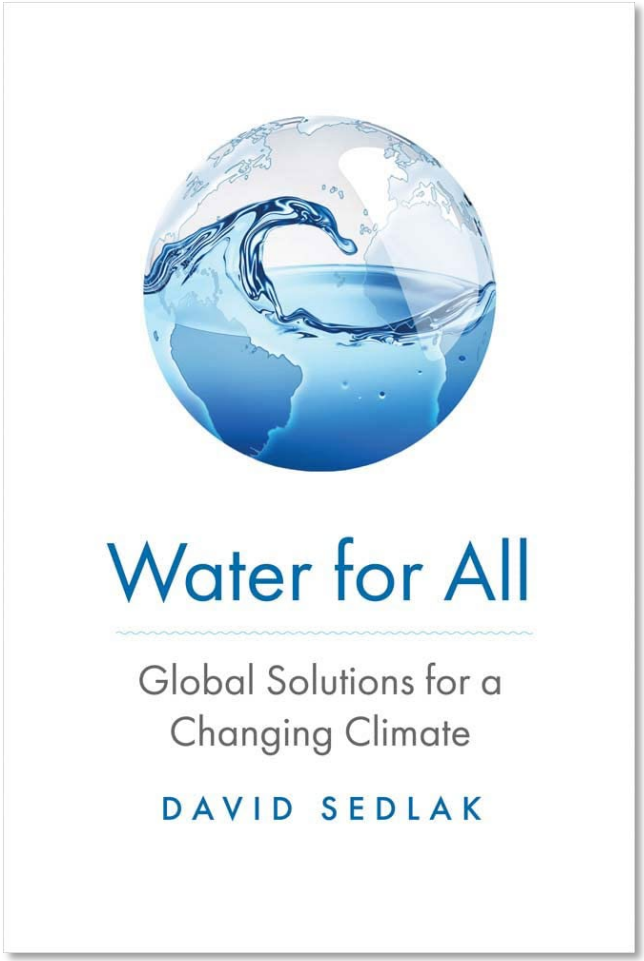
Global Solutions for a Changing Climate

David Sedlak
Department of Civil & Environmental Engineering
University of California, Berkeley
Urban Water Institute's 2024 Water Conference
February 22, 2024
Palm Springs, CA



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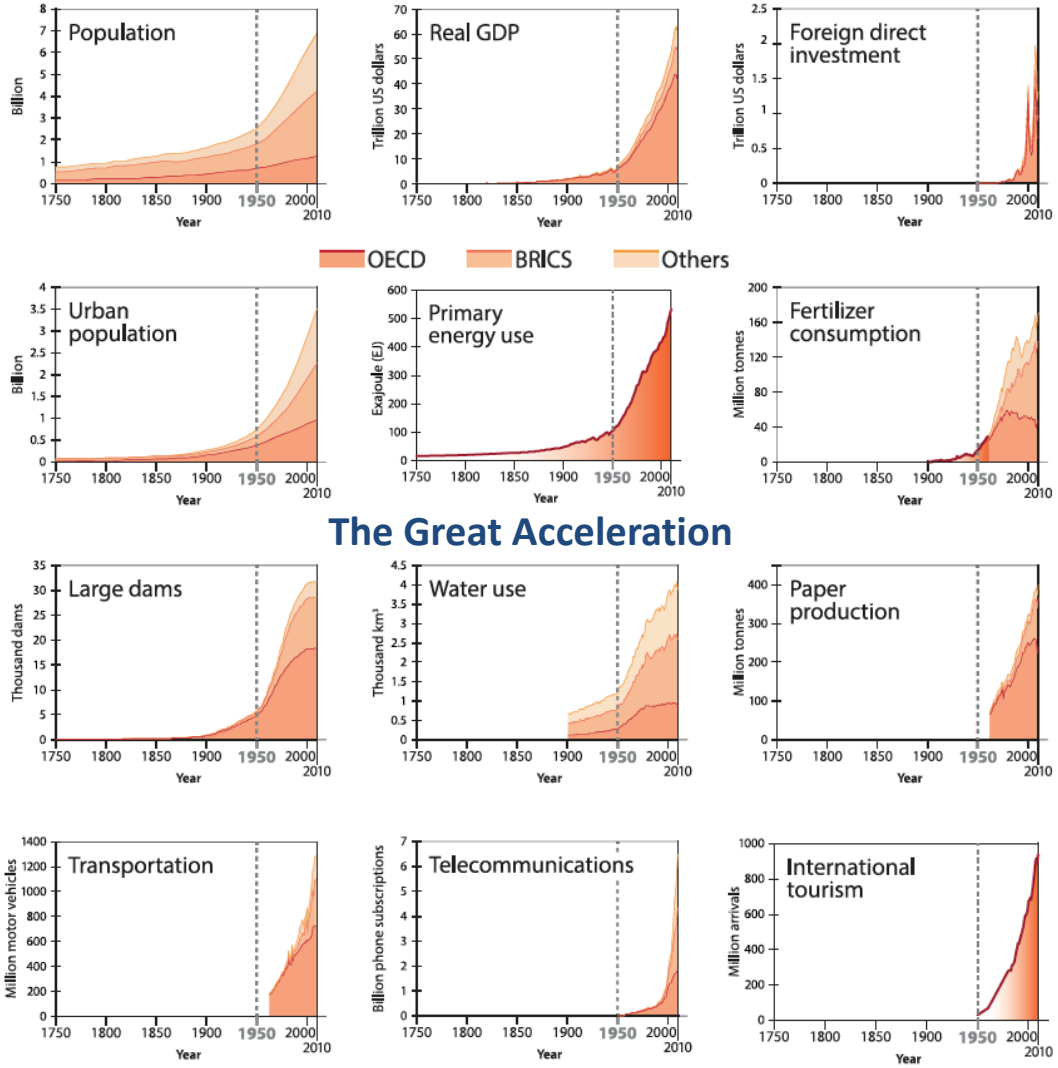

The Great Acceleration

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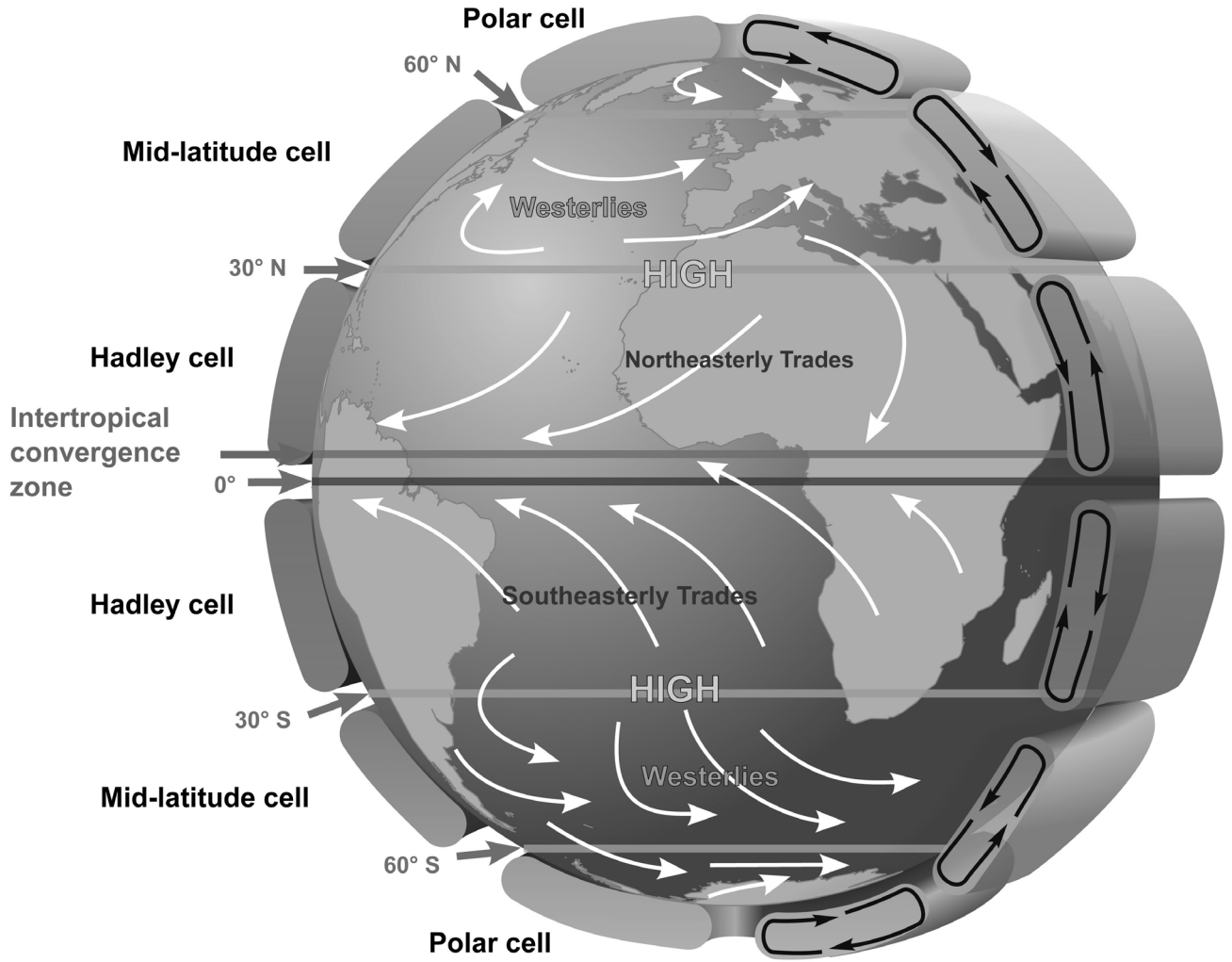
Steffen *et al.* (2015)



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Water for the Wealthy


Water for the Many
The Philipine Star


Water for the Poor
NY Times


Water for Health
Wikipedia

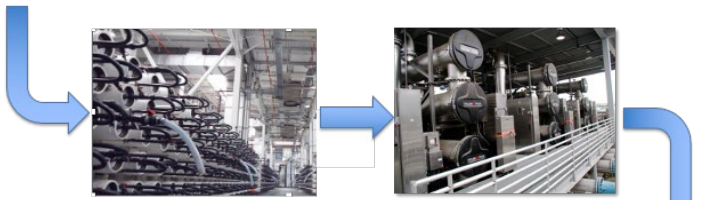

Water for Food


2000
Water for Ecosystems
NASA
2013
2013

A Water Reuse Revolution

Full Advanced Treatment (FAT)

Treated Wastewater



Physical/Chemical Treatment

Managed Aquifer Recharge

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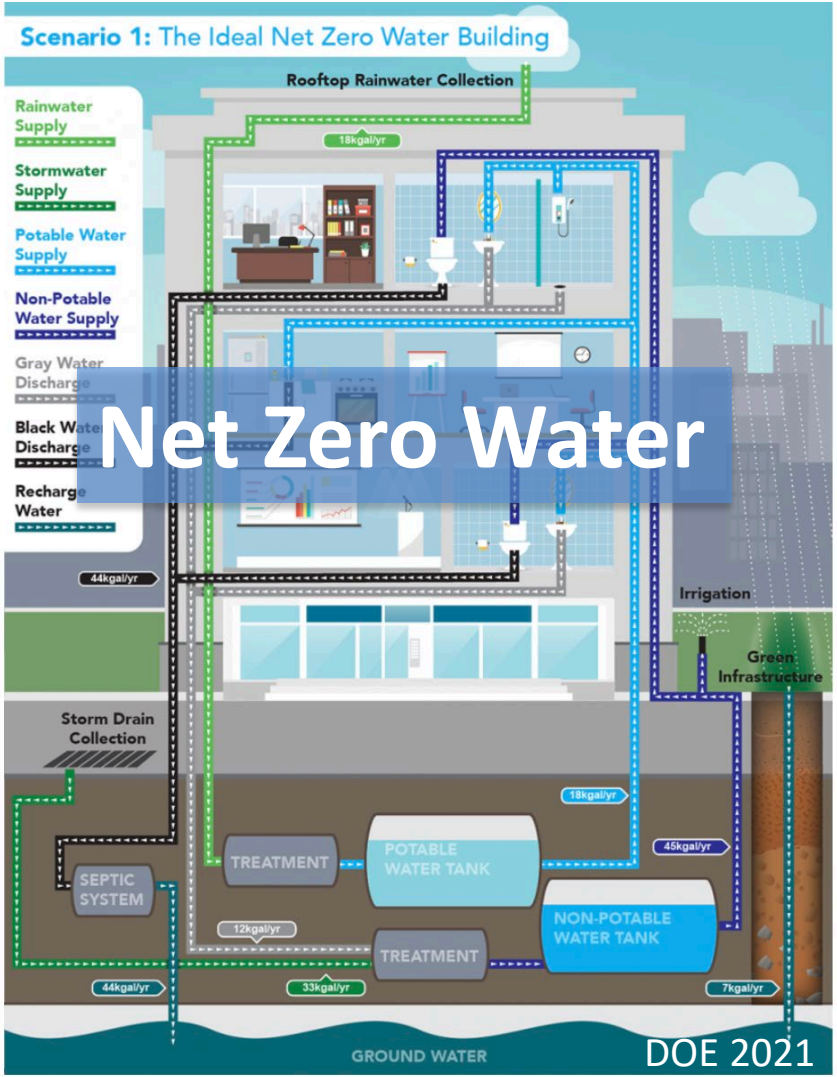

Net Zero Water

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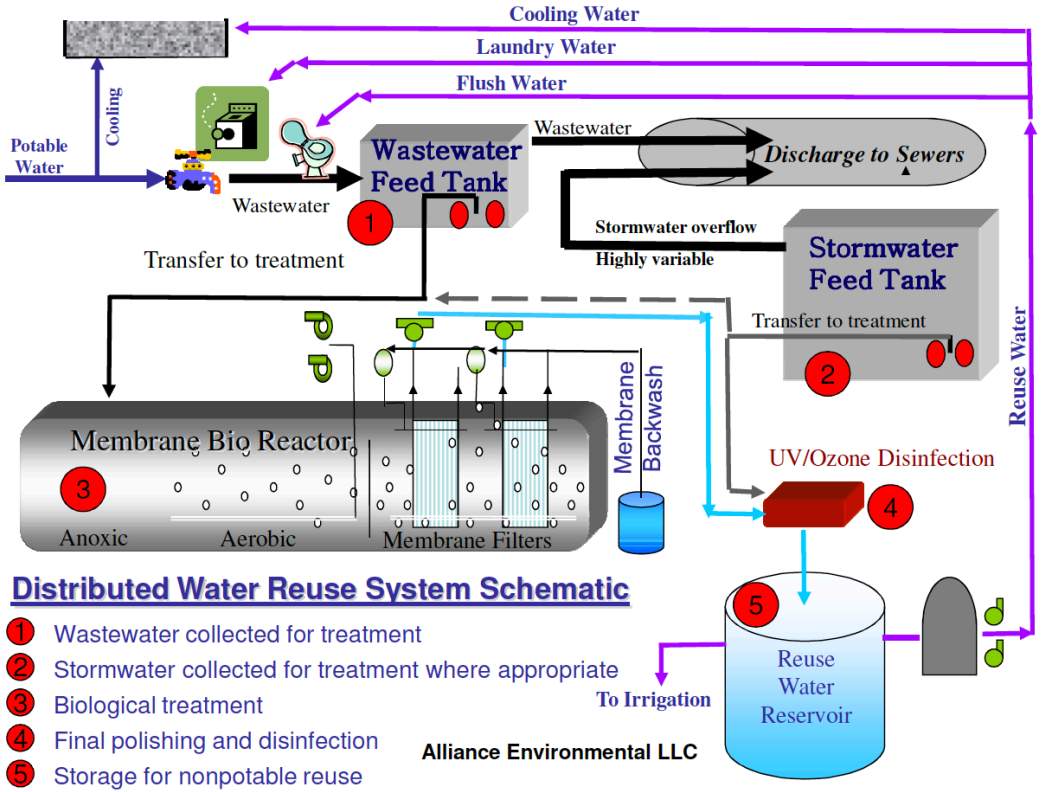
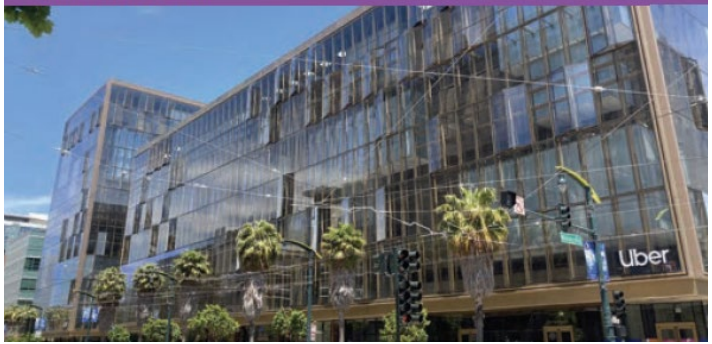
Halfway to Net Zero in New York

Battery Park City

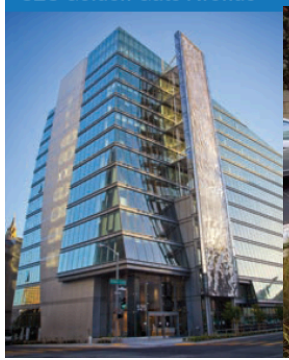


Projects in Our Backyard

Uber Mission Bay at 1455 and 1515 Third Street – San Francisco, CA



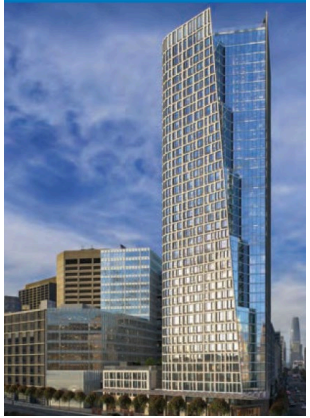
San Francisco Public Utilities Commission Headquarters — 525 Golden Gate Avenue



Salesforce Tower – San Francisco, CA

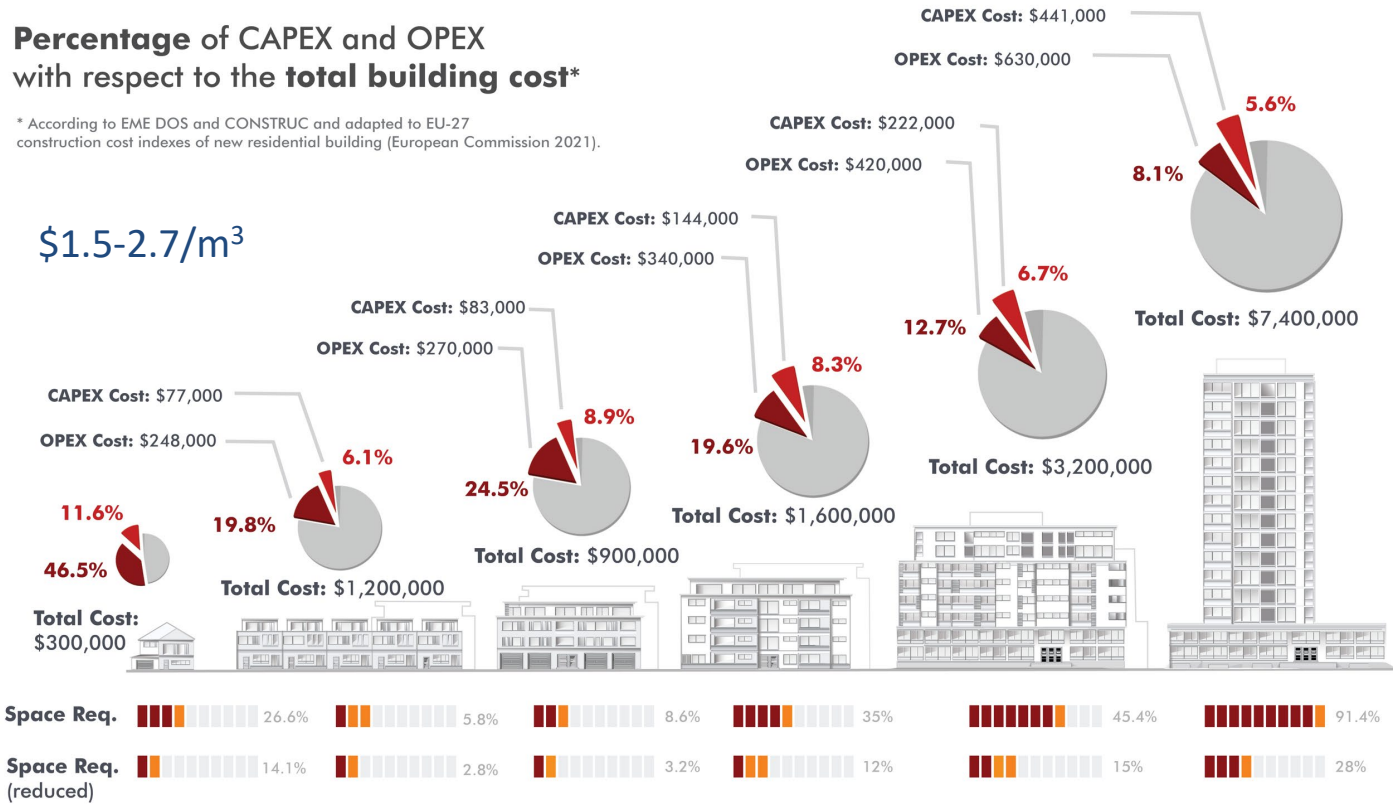
Chase Center – San Francisco, CA

Fifteen-Fifty at 1550 Mission Street – San Francisco, CA



Mission Rock at Third and Mission Rock Street – San Francisco, CA

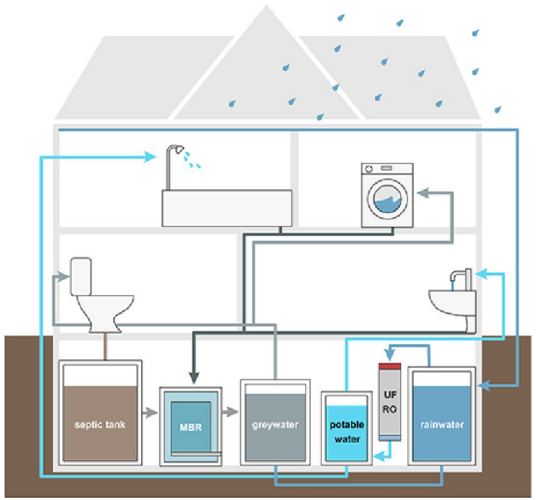
Costs: Techno-Economic Analysis



Garrido-Baserba et al. (2022)

Beyond Big Projects in Wealthy Cities

Single Family Dwellings



Rabaey et al. (2020)

Rural Communities

THE CALIFORNIA REPORT MAGAZINE

Racism Robbed This Historically Black California Town of Its Water. Now, They're Developing Water of Their Own

LISTEN

By Teresa Cotsirilos
Food and Environment Reporting Network Sep 9, 2022 Save Article

Sherry Hunter, president of the Allensworth Community Services District in rural Tulare County, stands near a swing set at the town's community center on Friday, Aug. 29, 2022. *(Craig Kohlruss/FERN)*

Emerging Megacities

How Africa can leapfrog the world's stagnant water paradigm

August 12, 2019

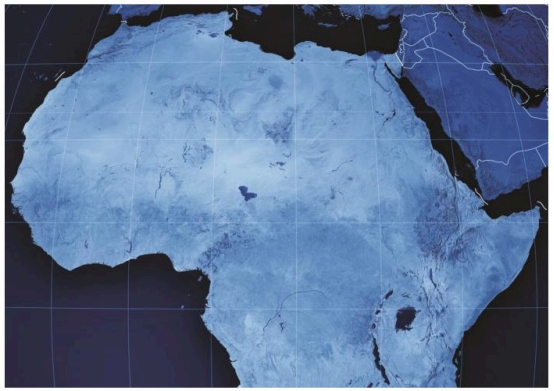


Photo credit: FrankRamspott/iStock

Africa has an unprecedented opportunity to embrace widespread water innovation. IWA is poised to help catalyse this, and to share the lessons globally in a two-way exchange with its African partners, writes ***Kala Vairavamoorthy****.*

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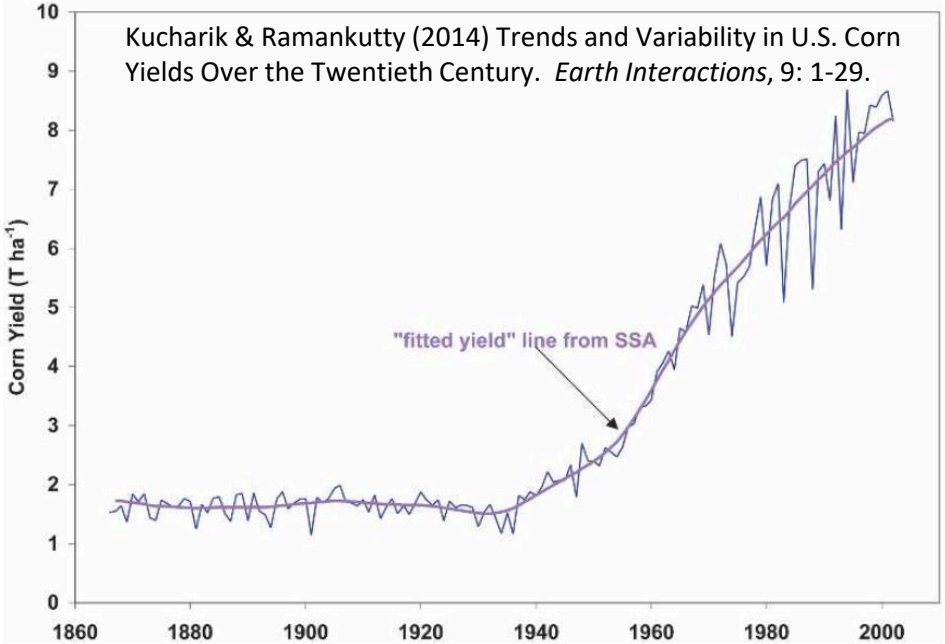
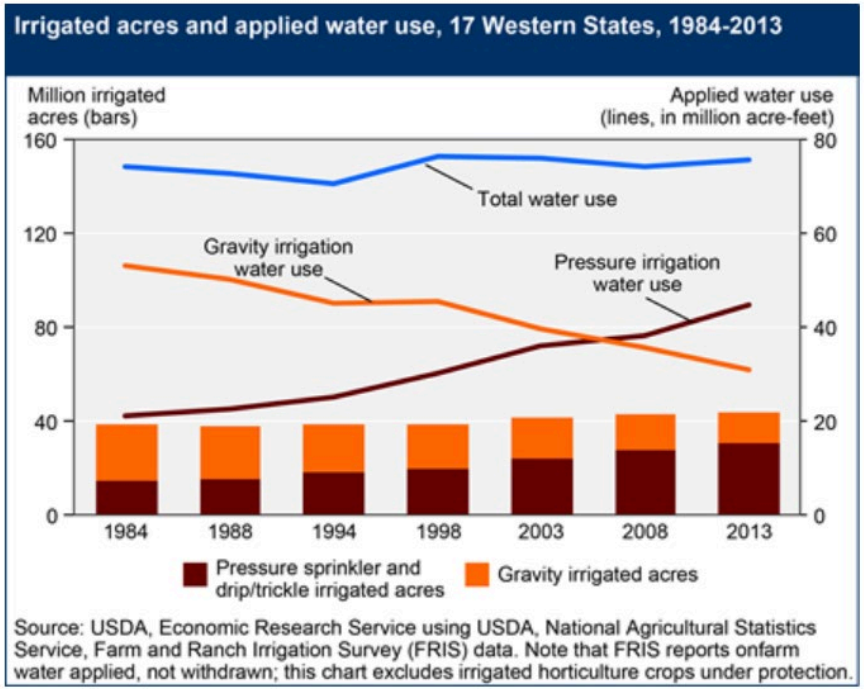
Water for Food

Center-Pivot Irrigation in Kansas USA

Wikipedia

The First Green Revolution





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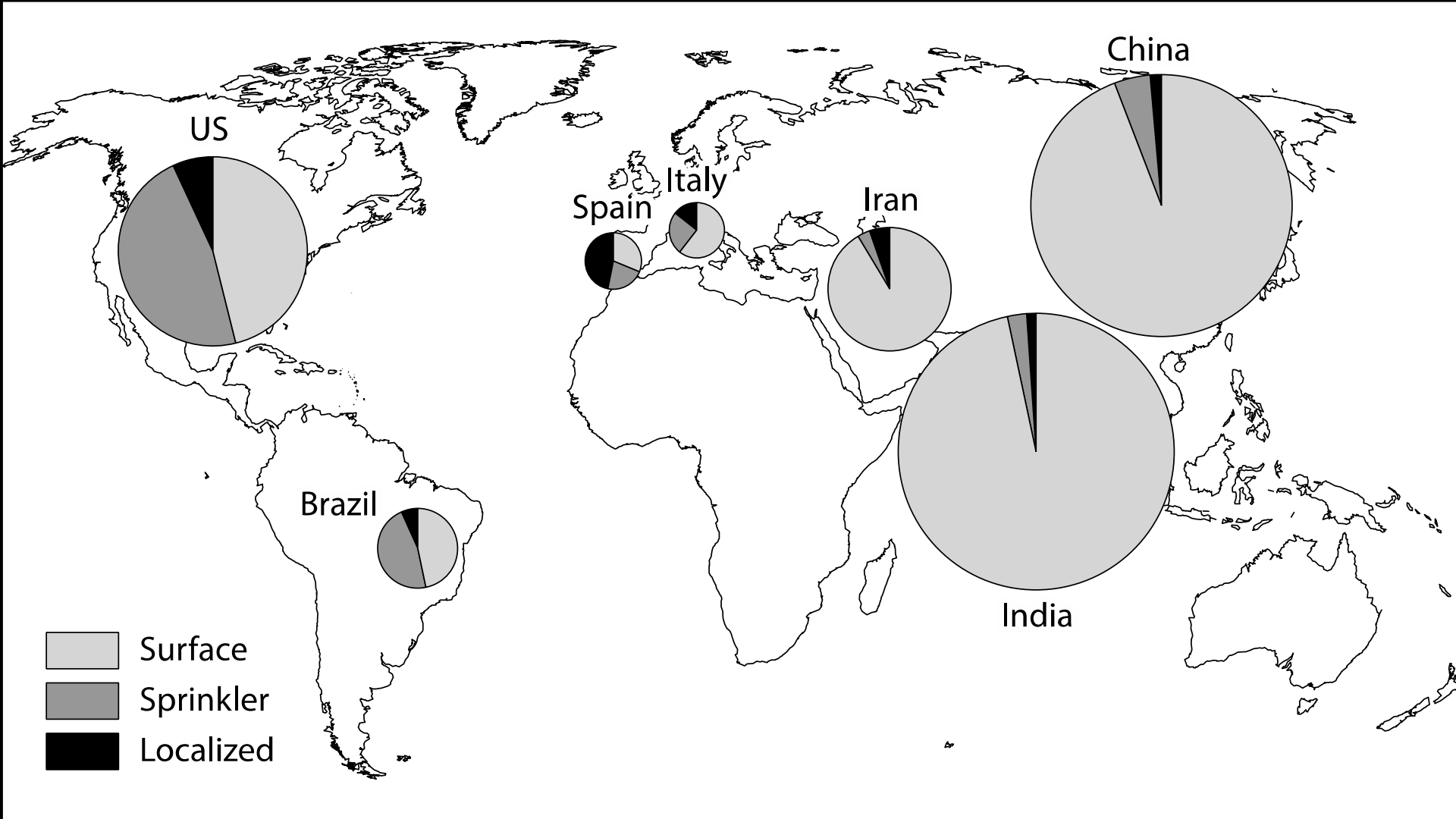
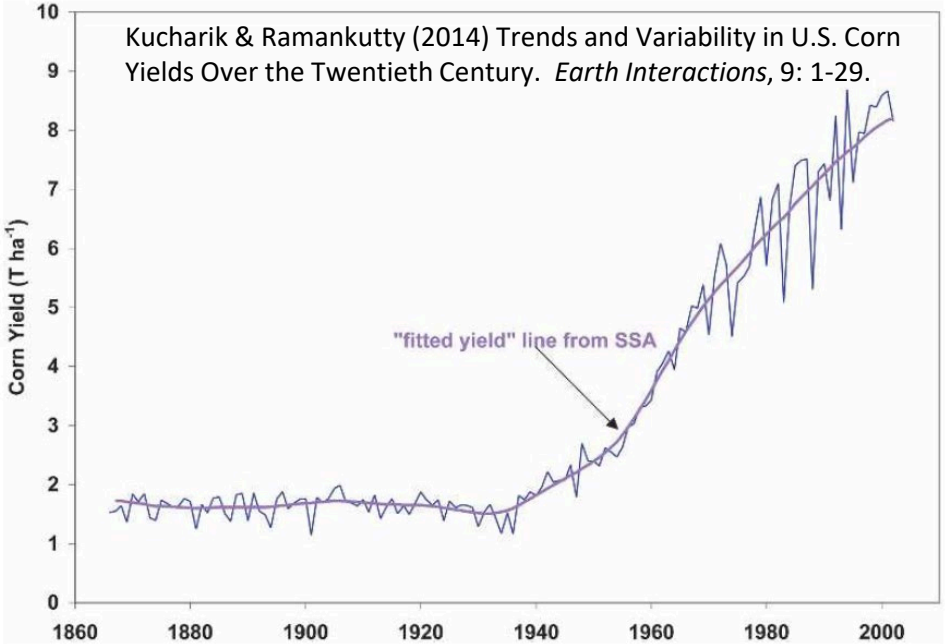
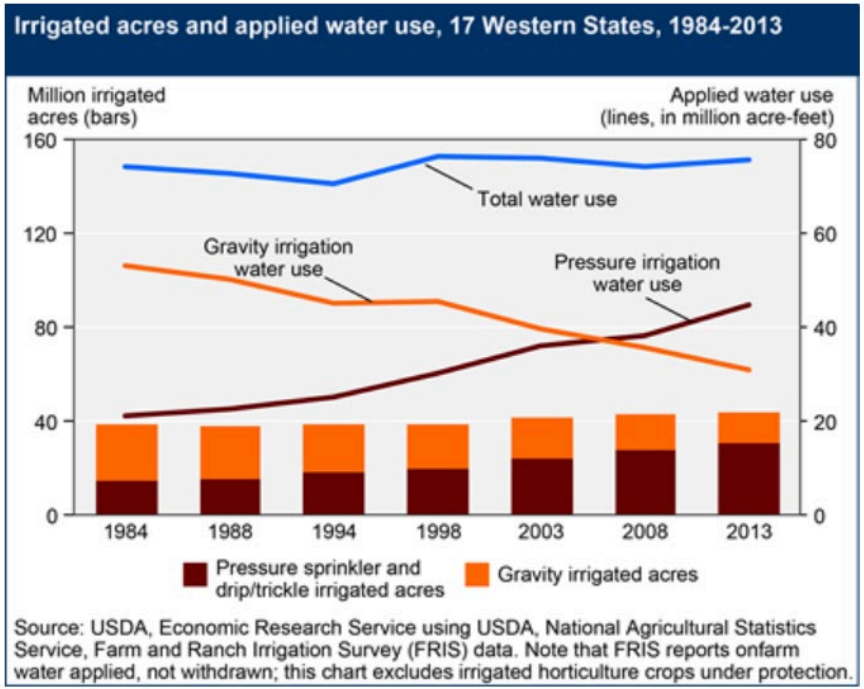

US
Spain
Italy
Iran
China
Brazil
India
Surface
Sprinkler
Localized

The First Green Revolution





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Advanced Water Technology for Agriculture

Brackish Water Desalination

Modular Small-Scale Treatment

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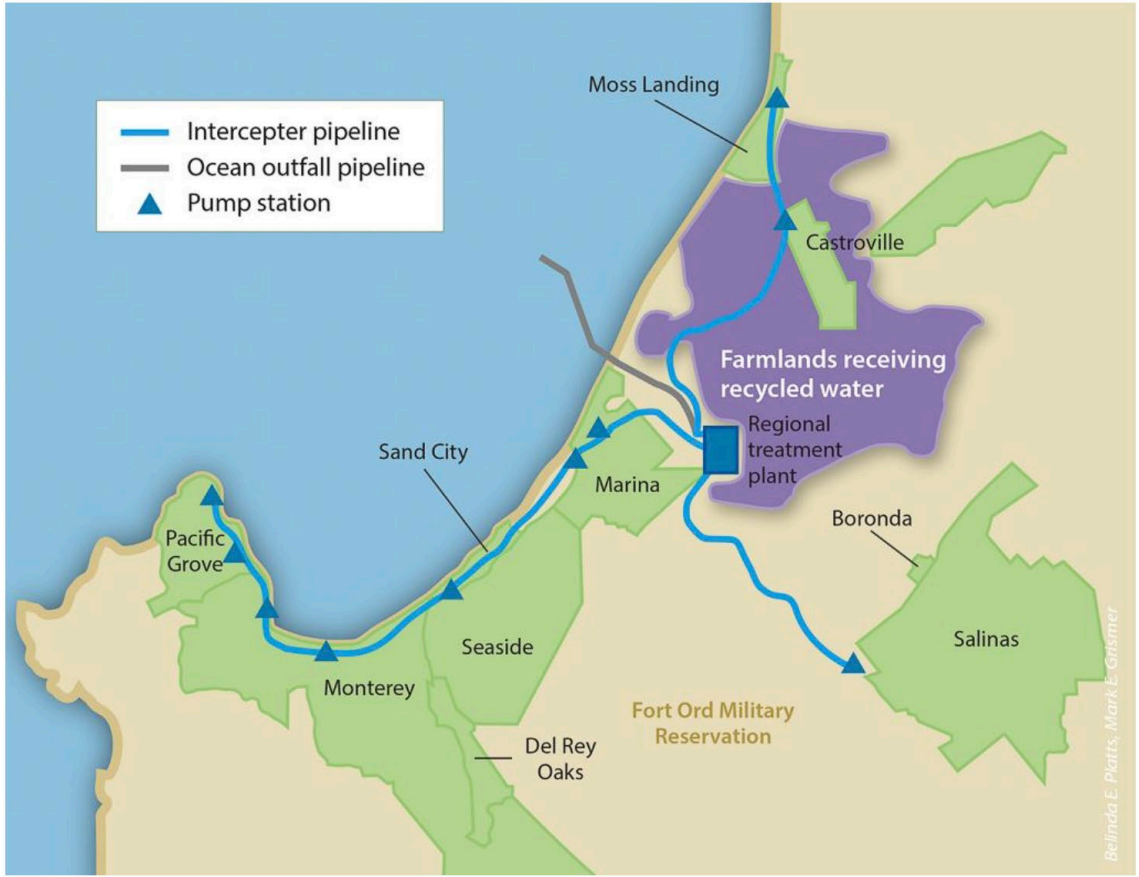
Advanced Water Technology for Agriculture



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Takeaways

Water challenges facing wealthy city dwellers are one of six global water crises.

No single solution will solve the world's water crises.

Experience gained in local water crises can be applied in new locations.

People in this room are integral to **Water for All**.

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