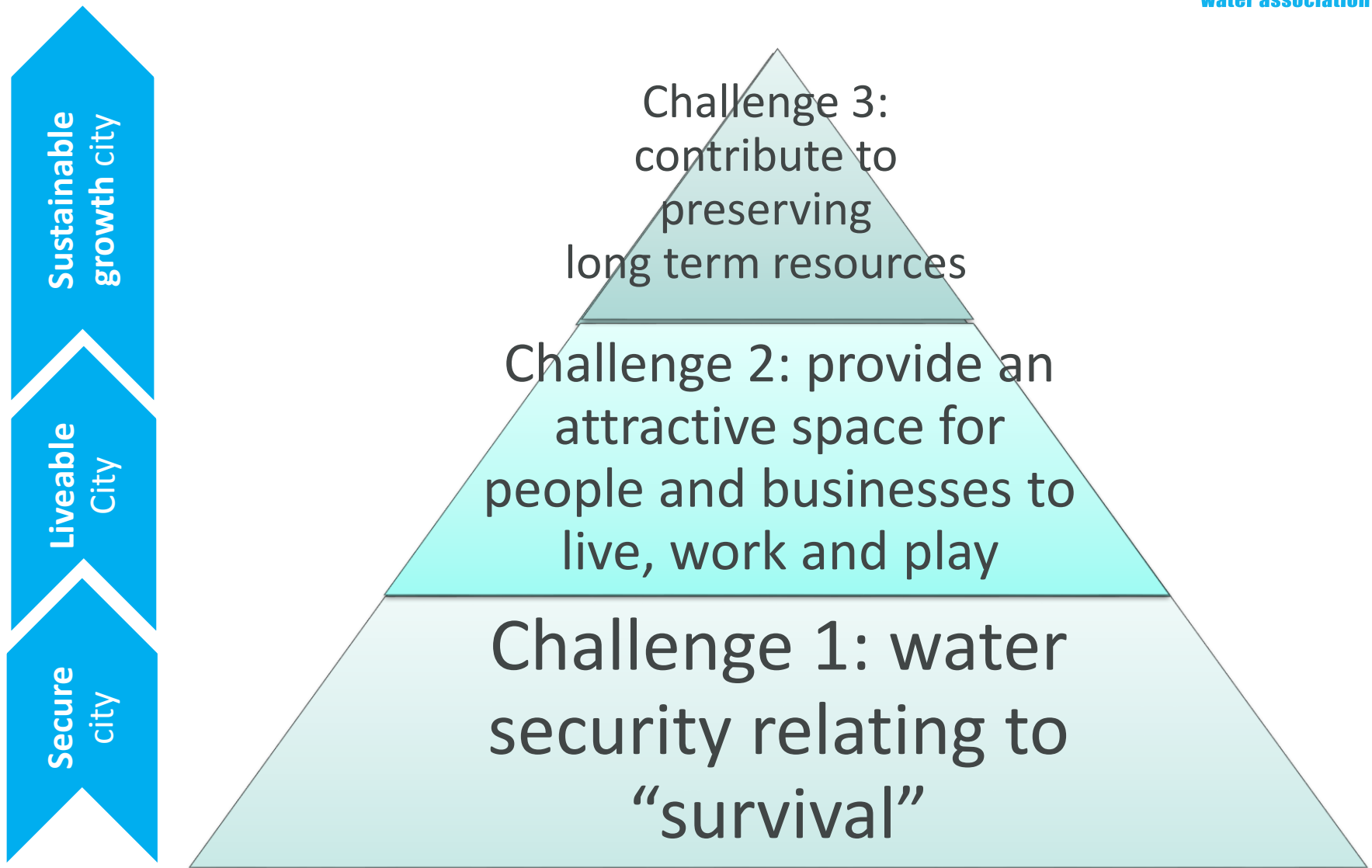


Seattle, rooftop community gardens
Courtesy of Urban Farm Company



Copyright Mark Dixon,
Flickr

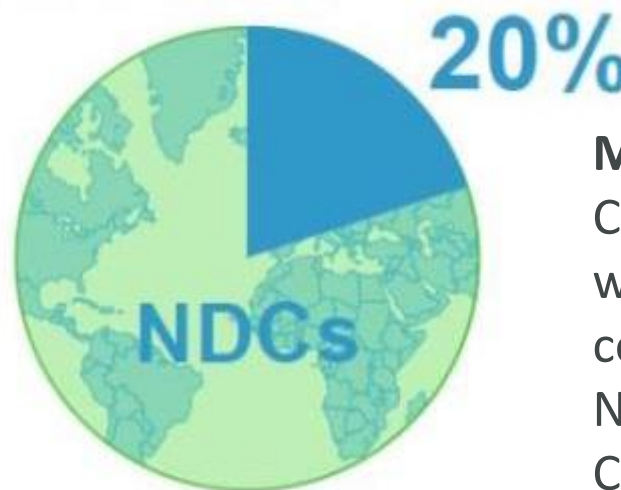
CITIES AT THE CENTER OF THE CHALLENGES AND OPPORTUNITIES



THE COP... URGING TO ACTION

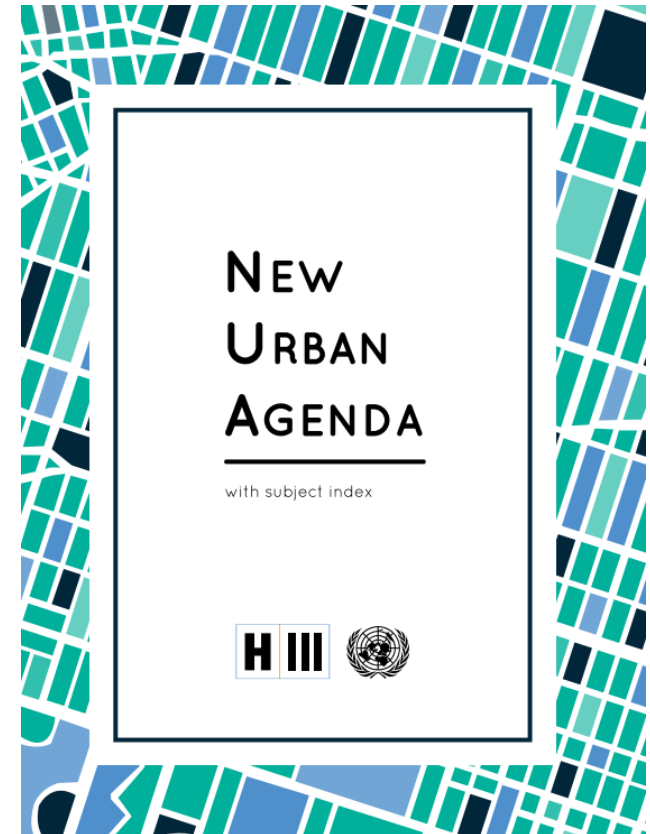


ADAPTATION required



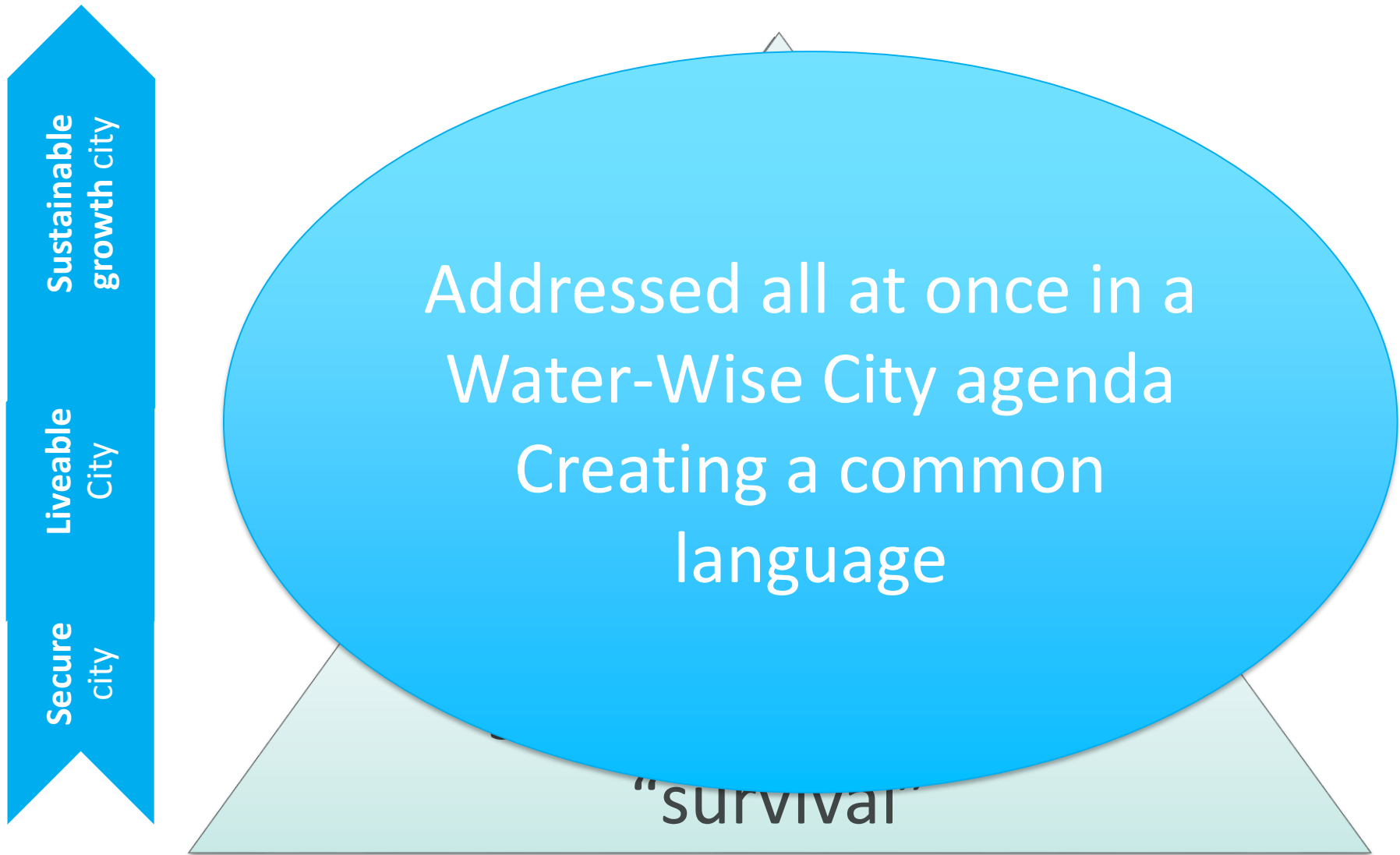
MITIGATION potential
Carbon neutral urban
water services would
contribute up to 20% of the
Nationally Determined
Contributions

GLOBAL AGENDAS TOWARDS SECURE, LIVEABLE AND SUSTAINABLE PLACES



K. Weinberger UN ESCAP presentation 2015

CITIES AT THE CENTER OF THE CHALLENGES AND OPPORTUNITIES



The IWA Principles for Water Wise Cities

For Urban Stakeholders to Develop a Shared
Vision and Act towards Sustainable Urban Water
in Resilient and Liveable Cities

4 Levels of Action



5 Building Blocks



Vision



Governance



Knowledge
& Capacity



Planning
Tools



Implementation
Tools

17 Principles for Water-Wise Cities

1 Regenerative Water Services

Regenerative Water Services

- Use a Systemic Approach Integrated with Other Services
- Increase the Modularity of Systems and Ensure Multiple Options

2 Water Sensitive Urban Design

Water Sensitive Urban Design

- Visible Water
- Modify and Adapt Urban Materials to Minimise Environmental Impact

3 Basin-Connected Cities

Basin-Connected Cities

4 Water Wise Communities

Water Wise Communities

WHAT IS IWA?



Over 70 years heritage working with and connecting people in the sector to help solve global, regional and local water challenges.

“A global network of water professionals striving for a world in which water is wisely, sustainably and equitably managed”

- *IWA Strategic Plan 2019-2024*

IWA'S MAIN ACTIVITIES

Communities

10,000 members
in 140 countries

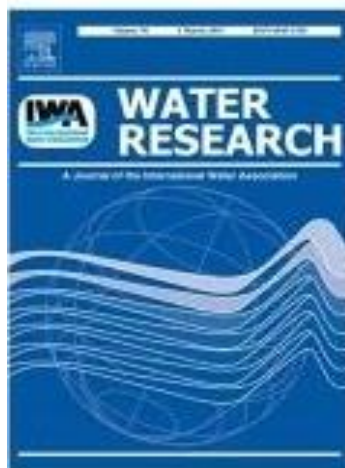


50 Specialist Groups

Communities of water
regulators, cities, utilities

Publications

14 Journals
40 books/year



Events

Biennial Congress with
over 9000 participants



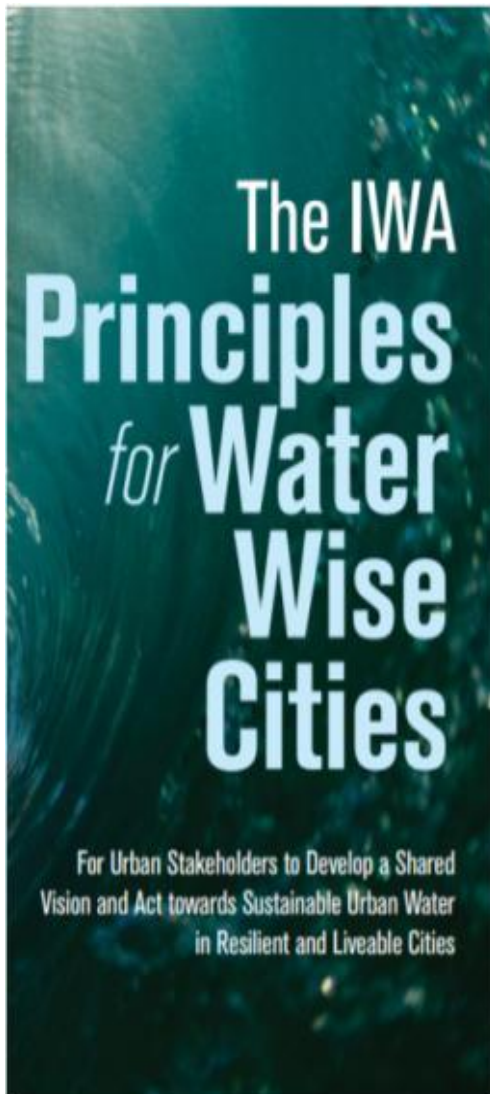
Over 30 conferences/year
with over 50,000 participants

Thought leadership

Leading edge
technologies and
best practices



THE PRINCIPLES FOR WATER-WISE CITIES



5 Building Blocks



Vision



Governance



Knowledge
& Capacity



Planning
Tools



Implementation
Tools

4 Levels of Action

1 Regenerative Water Services

- Replenish Waterbodies and their Ecosystems

Regenerative Water Services

- Increase the Modularity of Systems and Ensure Multiple Options

2 Water Sensitive Urban Design

- Enable Regenerative Water

Water Sensitive Urban Design

- Identify and Adapt Urban Infrastructure to Maximize Positive Environmental Impact

3 Cities & Watershed Stewardship

- Prepare for Extreme Events

4 Water Wise Communities

- Empowered Citizens

Water Wise Communities

- Leaders that Engage and Engender Trust

THE WATER SECTOR EMBRACING “GREEN AND GREY” CITIES



2. Water Sensitive Urban Design

- Enable regenerative water services
- Design urban spaces to reduce flood risks
- Enhance liveability with visible water
- Modify & adapt urban materials to minimise environmental impact

THE WATER SECTOR EMBRACING “GREEN AND GREY” CITIES



Leveraging the value created for:

- Health
- Urban spaces (parks, heat mitigation, buildings comfort and esthetics)
- Ecosystems
- People well-being and sense of belonging to a place
- Recovering social dialogue and creating a sense of Community

CHANGING OUR PERSPECTIVES

Away From Solving One challenge with One Solution



CHALLENGES AND ENABLERS TO COMBINING GREEN AND GREY



The main enabler = our capacity to collaborate across services

THE OPPORTUNITY OF “BLUE, GREEN, AND GREY” CITIES

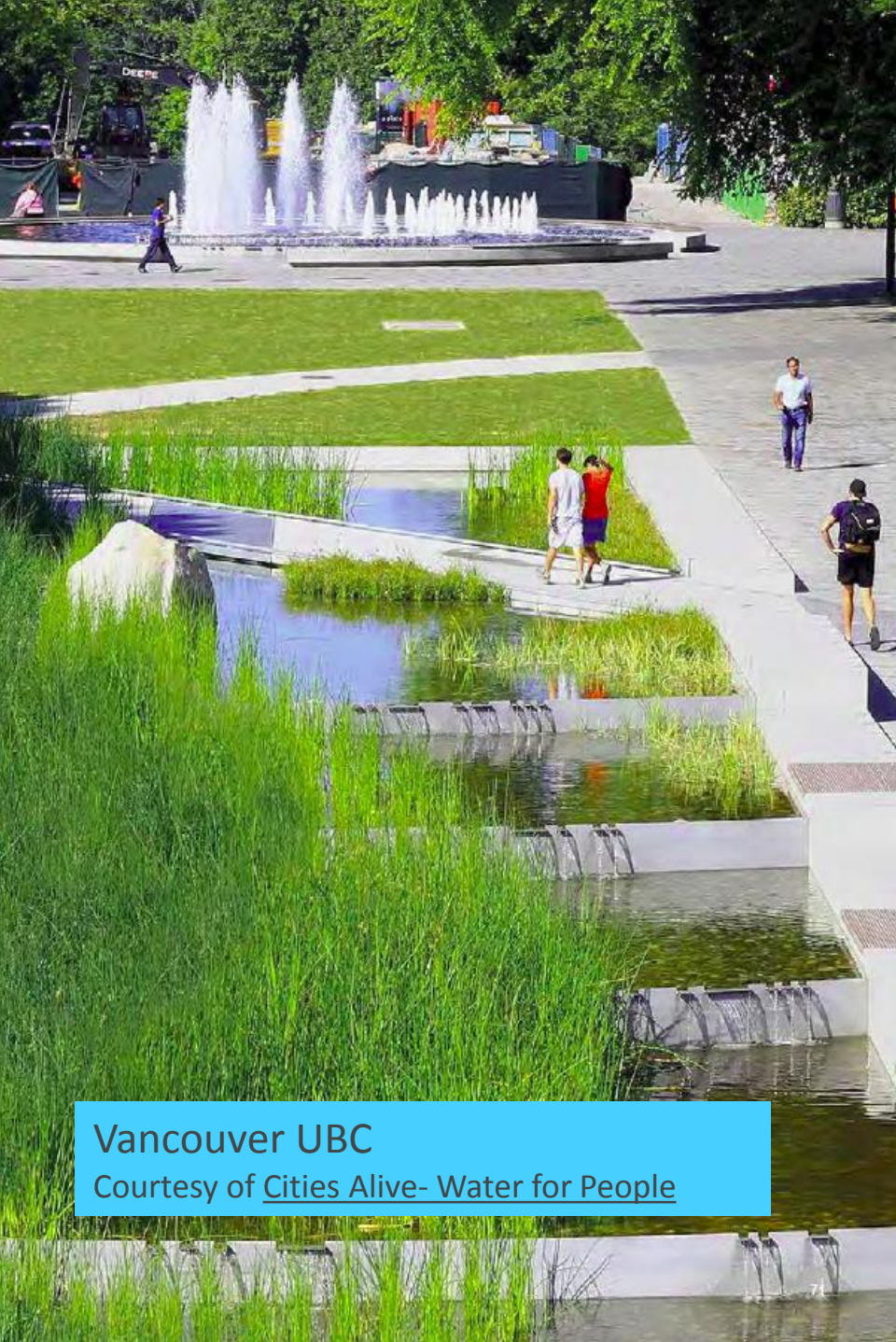


The untapped opportunity = Connecting people between themselves and to their “place”

Sponge City,
Ningbo Yinzhou Turne River, China
Courtesy of [Cities Alive- Water for People](#)



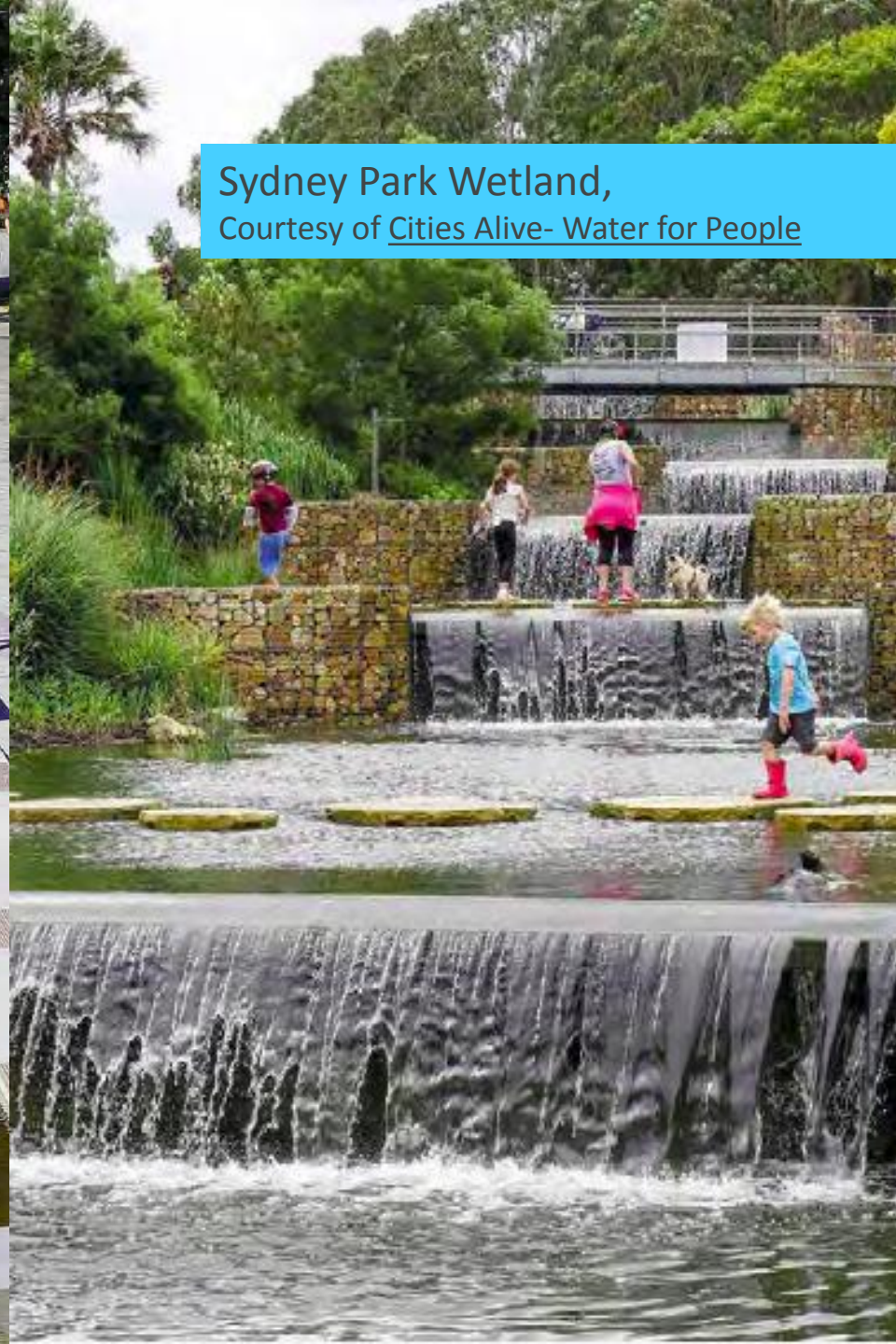




Vancouver UBC

Courtesy of Cities Alive- Water for People

Sydney Park Wetland,
Courtesy of Cities Alive- Water for People



NEW INSPIRATION FOR A TRANSITION TO BLUE, GREEN AND GREY CITIES



Water in cities has been kept hidden from citizens, both visually and as a topic.
It's been confined to a technical topic, but not brought to the citizens attention.

Dominique ALBA

Directrice générale de l'Apur - Atelier parisien d'urbanisme

NEW INSPIRATION FOR A TRANSITION TO BLUE, GREEN AND GREY CITIES



Cities have grown to be a collection of very diverse shapes and forms, citizens have become more different from each other than ever before, with a wide range of backgrounds and expectations that are sometimes hard to reconcile....

Dominique ALBA

Directrice générale de l'Apur - Atelier parisien d'urbanisme

An aerial photograph of a small village. The houses are mostly white with red-tiled roofs. A prominent church tower with a dark, conical roof is visible on the right side. The village is surrounded by green fields and trees. A blue text box in the upper right corner contains the text "Village, 150 people".

Village, 150 people

An aerial night-time photograph of Berlin, Germany. The city is illuminated with a dense network of glowing yellow and orange lines, which likely represent major roads or highways. A prominent blue line, possibly a river or a major transit route, winds through the center of the city. The surrounding areas are dark, with some scattered lights indicating smaller towns or rural regions. The overall image has a high-contrast, almost abstract quality due to the glowing lines against the dark background.

Berlin, ~4M people

© Vincent Laforet, Courtesy Fahey/Klein, Los Angeles

Tokyo, 38M people





NEW INSPIRATION FOR A TRANSITION TO BLUE, GREEN AND GREY CITIES



... We need to find paths that will bring people together around something they share.

Bringing environmental issues to the citizens can be one path to recover the lost social dialogue within the City.

Dominique ALBA

Directrice générale de l'Apur - Atelier parisien d'urbanisme

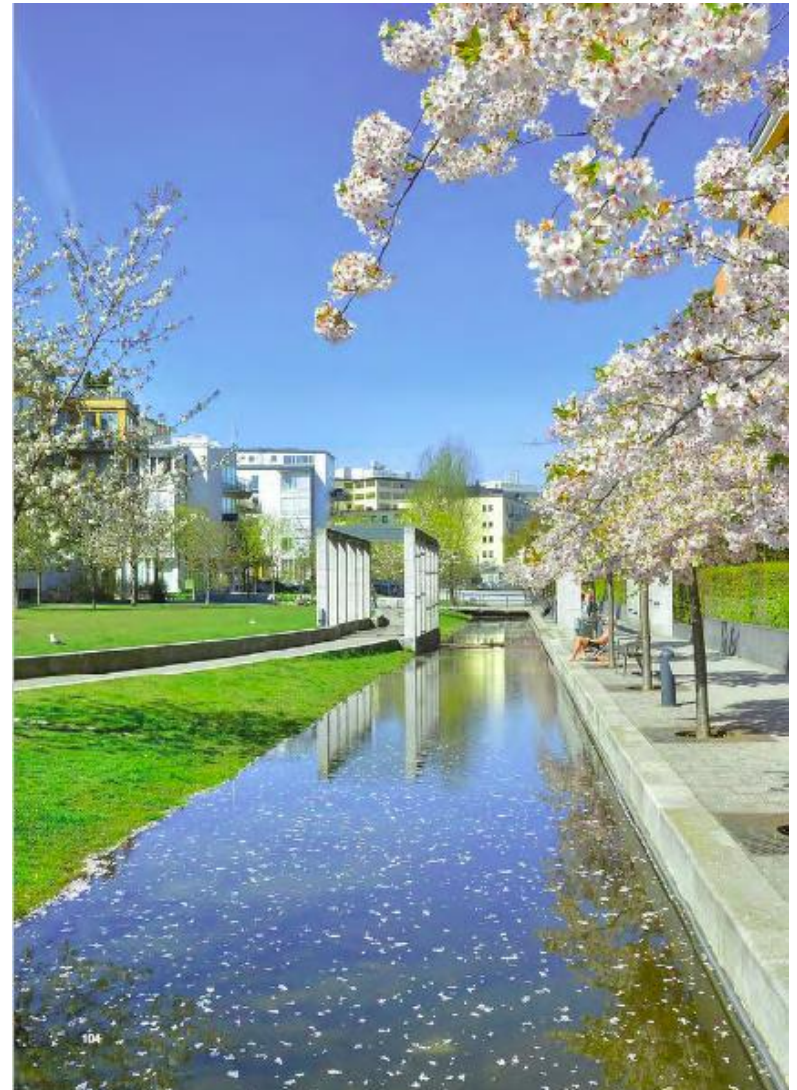


Source: Cities Alive, Water for People

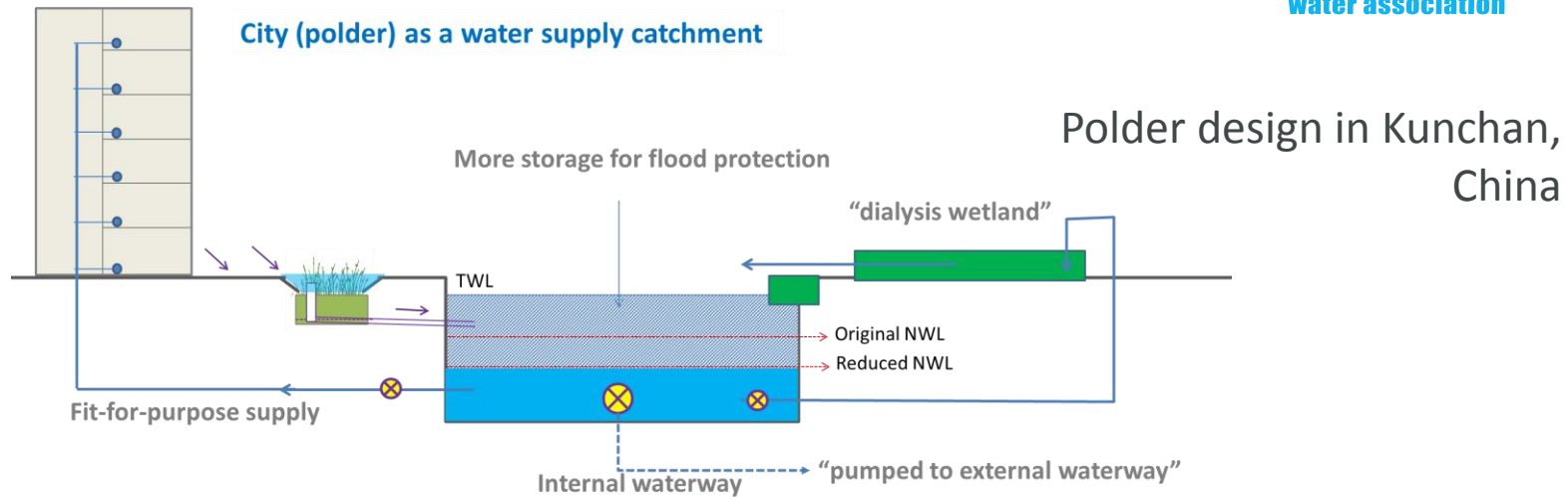
FROM UNVISIBLE TO VISIBLE



Hammarby Sjostad, Stockholm
Former industrial area by the port
Source: Cities Alive, Water for People



FROM TECHNICAL TO SOCIAL DIALOGUE



Co-design workshops with communities in informal settlements, RISE project



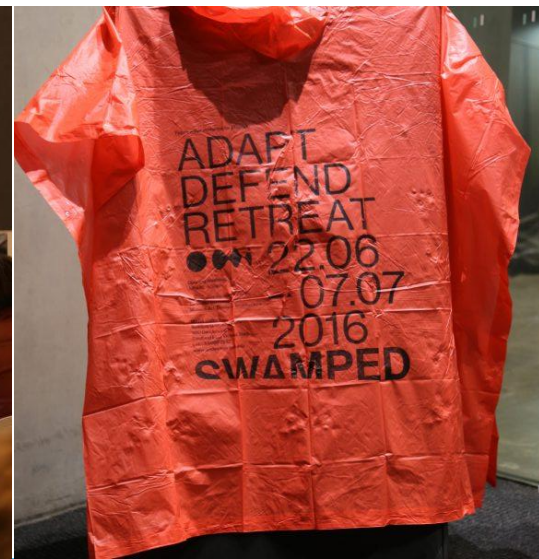
CRC for
Water Sensitive Cities

Water Sensitive Elwood

Location:
Melbourne,
VIC



- Community co-design
- Innovative flood resilience
- Making room for water in a former swamp



Water Sensitive Elwood

Location:
Melbourne,
VIC



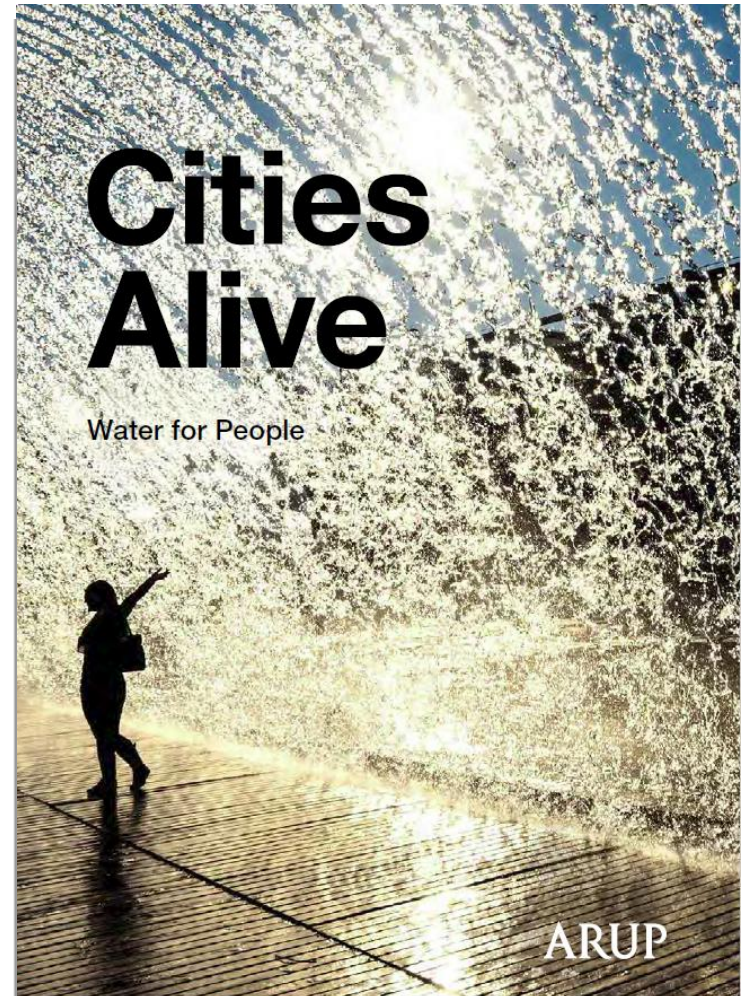
TAKE HOME MESSAGES

1. The main enabler to NBS projects in Cities = Collaboration between urban professionals
 - Supported by a shared vision
 - The IWA Principles for water-wise cities aim to create a shared vision

2. The untapped opportunity = recover social dialogue in cities
 - Nature is a natural bond between people
 - Combining blue green and grey can develop a common bond between people and a stronger connection to the place.

A GOOD READ...

Cities Alive: Water for People explores pioneering water approaches in cities around the world. It promotes five key principles that look to reconnect people with the water cycle, and reconnect cities with their basins to deliver resilience and create healthier city environments that will help drive social and economic success.



Thank you!

IWA is by members and for members!

I hope to see you soon in the IWA Community...

Corinne.trommsdorff@iwahq.org

www.iwa-network.org

 @IWAHQ

