

Waterroots - Building a Global Water Community -

our water world

PA AWWA Conference

Joey Wu

4/12/2024



William Anders (Apollo 8),
Earthrise, 1968



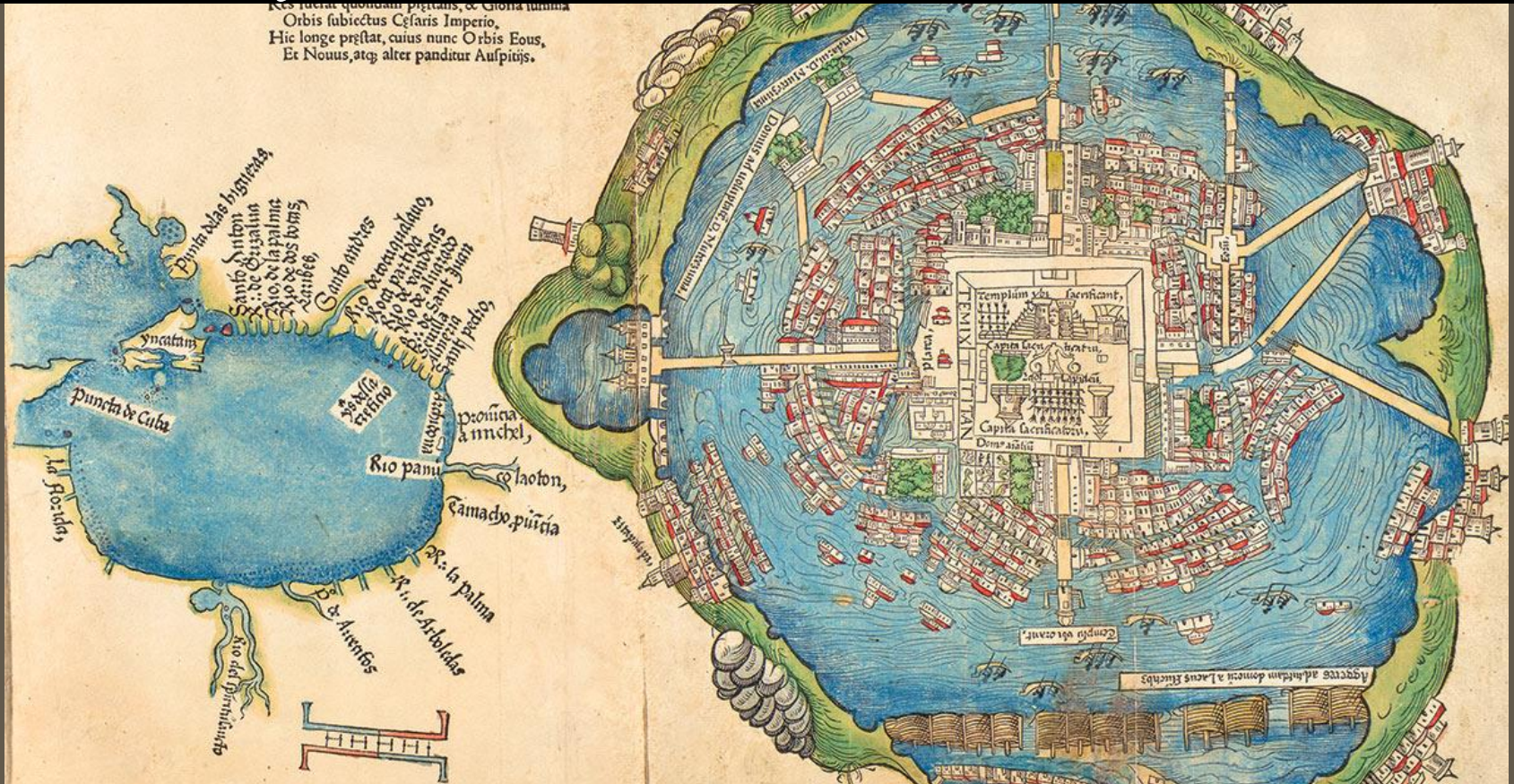
Apollo 17 Crew,
Blue Marble, 1972

Paleo-Agulhas Plain, South Africa - 9500 BC



“The city on a lake”, Tenochtitlan - 1325 AD

Res fuerat quondam piscinis, & Gloria tumida
 Orbis subiectus Cæsaris Imperio,
 Hic longe præstat, cuius nunc Orbis Eous,
 Et Nouus, atq; alter panditur Auspitijs.



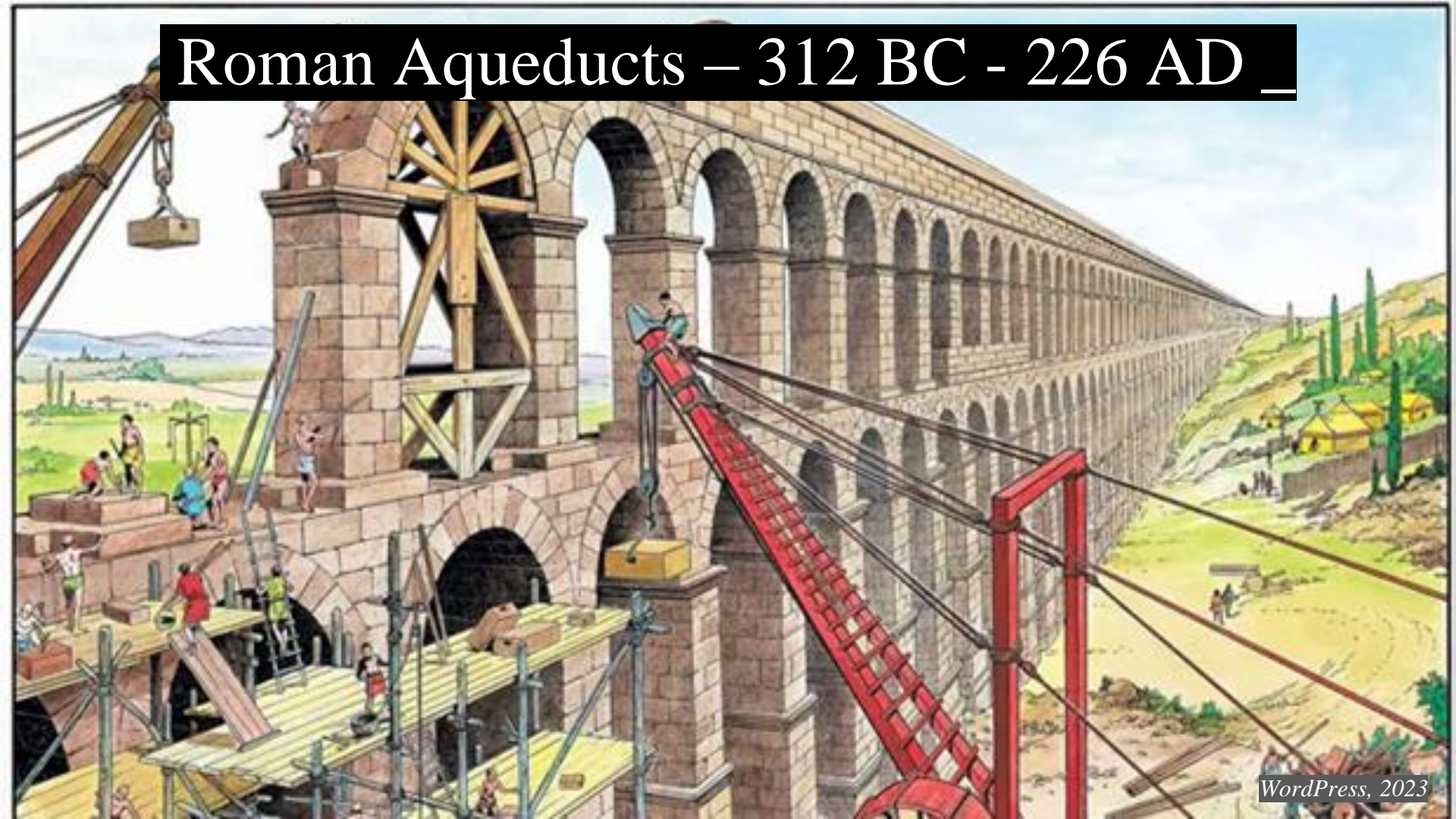
Quilibet punctus magnus continet leucas duodecim cum dimidia, ita q̄ duo magni puncti continent viginti quinque leucas, Continet autē leuca quatuor Italica miliaria, ita q̄ omnes puncti qui hic cōspic

Latin Etymology:

- *arrive* and *derive*
- from *river* to *rival*

Control and water access leads to conflict!

Roman Aqueducts – 312 BC - 226 AD _



... but where does it go?_





National Park Service, 1805

Philadelphia, PA (Modern Day) _



WATER - THE FACTS

700 MILLION

people could
be displaced
by extreme
water scarcity
by 2030

(Global Water
Institute 2013)



More than
**FIVE
BILLION**
people could live
in water-stressed
regions by 2050

(Burek et al. 2016)



85%



of wetlands are estimated to
have been lost since the
pre-industrial era and the rate
of loss is still accelerating

(IPBES 2019)



72% of all water withdrawals
are used by agriculture,
16% by municipalities for households
and services, and **12%** by industries

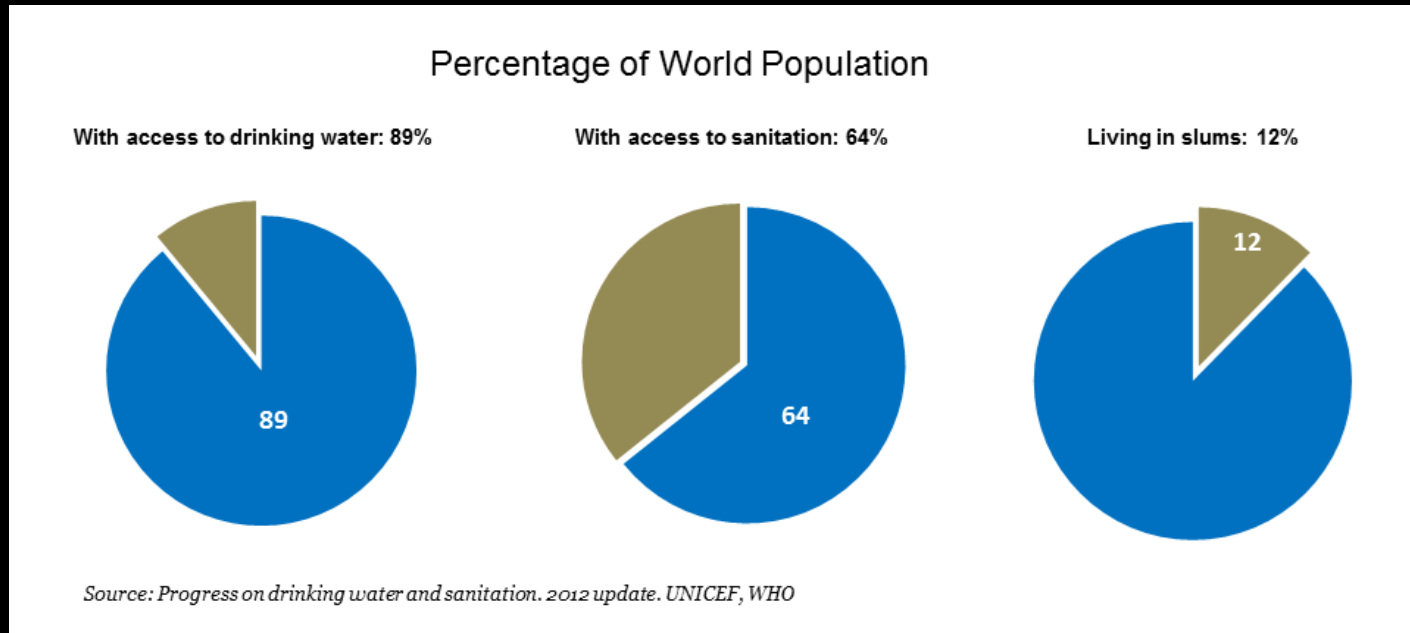
(UN-Water 2021)



HALF of the
world's largest cities
already experience
water scarcity

(World Economic Forum 2017)

all about numbers:



Waterroots asks **WHY** and **HOW**

a story of rain _





US

Crime + Justice

Energy + Environment

Extreme Weather

Space + Science

W

Philadelphia residents panic-bought water after being alerted to a chemical spill but officials say tap water is safe for now



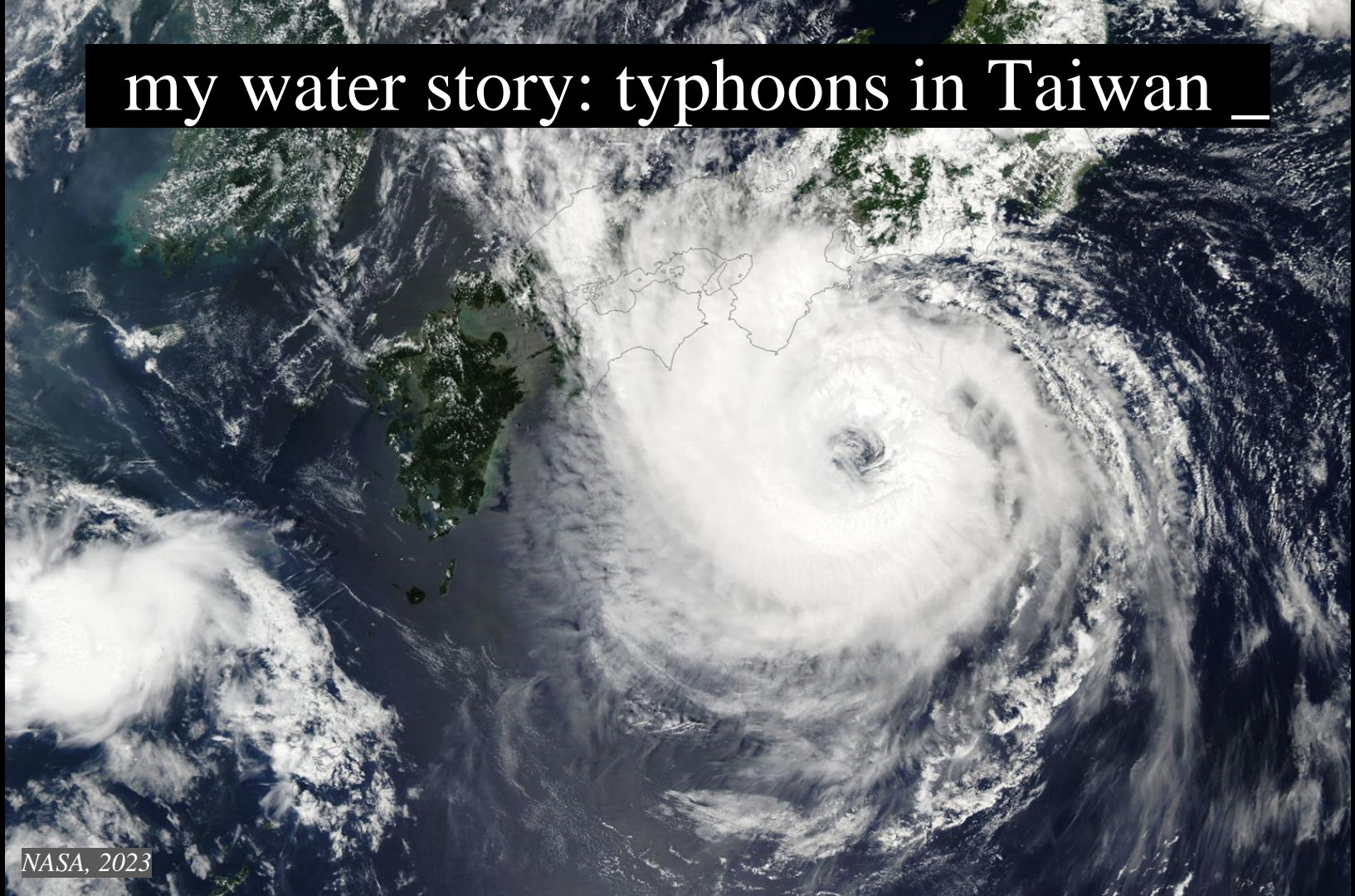
By [Celina Tebor](#), [Susannah Cullinane](#), [Dakin Andone](#) and [Danny Freeman](#), CNN

🕒 8 minute read · Updated 1:57 AM EDT, Tue March 28, 2023



my water story: typhoons in Taiwan _

NASA, 2023



Arenal, Costa Rica; Sun Link Sea, Taiwan



Medium, 2015



Trip, 2019

Taupo, New Zealand; Chania, Greece



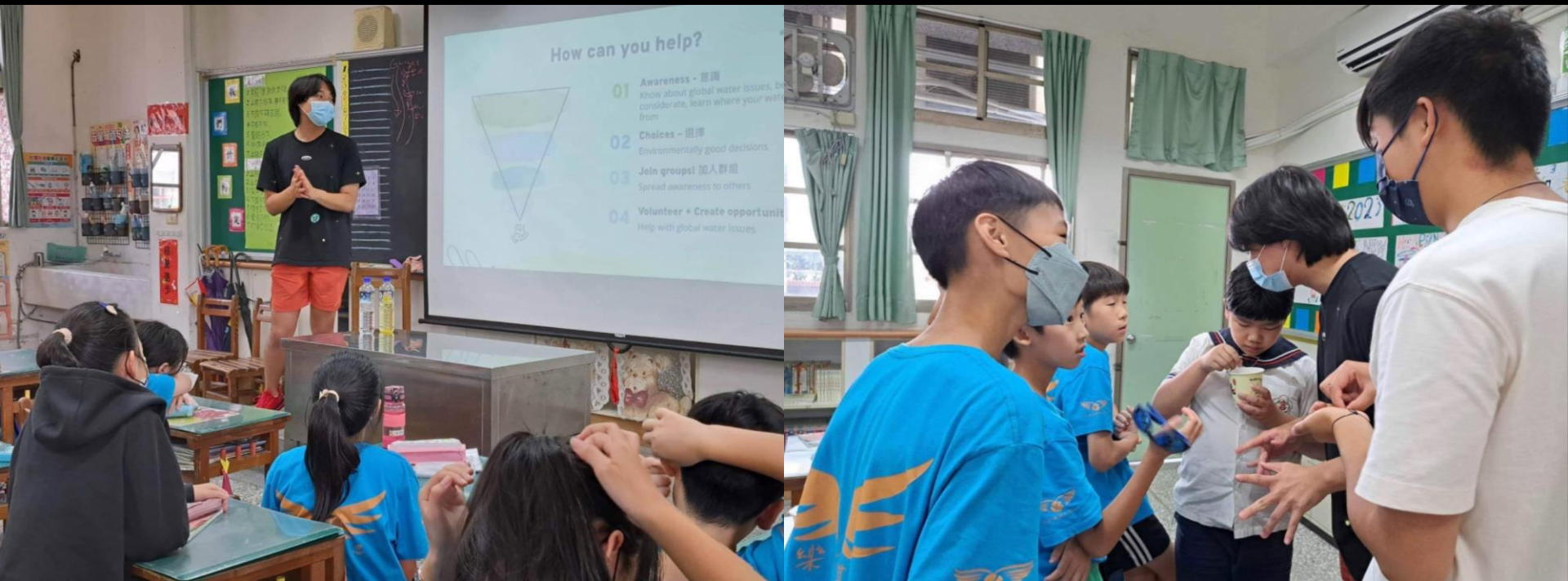
Sydney Herald, 2011



Cunard, 2023



The birth of Waterroots





*The Nature Conservancy,
2018*



Reuters, 2021

The Power of Water Stories _



Weather Channel, 2016



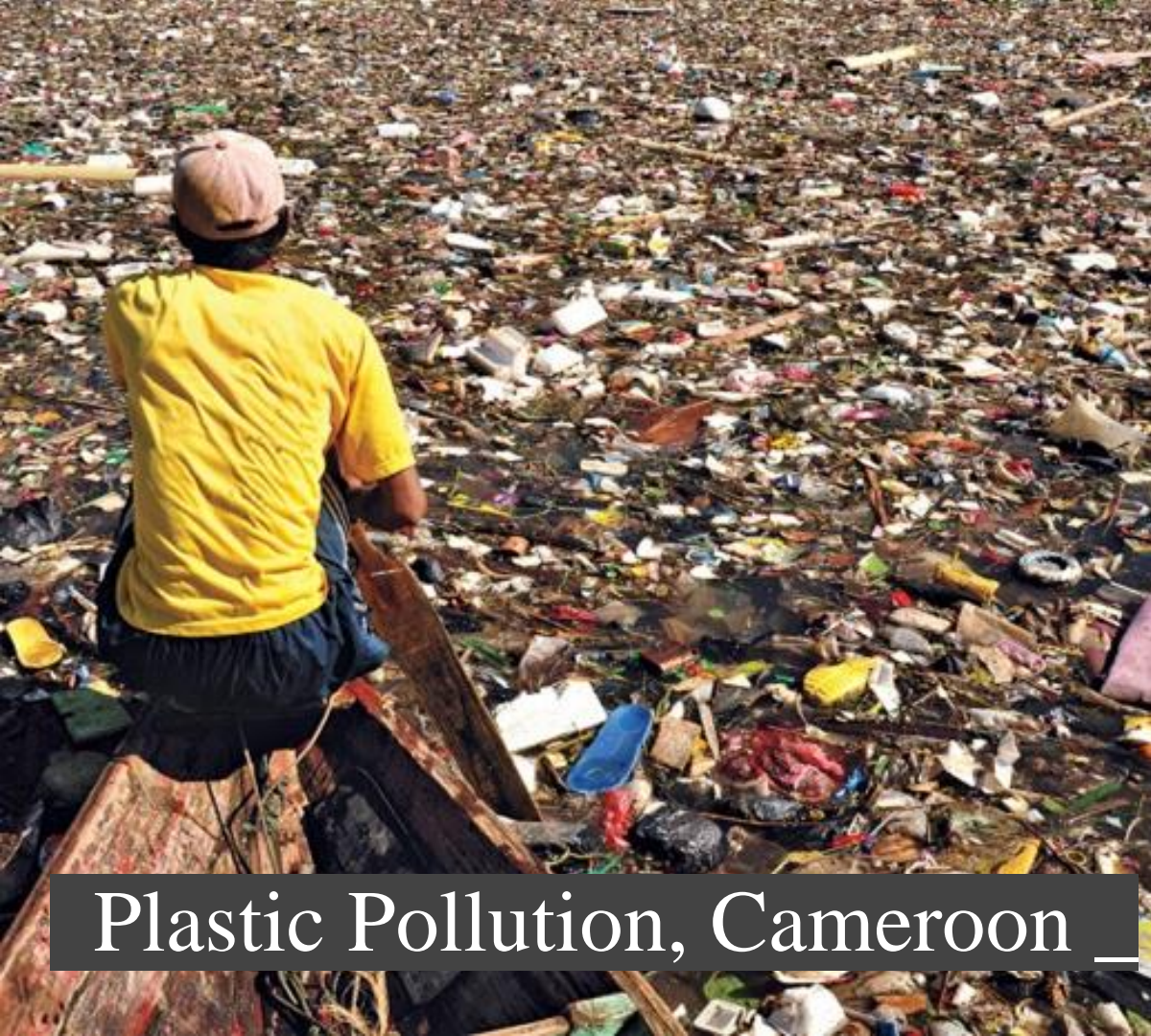
Desert Sun, 2016



Period Poverty, Nigeria _



PCGHR, 2020



Plastic Pollution, Cameroon



water roots
AFRICA DIVISION HEAD

C&EN, 2020



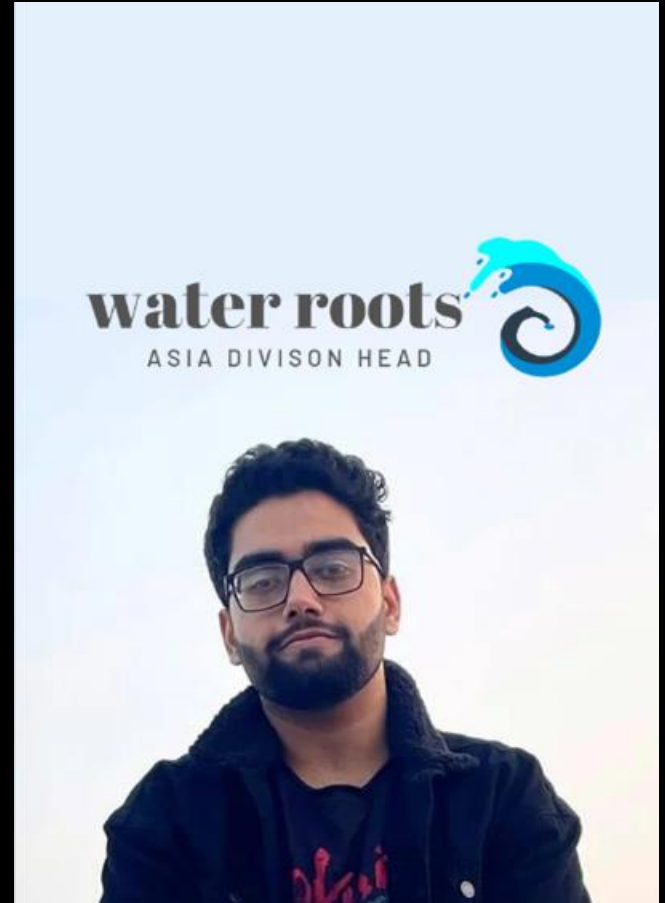
Climate Education, Kenya



Samaritan's Purse, 2018

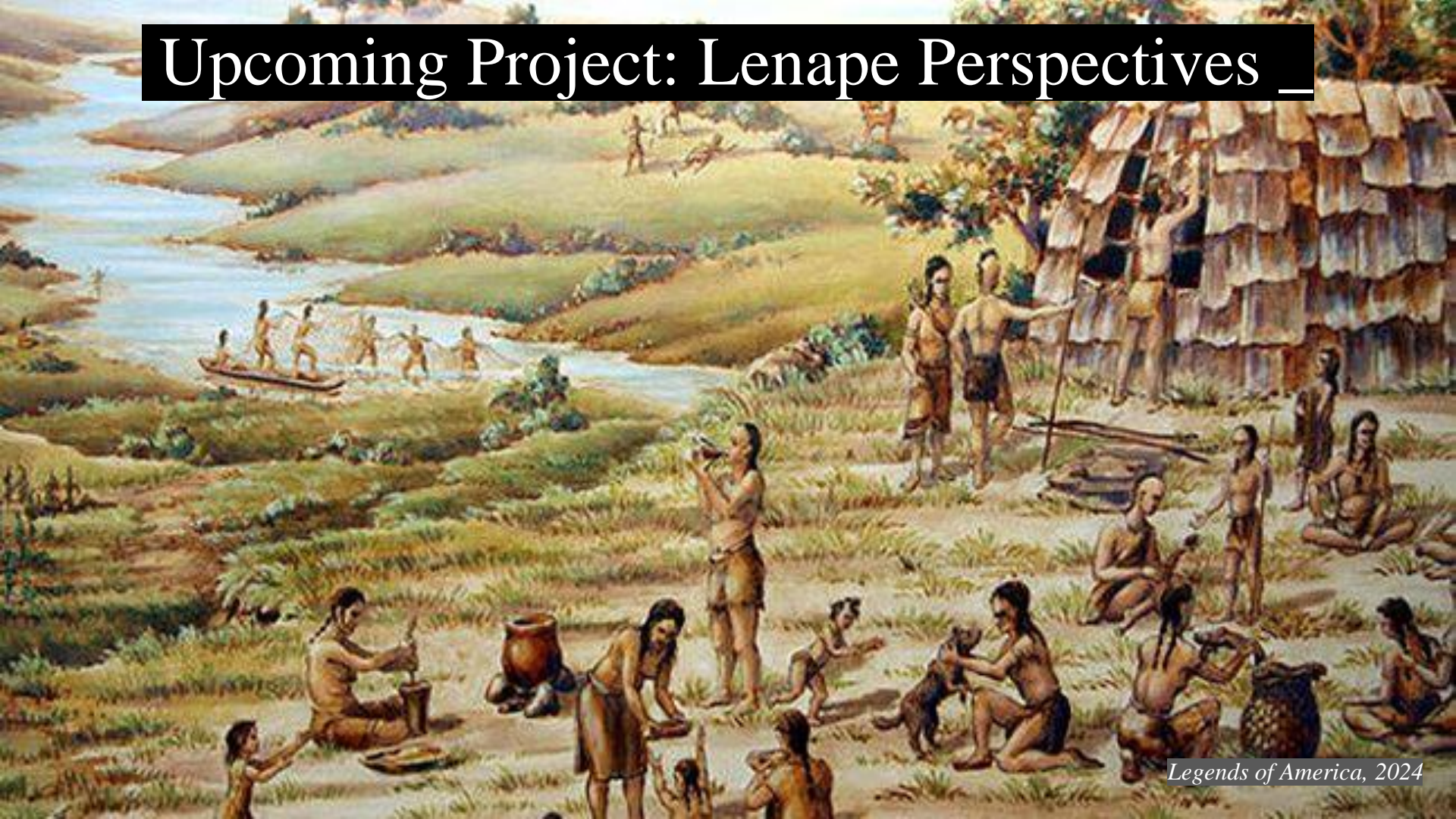


Hair Loss, Bangladesh _



Independent, 2024

Upcoming Project: Lenape Perspectives _



Key messages:

- *Cultural background influences water perceptions*
- *Environmental education is the first step to climate resilience*
- ***Youth** can make meaningful impacts*

Executive Team:



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Director



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United Nations
Academic Impact



**Millennium
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American Water Works
Association



**DUKE
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The Water Center
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GLOBAL WATER
ALLIANCE



EARTHECHO
INTERNATIONAL



Bow Seat
Ocean Awareness Programs



**PHILADELPHIA
WATER**
DEPARTMENT