



Creative Mapping:
hydroglobe

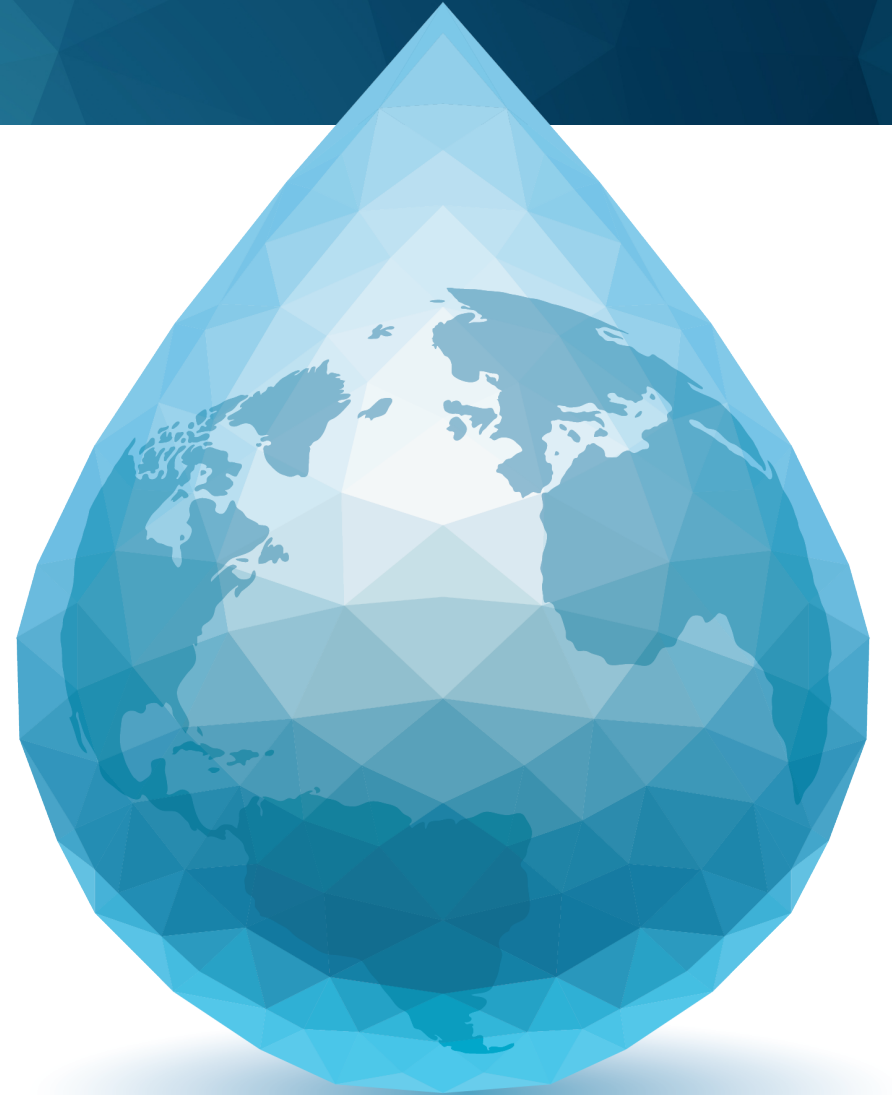
EDPX 3350/4350 – WINTER 2018

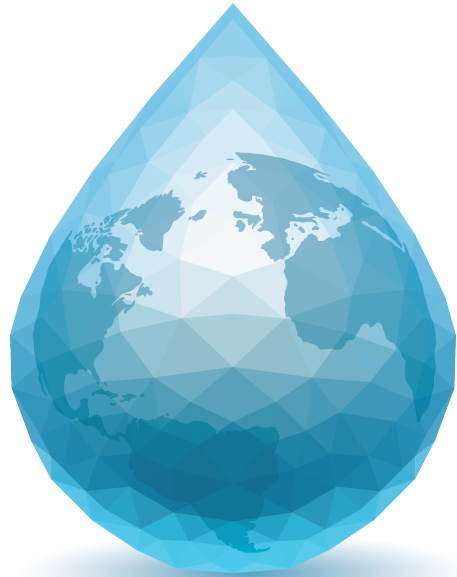
Abigail Murphy + Heidi Landis

CONCEPT

ICO WATER

Create a dApp/ICO to support the development of high-quality drinking water and sanitization services that are easily accessible and continually sustained through education of strong, local communities*





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ICO WATER

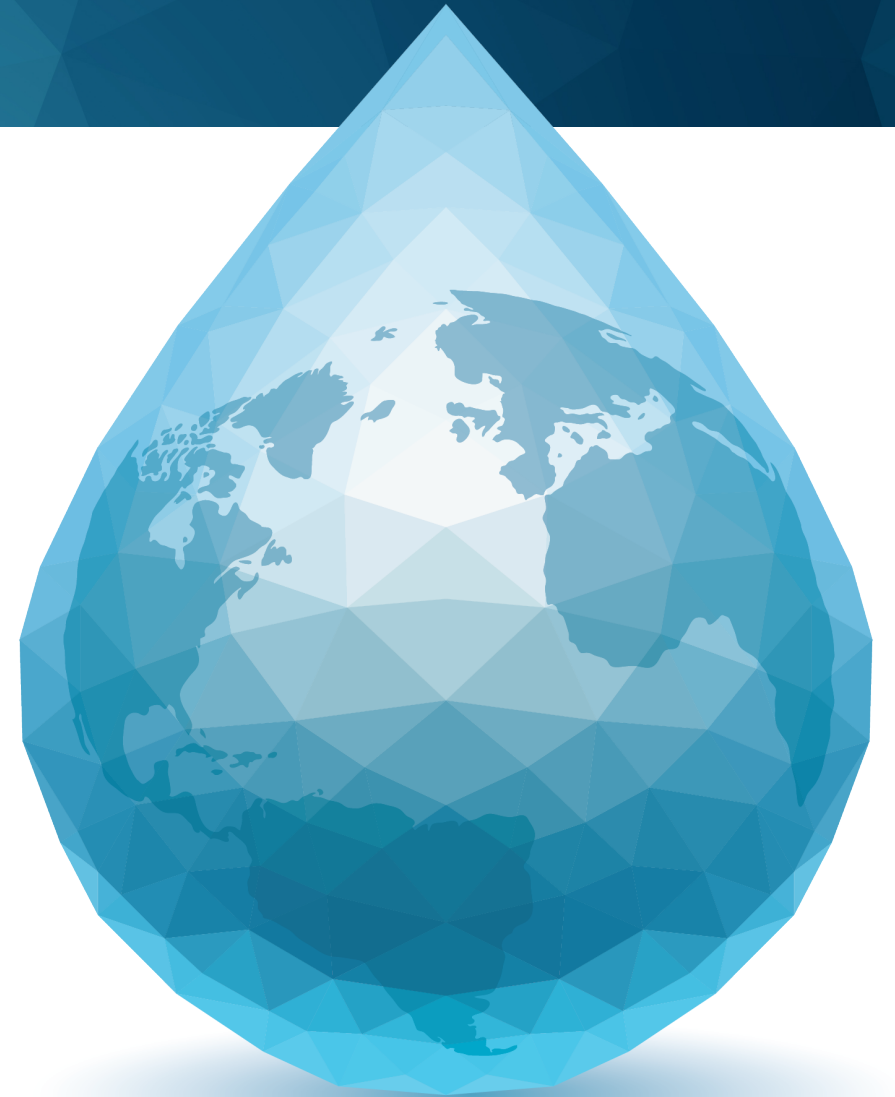
ICO WATER SYSTEM

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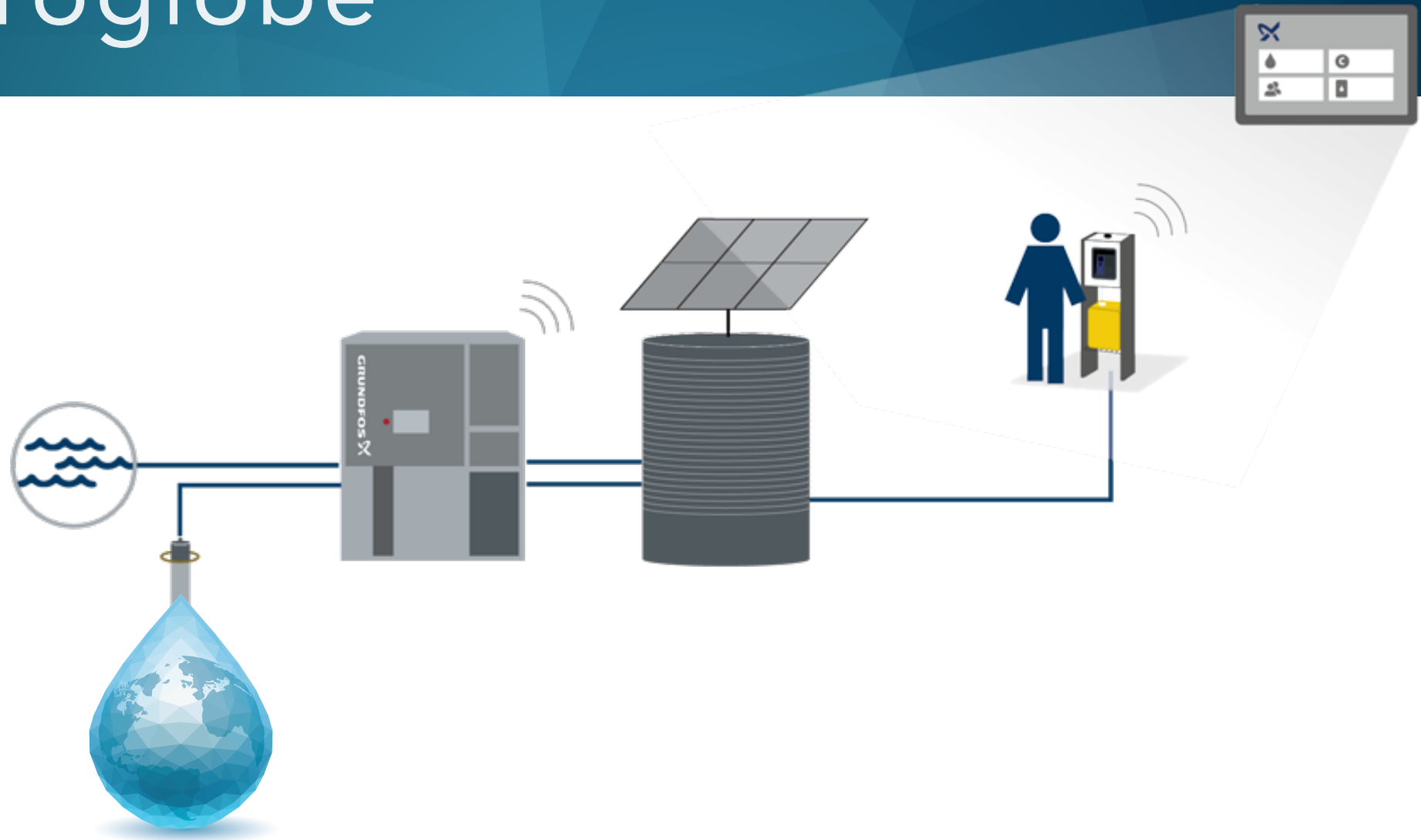
Using the same system as developed by Grundfos Lifelink water supply kiosk:

Develop a water kiosk in communities that do not have direct access to a line of clean water.

The water system can collect rain water, ground water, and surface water. The water is cleaned through a solar-panel run filtration system, stored in a storage tank, and distributed through a kiosk station.



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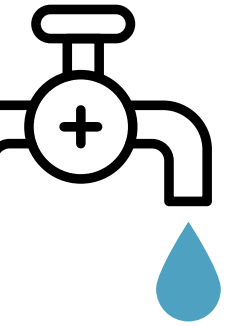




Cambodia

ONE OF THE TOP TEN PLACES MOST IN NEED OF CLEAN WATER

CAMBODIA: WATER FACTS



4 MILLION

people out of the total population in Cambodia lack access to safe water



2 MILLION

lack access to improved sanitation



84% OF THE POPULATION

does not have access to clean, safe water

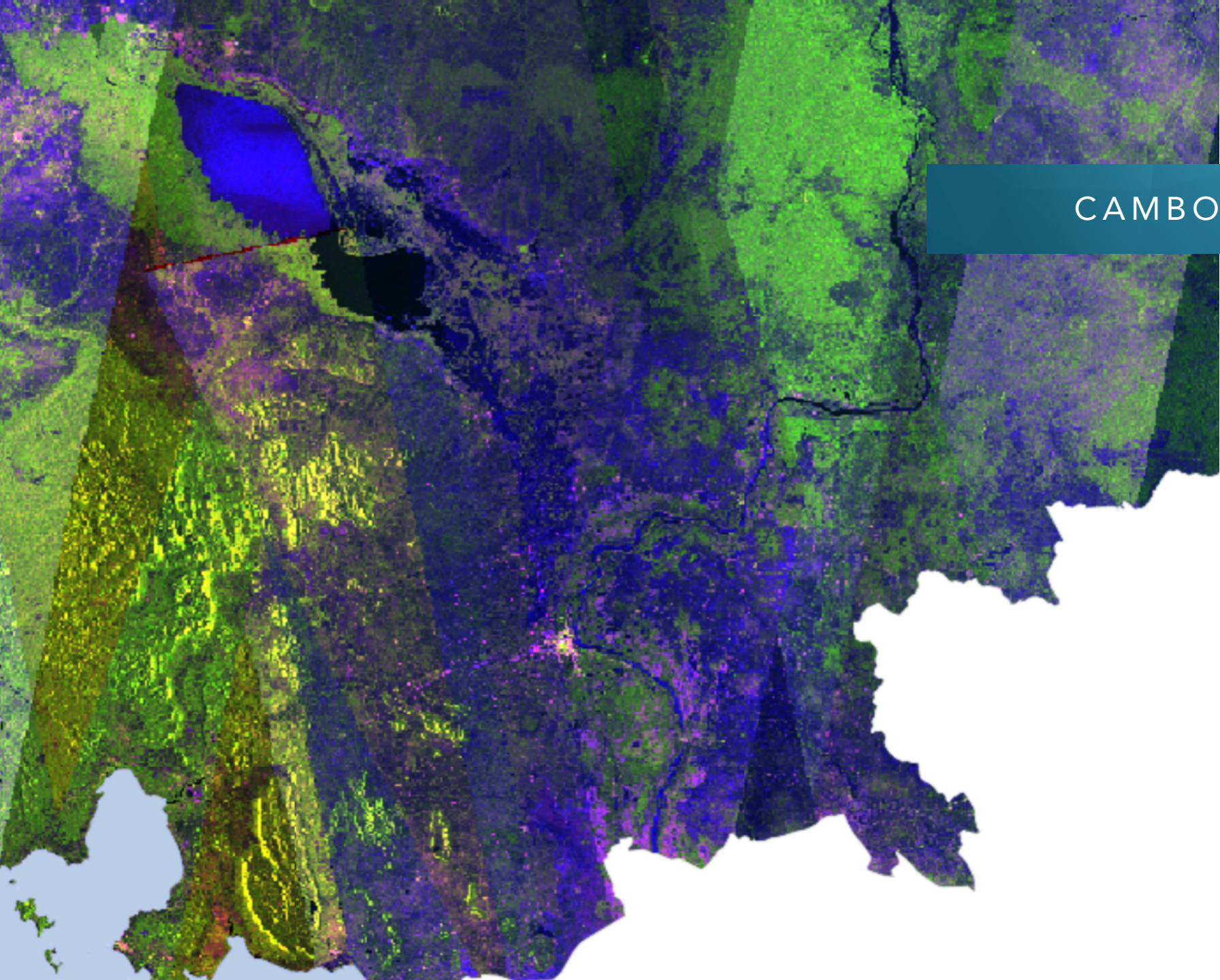
Why CAMBODIA?

Current issues with development:

- Lack of technology
- Contamination of water
- Reliance on rainfall for drinking water

Benefits/issues of location:

- Located on the Mekong River
- Cambodia experiences monsoon season from May to November



CAMBODIA WATER SOURCES

Locations have been selected that are directly on a water source or within close proximity to a water source.

Locations have been selected to serve the greatest number of those most in need.

CAMBODIA POPULATION MAP



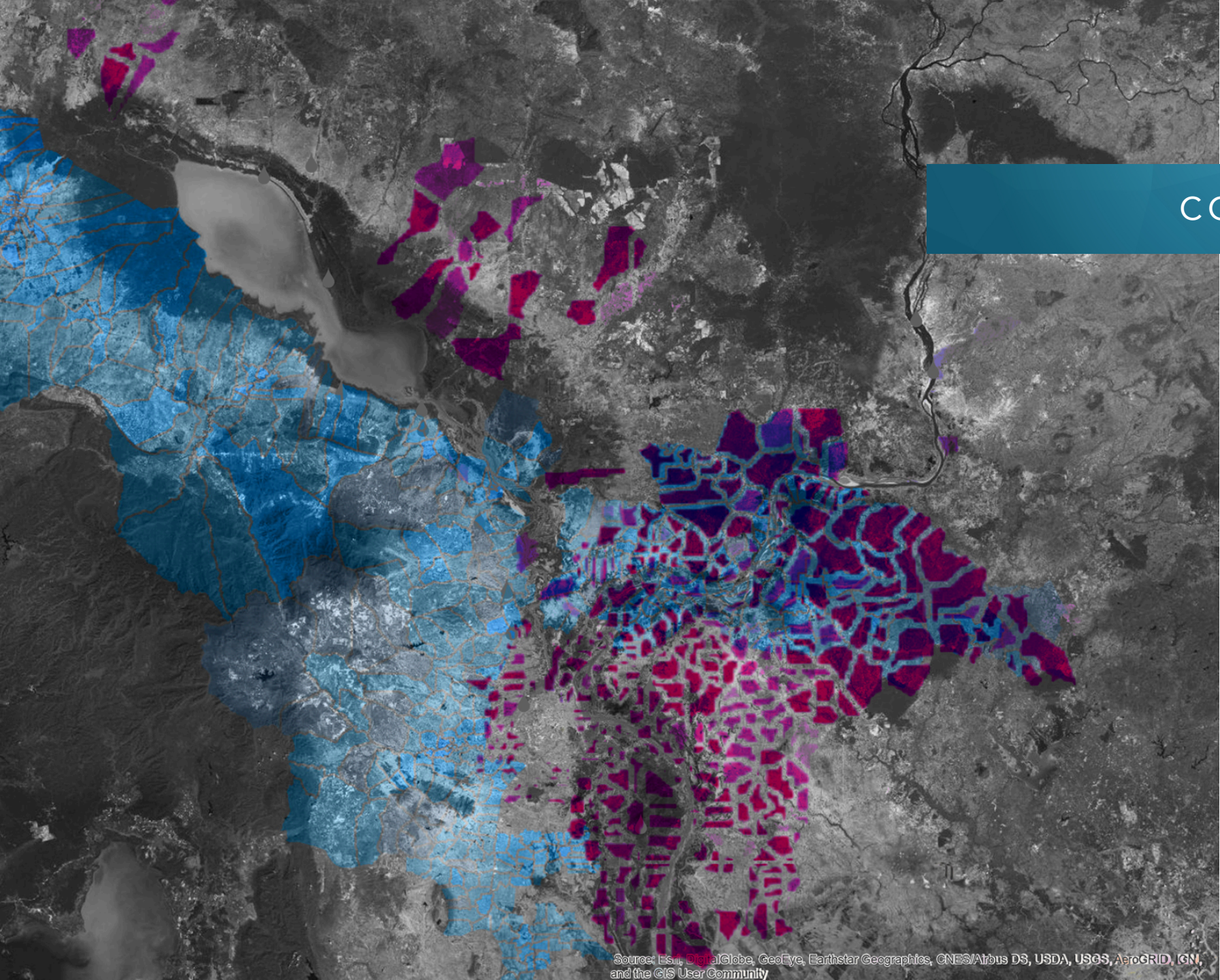
LEGEND

- International boundary
- Province boundary
- National road
- Secondary road
- Other road
- Railway
- Water body

Population density 2010 (people per km²)

- > 10000
- 5000 - 10000
- 1000 - 5000
- 500 - 1000
- 250 - 500
- 100 - 250
- < 100

CONTAMINATED WELLS

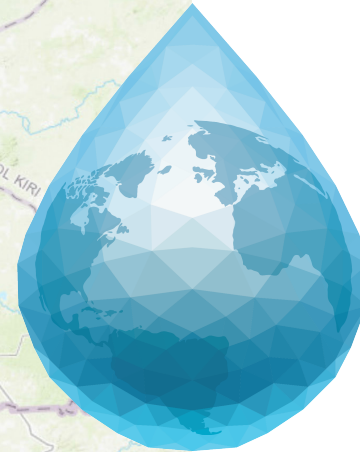


Legend

- Latrine in %
- 5% - 25%
 - 25% - 50%
 - 50% - 75%
 - 75% - 100%

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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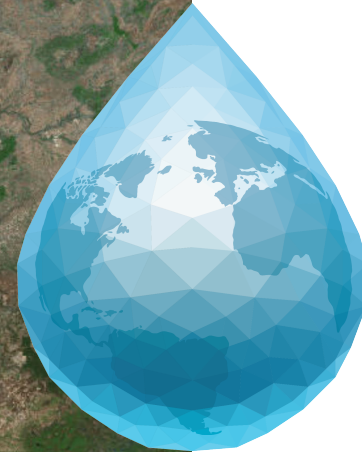
Radius of Each
Water Drop:
**6 MILE DIRECT
ACCESS RADIUS**



hydroglobe WATER KIOSKS

Radius of Each
Water Drop:

6 MILE DIRECT
ACCESS RADIUS



CAMBODIA: THE DATA

Directly on Water Source:

812, Kampong Phluk, Cambodia
Lat: 13.212 Lon: 103.973

55, Chhnok Tru, Cambodia
Lat: 12.497 Lon: 104.454

Moat Khla Floating Village
Lat: 12.895 Lon: 104.17

140, ឃុំ ស្រីប្រី, Cambodia
Lat: 12.065 Lon: 104.749

5, Cambodia
Lat: 11.942 Lon: 104.715

Kandal
Lat: 11.223 Lon: 105.125

Kampi Rapid
Lat: 12.616 Lon: 106.019

សំបួរ, Kratié Province
Lat: 12.774 Lon: 105.967

Close Proximity to Water Source:

5 National Hwy 5, ឃុំ ពន្ទុលត្រី, Cambodia
Lat: 12.439 Lon: 104.459

54, Krakor, Pursat Province
Lat: 12.551 Lon: 104.209

NR6, Damdek, Cambodia
Lat: 13.247 Lon: 104.118

Krong Kampong Chhnang,
Kampong Chhnang Province
Lat: 12.261 Lon: 104.676

Phum Kruos, Kampong Chhnang Province
Lat: 12.155 Lon: 104.632

ផ្ទុល្យល្យខេ ១៣៦, Oudongk, Cambodia
Lat: 11.816 Lon: 104.73

Chung Thnol, Phnom Penh
Lat: 11.596 Lon: 104.767

Khson Tboung, Prey Veng Province
Lat: 11.645 Lon: 105.153

Province of Source Population Size:

Siem Ream: 168,662

Pouthisat: 25,650

Kampong Thum: 31,871

Kampong Chhnang: 43,130

Phnom Penh: 1,242,992

Ta Khmua: 80,141

Kracheh: 29,033

Kampong Cham: 47,300

Total Population to Supply Water:

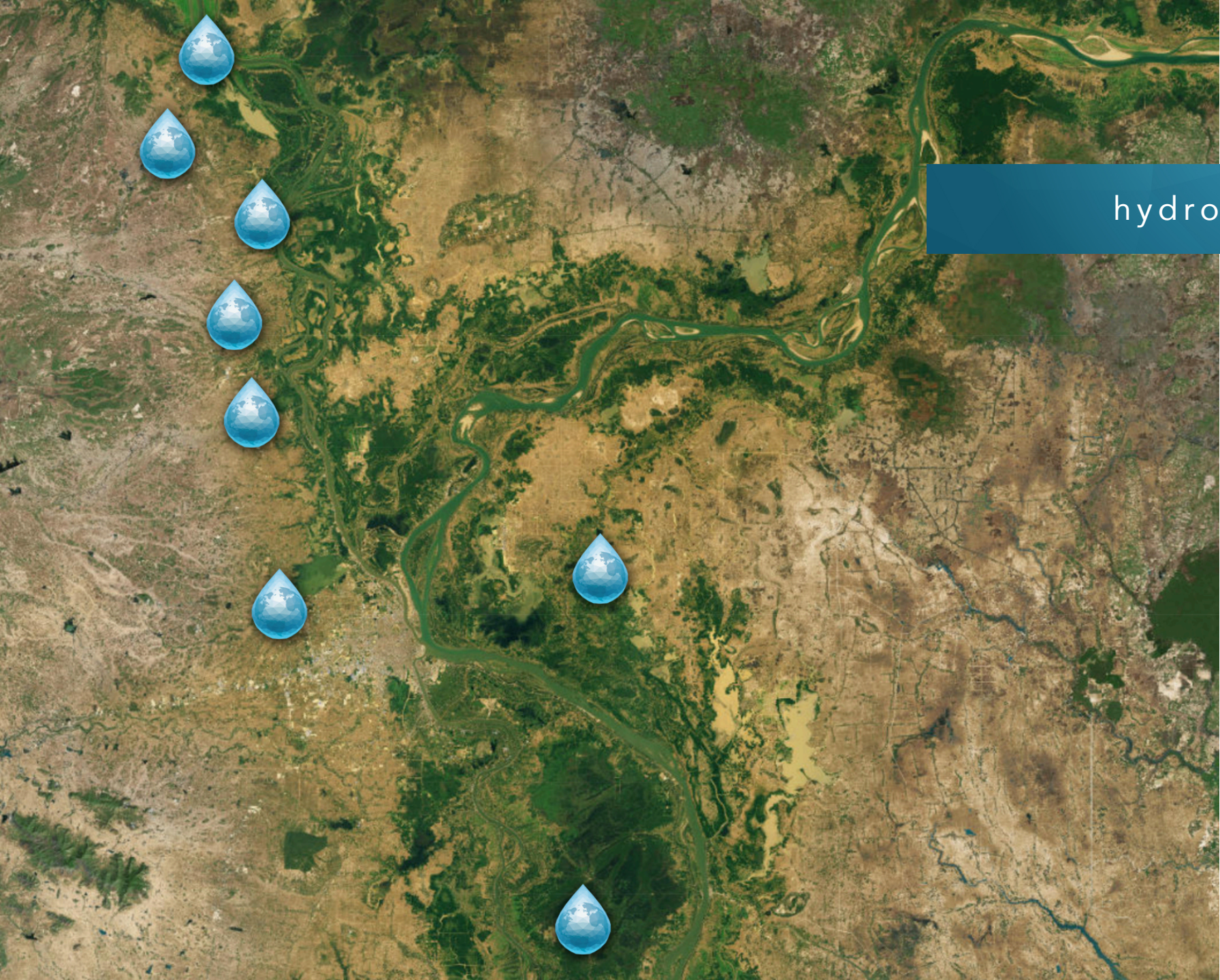
1,668,779



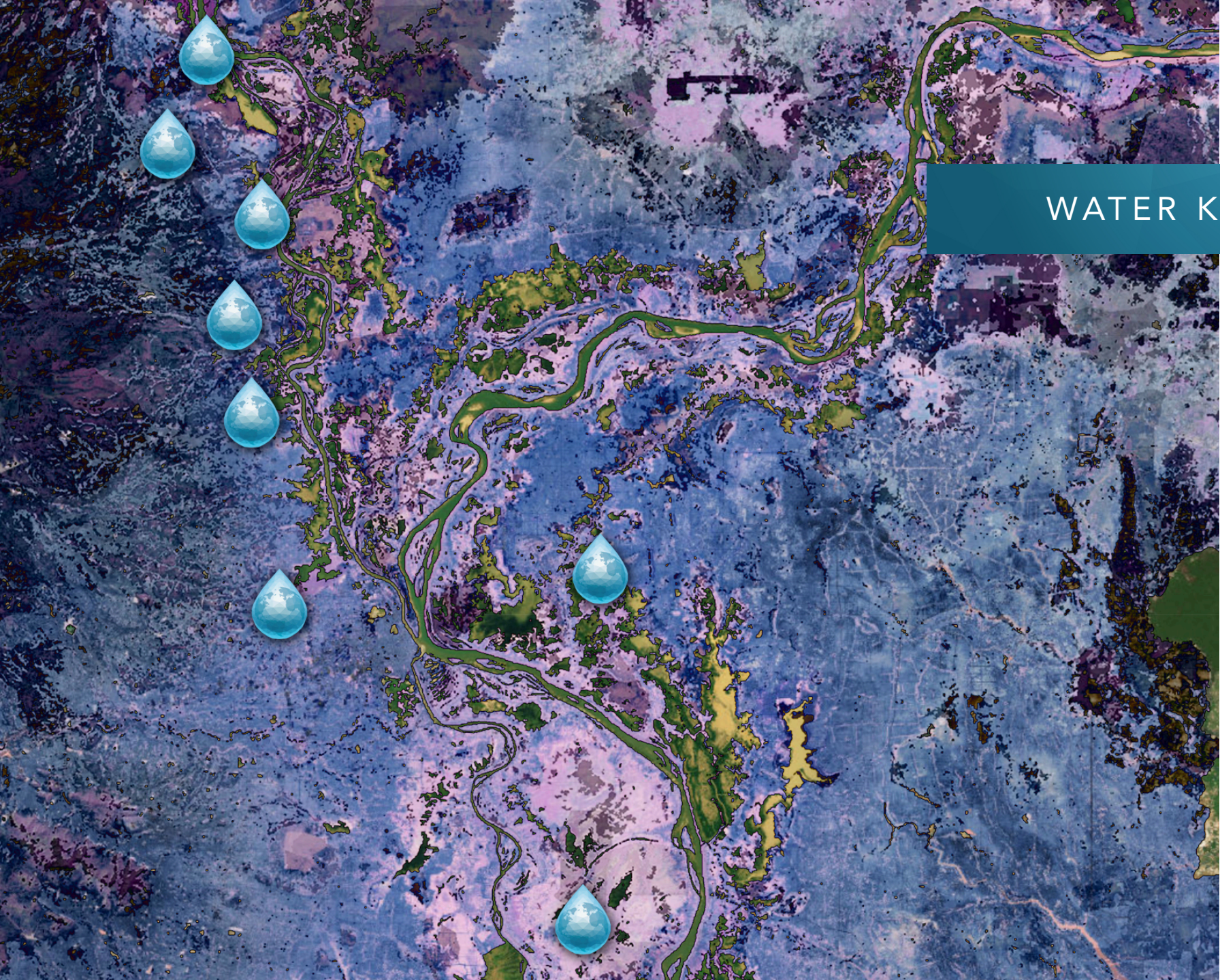
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WATER KIOSKS / POPULATION



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WATER KIOSKS / POPULATION



LOCAL WATER KIOSK







REFERENCES

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