NEWSLETTER
Green Thinking REVIEW
*Sustainable Building: Innovations & Best Practices for Human Flourishing & Planetary Well-being — Humane, Green & Smart*


# *Every Drop Has a Job:* Designing with Water, Not Against It.

Cover:

Water has always shaped cities.

Rivers gave birth to settlements. Coastlines enabled trade. Rainfall sustained agriculture. Wells, streams, and wetlands supported life long before modern infrastructure emerged.

Yet many modern cities behave as though water is a problem to be removed rather than a resource to be managed.

When rain falls, the objective is often simple: move it away as quickly as possible. Drains are enlarged. Channels are deepened. Rivers are confined. Wetlands are filled. Natural water pathways are interrupted.

The result is a familiar cycle: flooding during periods of heavy rainfall and water scarcity during periods of drought.

Across Africa and many other parts of the world, urbanization, climate change, and aging infrastructure are placing increasing pressure on how cities interact with water.

The challenge is no longer simply about drainage.

It is about stewardship.

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Editor's Note:

*Dear Green Thinkers,*

***Why Water Matters Again.***

*Water has always shaped human settlements. Cities emerged around rivers, lakes, coastlines, and reliable water sources. Water enabled agriculture, trade, industry, health, and community life. Yet in many modern cities, we have gradually come to treat water as a problem to be controlled rather than a resource to be stewarded. When rain falls, our first instinct is often to move it away as quickly as possible.*

*The consequences are increasingly visible.*

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*Flooding damages homes, businesses, infrastructure, and livelihoods. Wetlands disappear. Natural waterways are disrupted. At the same time, many communities continue to face water shortages during dry periods. Climate change is making these challenges more urgent.*

*This edition of Green Thinking Review explores an important shift in thinking: moving from flood control to water stewardship. It asks how buildings, neighbourhoods, and cities can work with water rather than against it.*

*Perhaps the most important question is this: What valuable work can water perform before it leaves the city? May this edition inspire fresh thinking and practical action.*

***Let Life Flourish | Floreat Vita***

*– The Editorial Team*

## From Flood Control to Water Stewardship

Traditional urban systems often treat water as waste once it reaches the ground. Water-sensitive cities adopt a different philosophy. Instead of asking: "How do we get rid of water?"

they ask: "How can water serve multiple purposes before leaving the site?" Rainwater can recharge groundwater. Landscapes can absorb runoff. Parks can store stormwater. Wetlands can filter pollutants. Green corridors can reduce flooding while supporting biodiversity. Water becomes an asset rather than a burden.

Every drop has a job.

## Water as Infrastructure

Many of the most resilient cities are beginning to rethink the relationship between water and urban design.

Water is no longer viewed solely through pipes, drains, and concrete channels.

It is increasingly integrated into parks, streets, buildings, public spaces, and ecosystems. A rain garden may improve aesthetics while reducing runoff.

A retention pond may become both community amenity and flood-control infrastructure. A green roof may reduce heat gain while slowing stormwater discharge.

The most effective solutions often deliver multiple benefits simultaneously.

## An Opportunity for African Cities

For many African cities, water-related challenges are becoming more visible.

Flooding disrupts transport, damages property, affects public health, and weakens economic productivity. At the same time, many communities continue to face seasonal water shortages.

These challenges present an opportunity to rethink urban development.

New neighbourhoods, estates, schools, campuses, markets, and public facilities can be designed to work with natural water systems rather than against them. The goal is not merely to survive rainfall events.

The goal is to create cities that become healthier, more resilient, and more environmentally responsive.

## A Different Question

As climate pressures increase, perhaps the most important question is no longer:

"How quickly can we remove water?" but "What valuable work can water perform before it leaves?"

The answer may shape the next generation of sustainable cities. Because in a water-sensitive city, every drop has a purpose.

Every drop has a job.

Every Drop Has a Job

Innovations & Best Practices:

# Every Drop Has A Job: *Seven Water-Sensitive Urban Responses*

These seven responses are helping create more resilient and water-sensitive communities.

**1. Rainwater Harvesting**

Rainwater should not be viewed as runoff alone. Buildings, schools, estates, and institutions can capture and store rainfall for landscape irrigation, cleaning, and other non-potable uses.

**2. Permeable Surfaces**

Traditional pavements prevent water from soaking into the ground. Permeable paving allows rainfall to infiltrate naturally, reducing runoff and helping replenish groundwater.

**3. Rain Gardens and Bioswales**

These landscaped features collect, slow, and filter stormwater while improving biodiversity and visual quality. They transform drainage into an environmental asset.

**4. Green Roofs**

Vegetated roofs help absorb rainfall, reduce peak runoff, improve insulation, and contribute to urban cooling.

**5. Constructed Wetlands**

Designed wetlands can treat stormwater naturally while supporting wildlife, enhancing landscapes, and improving water quality.

**6. Blue-Green Infrastructure**

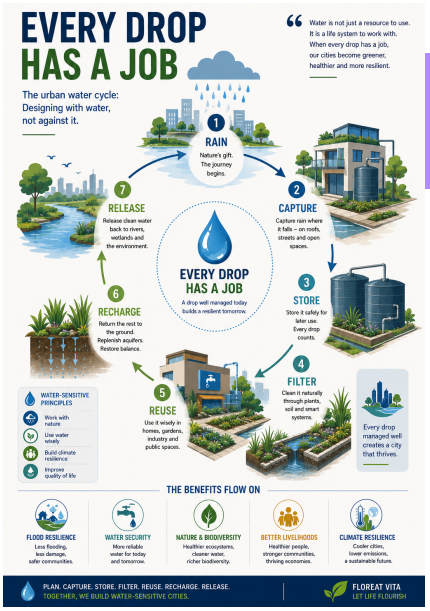
Integrating water systems with parks, green corridors, and public spaces allows cities to manage water while creating healthier and more attractive environments.

**7. Water-Sensitive Planning**

The most effective response begins at the planning stage. Streets, buildings, open spaces, and drainage systems should be conceived as part of a connected water-management network.

**Conclusion:**

A water-sensitive city does not ask how quickly water can be removed. It asks how wisely water can be used.




## *Green Thinking Insights*

### *Reflections on Water, Cities and Stewardship*

*"Water is not merely a resource to be consumed. It is a life system to be stewarded." — GTR Insights*

*"A city's relationship with water is one of the clearest indicators of its resilience." — GTR Insights*

*"The best drainage system may not be the one that removes water fastest, but the one that uses water most wisely."— GTR Insights*

### *This Edition's Thought:*

*Every drop that falls on a city presents a choice: waste it, fight it, or put it to work.*

Every Drop Has a Job

Top 5 Action Points

# Five Water Actions for the Next 90 Days

**1. Conduct a Water Audit**

Assess how water enters, moves through, and leaves your building, site, estate, campus, or community. Identify opportunities to reduce waste, improve efficiency, harvest rainfall, and manage runoff more effectively.

**2. Harvest the Next Rainfall**

Explore practical rainwater harvesting opportunities. Even modest collection systems can reduce pressure on municipal supplies while providing water for irrigation, cleaning, and other non-potable uses.

**3. Increase Permeable Areas**

Review paved surfaces and identify opportunities to increase infiltration. Permeable paving, planted areas, rain gardens, and landscaped zones can help reduce flooding while improving environmental quality.

**4. Protect Existing Water Pathways**

Avoid building over natural drainage routes, wetlands, streams, and floodplains. Nature often remembers where water wants to flow, even when development ignores it.

**5. Make Water Part of Every Project Brief**

Whether designing a home, school, office, market, estate, or public facility, ask: How will this project capture, store, filter, reuse, or responsibly release water?

Water stewardship should be a design consideration from day one, not an afterthought.

## *Resources for Further Study*

**Learn More. Think Deeper. Act Better.**

**Read** 👉 UN World Water Development Report 2025: Mountains and Glaciers – Water Towers: UNESCO / UN-Water flagship report on global water security and climate-related water risks. Link: https://www.unesco.org/reports/wwdr/en/2025/download

**Watch:** 👉 Case studies Singapore ABC Waters Programme. PUB Singapore overview of integrating drains, canals, reservoirs, parks, and public life. Link: https://www.pub.gov.sg/Public/Places-of-Interest/Our-Reservoirs-and-Waterways/ABC-Waters/About

**Explore:** 👉 Planning a Green-Blue City: A How-To Guide. Victoria State Government guide for green-blue infrastructure planning. Link: https://www.water.vic.gov.au/__data/assets/pdf_file/0030/663366/planning-a-green-blue-city-how-to-guide.pdf

👉 Water Sensitive Urban Design for South Africa: WSUDSA Knowledge Platform. https://wsudsa.org

## GTR Learning Tip

A water-sensitive city begins with water-sensitive decisions.

### *GTR Action Reminder:*

*The cities that thrive in a changing climate will not necessarily be those with the biggest drainage systems, but those that develop the wisest relationship with water.*

# Cape Town: Towards a Water-Sensitive City

*Cape Town's Day Zero crisis became a global reminder that water security cannot be taken for granted. The experience helped accelerate a shift toward more water-sensitive and resilient urban thinking. Image Credit: Google/ TheGuardian.com*

In 2018, the world watched as Cape Town, South Africa, confronted the possibility of "Day Zero"—the point at which municipal water supplies could become critically depleted after several years of severe drought.

The crisis exposed the vulnerability of cities that depend heavily on traditional water sources while facing rapid urban growth, climate variability, and increasing demand.

Yet Cape Town's story is not only about drought. It is also about transformation.

The experience prompted a broader rethinking of how cities relate to water. Rather than viewing water solely as a resource to extract, consume, and discharge, planners, policymakers, researchers, and communities began exploring how the city could become more water-sensitive and resilient.

This shift encouraged greater attention to water conservation, demand management, alternative water sources, stormwater management, groundwater use, ecological restoration, and public awareness.

The vision extends beyond securing water supplies.

It seeks to create a city where water is integrated into urban planning, environmental stewardship, and everyday life.

A water-sensitive city recognizes that rainfall, rivers, wetlands, aquifers, parks, streets, buildings, and public spaces are interconnected parts of one urban water system.

In such a city:

- Rainwater is harvested and reused.
- Stormwater is managed as a resource rather than a nuisance.
- Wetlands and waterways are protected and restored.
- Public spaces contribute to water resilience.
- Citizens become active participants in water stewardship.

Cape Town's journey demonstrates that resilience is not achieved through infrastructure alone.

It emerges from a combination of planning, governance, innovation, community participation, and long-term commitment.

👉 **Water Sensitive Urban Design for South Africa:** WSUDSA Knowledge Platform https://wsudsa.org

Every Drop Has a Job

Outside the Box

# 2040: When Every Drop Had a Job

*By 2040, cities stopped treating water as something to remove and began treating it as something to use wisely. Rainfall was captured, stored, filtered, and reused before leaving the site.*

*Parks became part of the water system. Schools harvested rainwater. Buildings stored water for irrigation and other non-potable uses. Wetlands became essential infrastructure.*

### *Every drop had a purpose.*

*The most successful cities discovered that resilience was not simply about bigger drains. It was about developing a wiser relationship with water.*

### *Nature became a partner rather than an obstacle.*

*Green corridors managed stormwater. Rain gardens cooled neighbourhoods. Urban wetlands improved water quality and supported biodiversity. The result was not only better water management, but healthier, more attractive, and more resilient communities.*

*The water-sensitive city of 2040 will not appear by accident. It is being shaped today through planning decisions, development approvals, infrastructure investments, and everyday choices.*



## A Question for Today:

If every drop had a job, what role would the next rainfall play in your community?


## *GTR Closing Reflection:*

The future of water-sensitive cities may depend less on how quickly they remove water and more on how wisely they retain, reuse, and respect it. -

**Floreat Vita | Let Life Flourish.**

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