



**COP28**  
UAE

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# **Revolutionizing Sustainability: Water and Innovation Technologies**

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**AB AQUA - Centro Studi Idrostrategici**

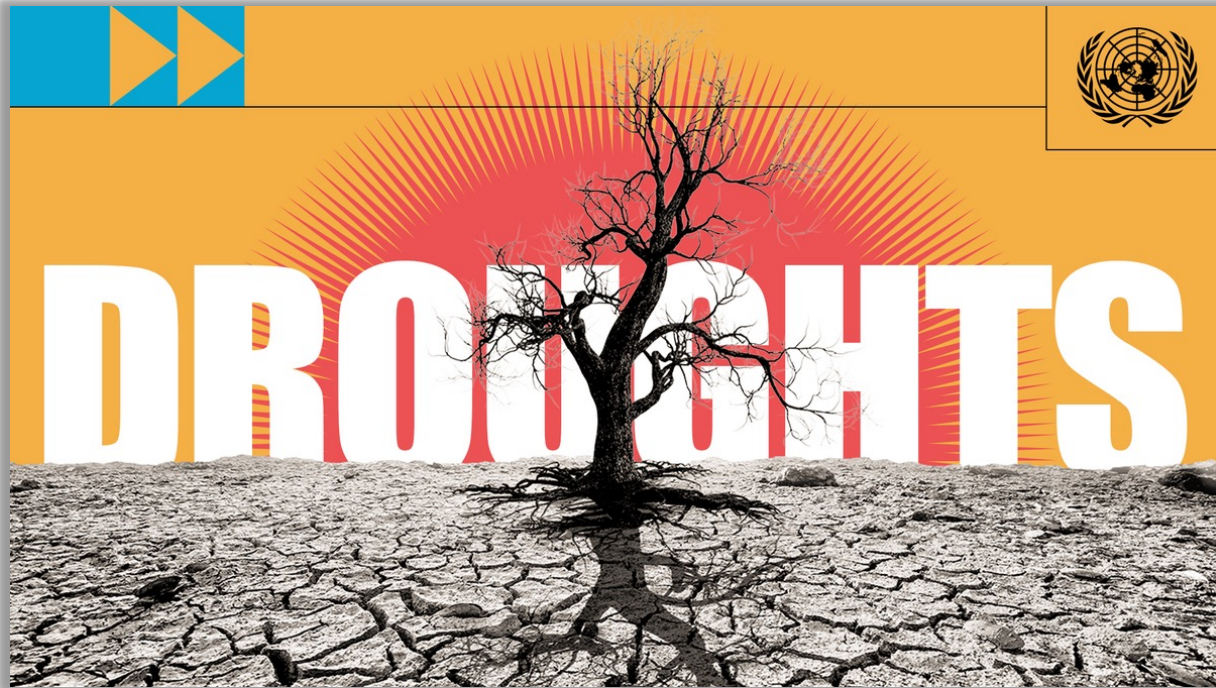


## *Water scarcity: a generational problem*

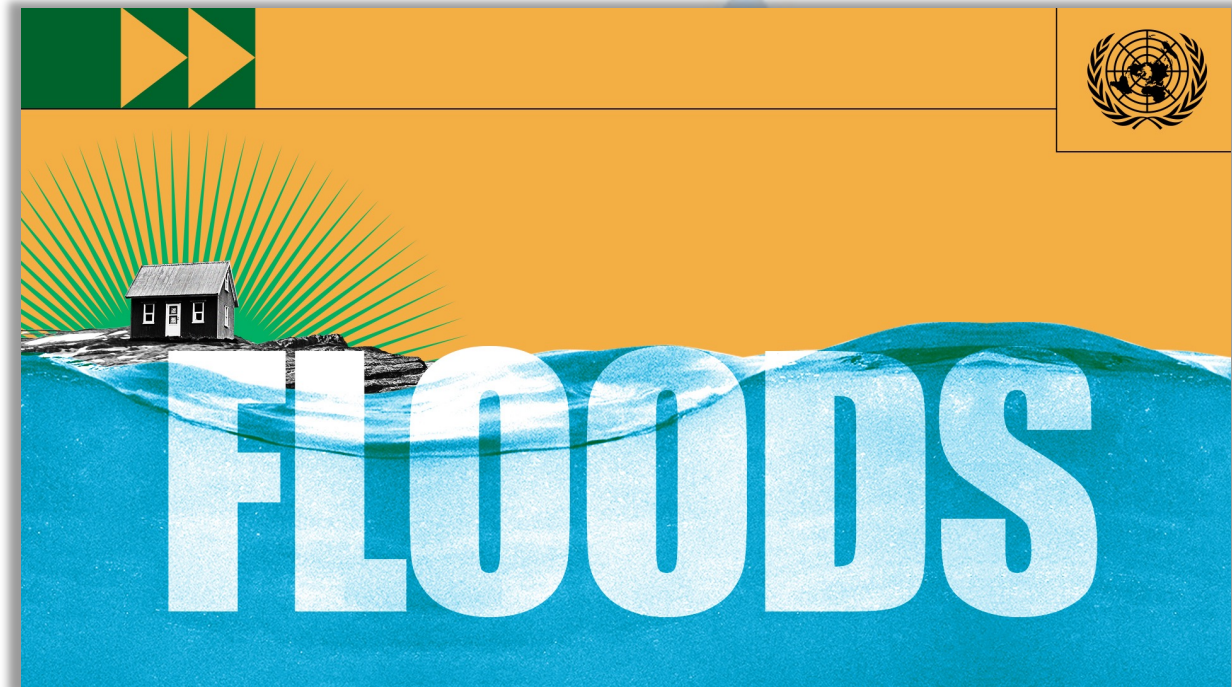
- About **two billion** people worldwide don't have access to safe drinking water today ([SDG Report 2022](#)), and roughly half of the world's population is experiencing severe water scarcity for at least part of the year ([IPCC](#)). These numbers are expected to increase, exacerbated by **climate change** and **population growth** ([WMO](#)).
- Only **0.5 per cent** of water on Earth is useable and available freshwater – and climate change is dangerously affecting that supply. Over the past twenty years, terrestrial water storage – including soil moisture, snow and ice – has dropped at a rate of 1 cm per year, with major ramifications for water security ([WMO](#)).
- Water supplies stored in **glaciers** and **snow** cover are projected to further decline over the course of the century, thus reducing water availability during warm and dry periods in regions supplied by melt water from major mountain ranges, where more than one-sixth of the world's population currently live ([IPCC](#)).
- **Sea-level rise** is projected to extend **salinization of groundwater**, decreasing freshwater availability for humans and ecosystems in coastal areas ([IPCC](#)).



## Water scarcity: a generational problem



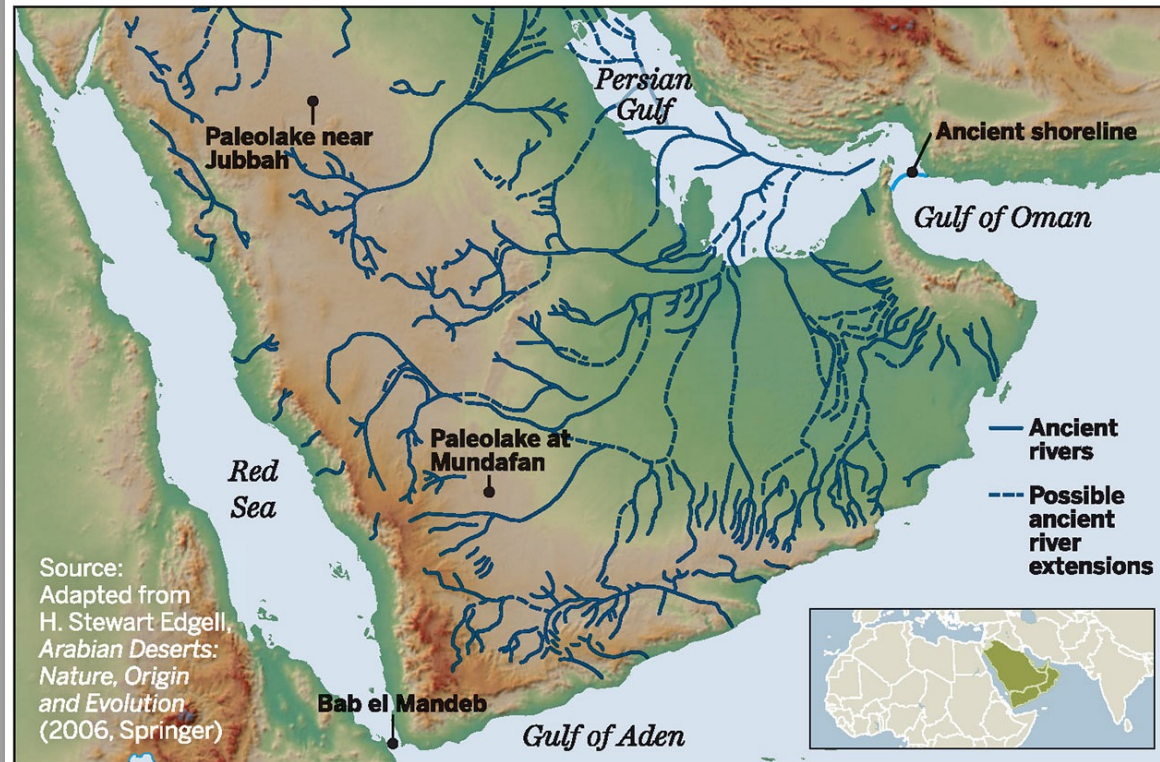
Chennai Water Crisis (2019)



# The Arabian Peninsula in the Pleistocene

## Making the desert bloom

Researchers are working to further detail Arabia's ancient rivers and lakes.





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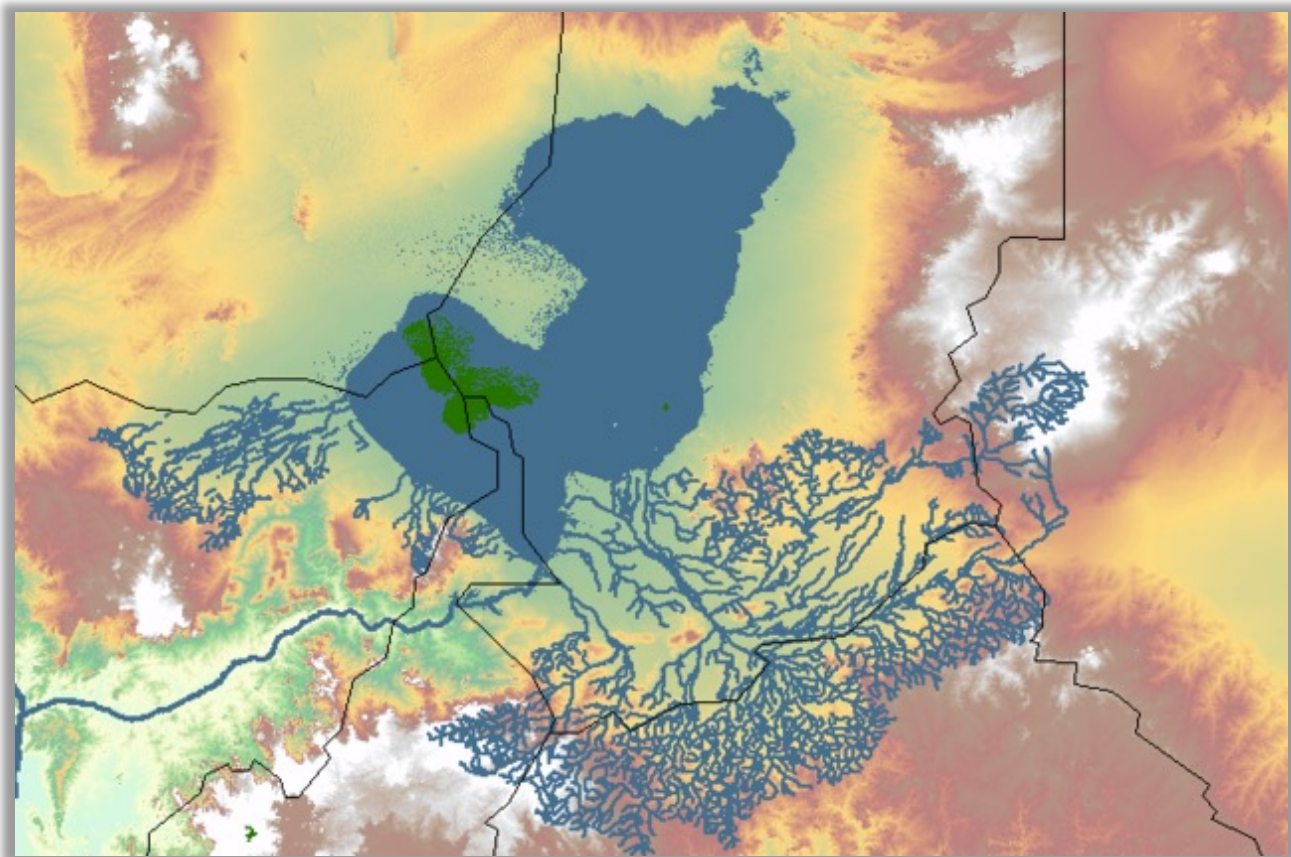
## *The Arabian Peninsula in the Pleistocene 2*

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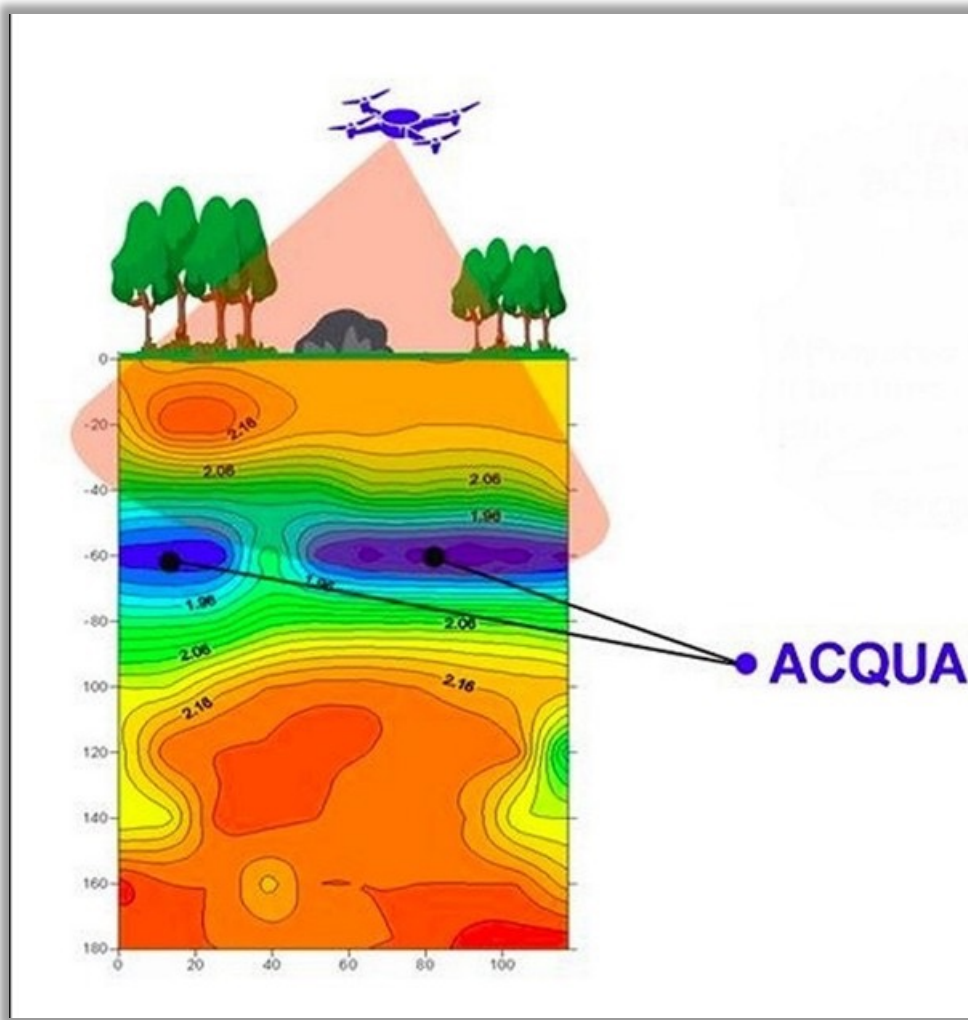
# Mega Chad



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# Hydro Hunters





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*Artificial intelligence and water efficiency. The Mersin case*

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MiPU 







## Artificial intelligence for water

# AI FOR WATER

01

COLLECT DATA EFFICIENTLY

02

PRESENTS MEANING FULL DATA INSIGHTS

03

WATER TREATMENT

04

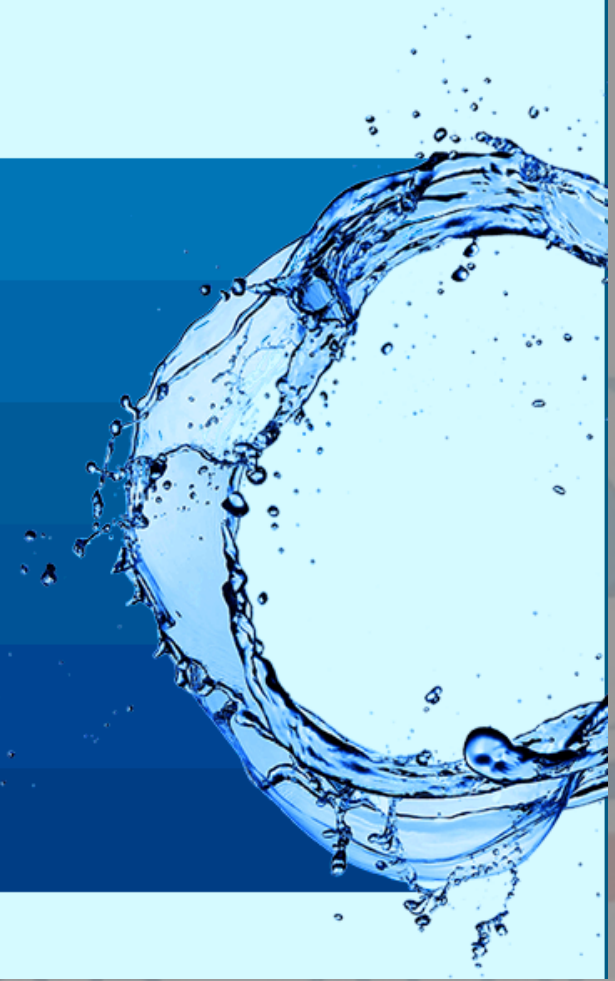
DETECT LEAKAGE

05

AVOID EXPENSIVE MAINTENENCE

06

WATER MANAGEMENT IN HOMES & BUILDINGS





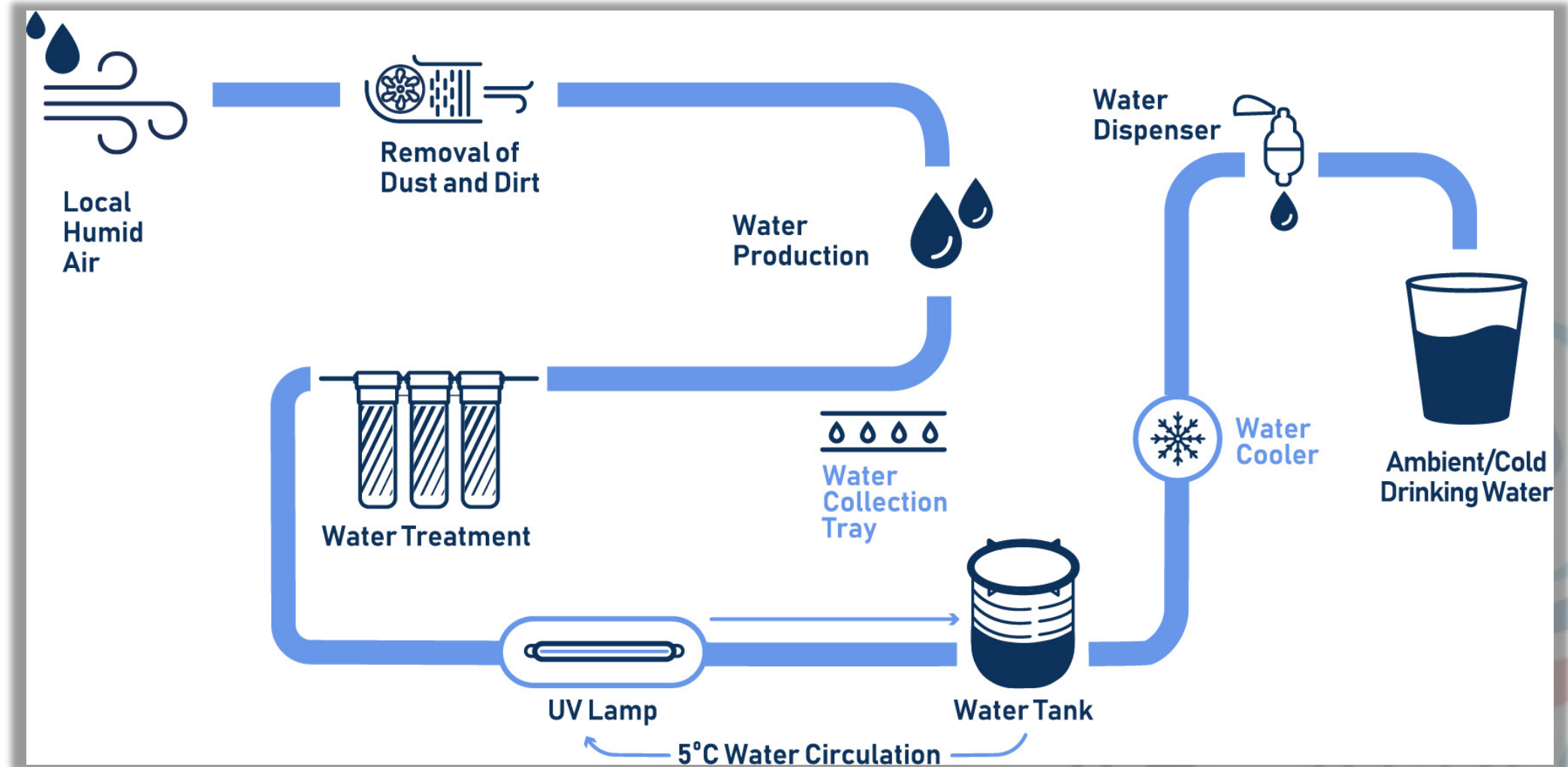
## Producing water from the air



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## Producing water from the air 2





*Thank you for your attention*

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