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H<sub>2</sub>O Map

H<sub>2</sub>O Map: Innovative learning by hydraulic heritage mapping

# E-LEARNING COURSE FOR TEACHERS: *Innovative Educational Tools for Assessment of the Hydraulic Heritage with by ICT Tools.*

## PART I: HYDRAULIC HERITAGE



# General Structure

## Module III: Anthropogenic action and Water: past, present and future

3.1 Why Water?

3.2 Water culture

3.3 Water conflicts

3.4 Return to water

3.5 Towards an ecological city: wáter for urban quality



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# 3.1. WHY WATER?

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## WATER IS A RIGHT

Universal access to water is a social right and is an essential condition for the enjoyment of human rights. (A, 2010)

## WATER IS DEMOCRACY AND PARTICIPATION

Water management must aim at interventions that are inclusive and participatory. Water is an opportunity to rethink urban places, territories and infrastructures.

## WATER IS FUTURE

The scarcity of water is the main threat of our century. The future of the entire planet depends on responsible management of this resource.



## 3.2. WATER CULTURE

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**Narration & Mythology.** Many sacred texts such as the story of the universal flood described in the biblical text have water as protagonist. In the story of Noah's ark, the ark takes a saving value, thanks to which Noah manages to save himself from downpour. Poseidon, the god of the waters, is a mythological figure narrated in Homeric poems, characterized by the trident as a symbol of his power over the waters.

**Sacred resource.** In ancient Egypt, the intermittent floods caused by the Nile River represented a divine event ensuring the life of the inhabitants and making the soil extremely fertile for cultivation. The Ganges River, in India, is still sacred to Hindus today. Bathing in the Ganges grants forgiveness to one's sins and leads to salvation.

**Fundamental for the city.** The Romans built many aqueducts to bring water to the cities and introduced elements for well-being, environmental quality and health such as fountains in urban areas. The thermal baths represented the maximum place for the sociality of Roman culture.

Water was also essential for the transport of goods, for the defense of the city and the survival of the population.



# 3.3. WATER CONFLICTS

**IT IS HAPPENING.**

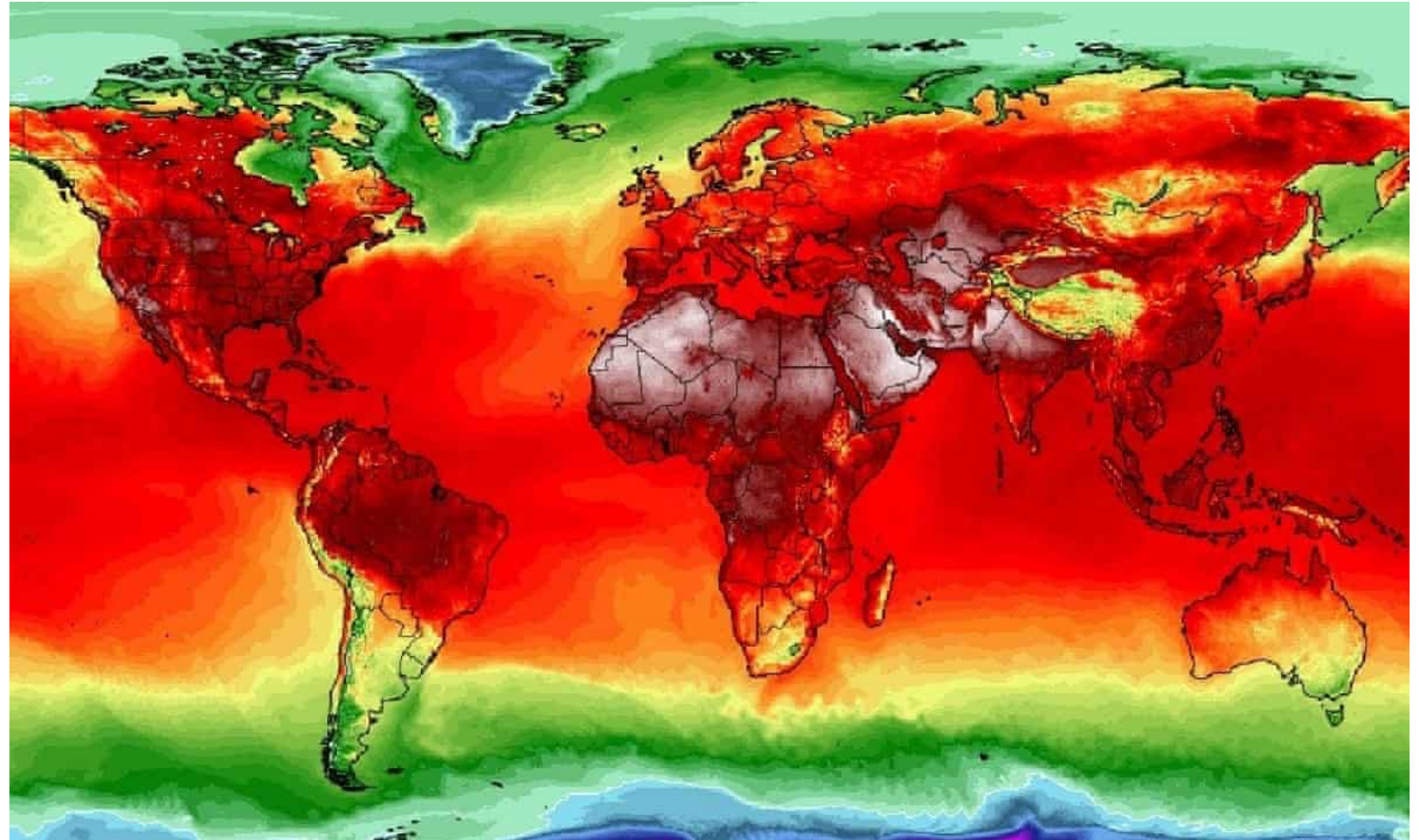
Climate Change is not just affecting our ice caps.  
Climate Change is affecting our entire planet.



TAKE GLOBAL ACTION.  
Reduce carbon pollution  
and expand clean energy.



DONATE AND CHECK OUT  
MORE INFORMATION AT  
[www.carbonfund.org](http://www.carbonfund.org)



A global heat map shows how temperatures are soaring across the planet during the summer of 2018.  
– The Guardian

# 3.3. WATER CONFLICTS



Flooding in Jakarta, Indonesia, after torrential rains in February – NY Times

# 3.3. WATER CONFLICTS

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Climate change and unsustainable use of land has contributed to desertification in the north-east of Camerun  
– United Nations

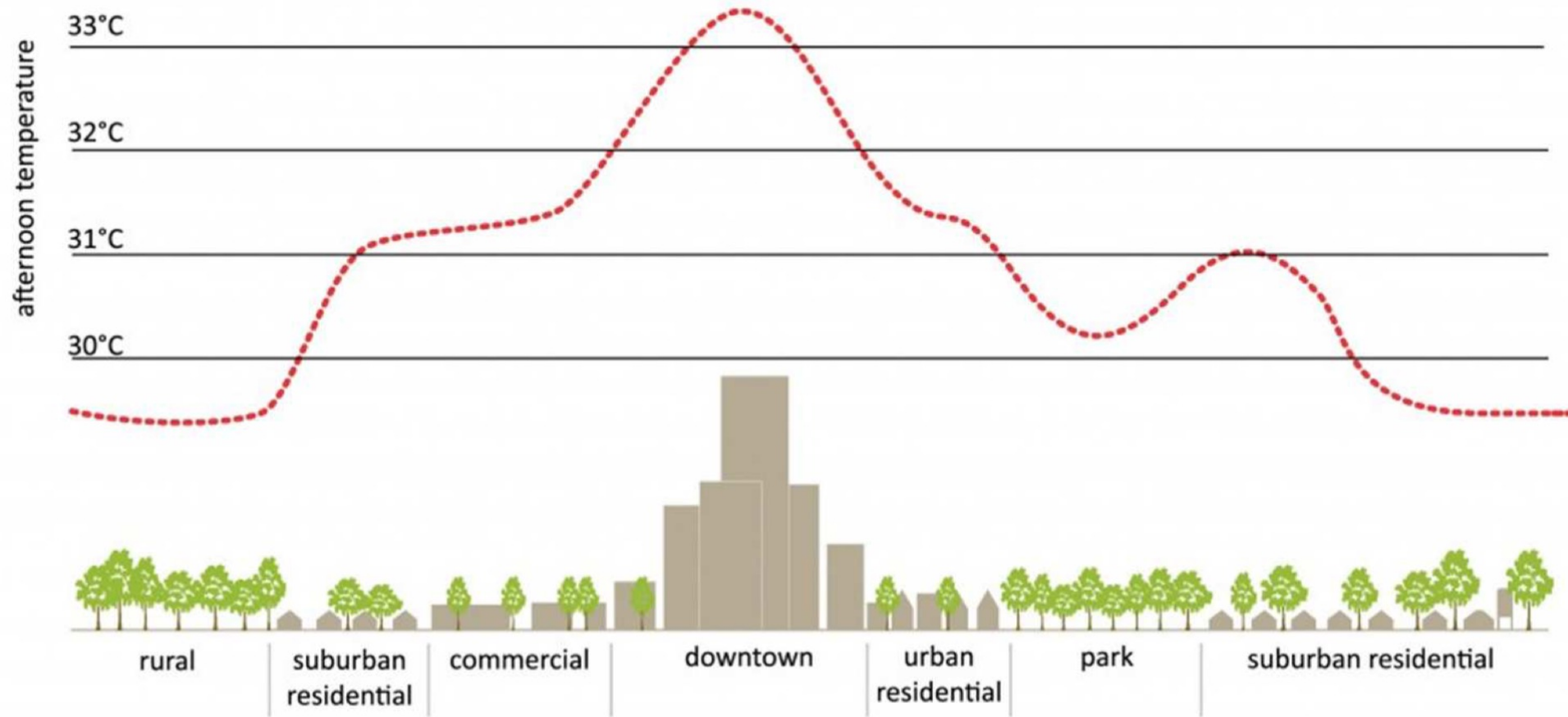


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# 3.3. WATER CONFLICTS



Urban heat island example





# 3.4. RETURN TO WATER



Copenhagen Cloudburst

# 3.4. TOWARDS AN ECOLOGICAL CITY

## WATERFRONT & RIVERFRONT



Les Bergers de Seine - Paris



Harbor Bath - Copenhagen



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# 3.4. TOWARDS AN ECOLOGICAL CITY

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## SOIL PERMEABILITY & WATER CYCLE



Parque Atlantico - Santander



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# 3.4. TOWARDS AN ECOLOGICAL CITY

## CANALS & BASINS RESTORATION



Stadsbuitengrach - Utrecht

# 3.4. TOWARDS AN ECOLOGICAL CITY

## WATER CYCLE ROUTES



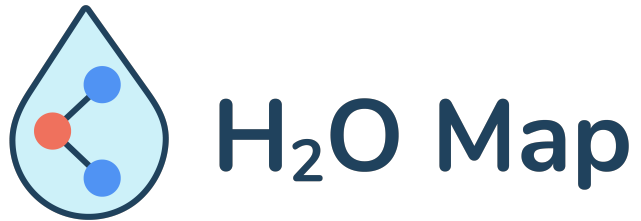
Cycling through water - Belgium



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