OVERVIEW OF TODAY'S TALK

* **Part 1: Introduction To Key Concepts in EDI**

* **Part 2: EDI In 2020**

* **Part 3: Inclusive Leadership in Water Research**

* **Part 4: People and Water**

* **Part 5: Water Security and Intersectionality**

* **Conclusion and Questions**

WHAT IS EQUITY, DIVERSITY, AND INCLUSION?

- **Equity:** Requires continuously challenging historically accepted ways of doing things. To give people the resources they need to be successful rather than giving everyone the same tools and support.

- **Diversity:** Is a relational concept; no one person can be diverse on their own; we are diverse in our identities, experiences, and relationships with each other.

- **Inclusion:** Relates to the quality of the experience that people have in their work environment. Creating an inclusive environment means anticipating that people experience the world differently and designing experiences to reflect these needs.

INTERSECTIONALITY

- Intersectionality Is a concept coined by American scholar Kimberlé Crenshaw.

- Intersectionality is a prism or lens to understand how people's experiences of multiple and overlapping identities and systems of oppression impact their life experiences and opportunities.

- Leaders who use an intersectional lens make better decisions about policy, and resources.

- An intersectional approach can also spark innovation.

https://www.womentransformingcities.org/gendered-intersectionality
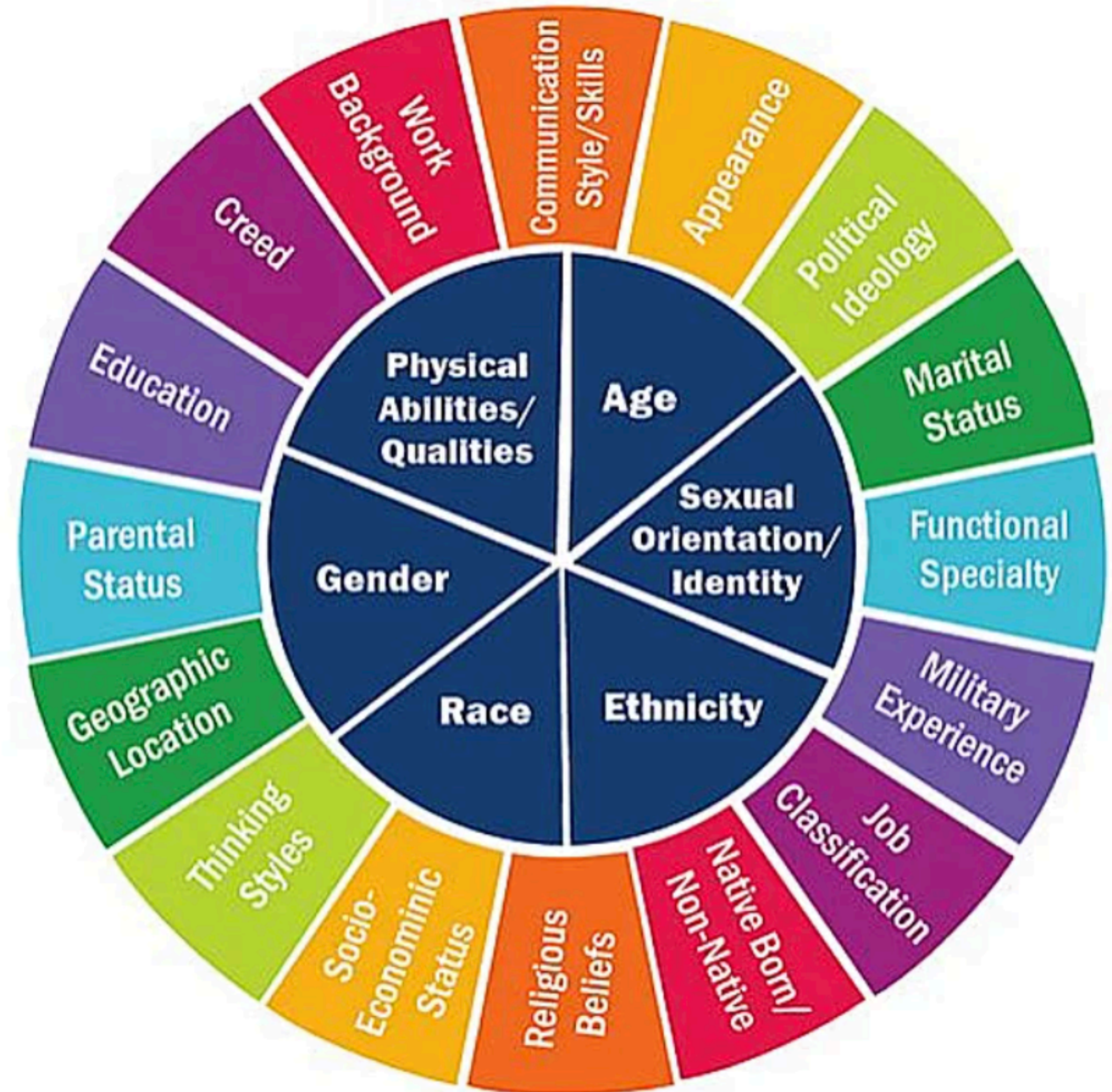
EDI IN 2020 RECOGNITION AND ACTION

Women are systematically excluded from global coronavirus coverage, experts say

'Blood, sweat and tears': Building a network for Black scientists

WORLD ECONOMIC FORUM

Disability inclusion isn't a tick-box exercise. It's vital to achieving the SDGs

An ATM designed for visually impaired and people with disabilities in Sharjah, UAE.

Image: Reuters/Satish Kumar

Trailblazer in the Arctic: A Tribute to the First African American to Reach Both Poles

March 3, 2020 · By Kimberly Aiken · Commentary, Society and Culture

Postdoc survey reveals disenchantment with working life

Women on Arctic research mission told not to wear tight-fitting clothing

Alfred-Wegener-Institut leads MOSAiC mission, says clothing policy relates to hygiene and occupational safety

Bradlyn Oakes, John Last · CBC News · Posted: Sep 28, 2020 2:00 AM CT | Last Updated: September 28

ISTOCK.COM/MARIJARADOVIC

'Now I know I'm not alone.' Study highlights challenges LGBTQ workers in STEM face

Eabametoong Chief concerned about hydrocarbon spill after vehicle capsizes in lake near the First Nation

Rohl Enterprise's amphibious vehicle capsized in a lake just northwest of Eabametoong First Nation on Thursday

Logan Turner · CBC News · Posted: Nov 11, 2020 4:00 PM ET | Last Updated: November 11

Half of child psychiatrists surveyed say patients have environment anxiety

Research finds young people in England feel growing distress about the future of the planet

▲ Young people are growing up with a backdrop of fear and worry about the planet's future. Photograph: Paul Quayle/Alamy

DIVERSITY IS ORGANIC EQUITY AND INCLUSION ARE INTENTIONAL

- **Self-awareness means understanding:**

  * Your own identity(s) to have [empathy](#) for others;

  * Your [privilege](#) to be able to extend it to people who do not have the same advantages as you;

  * [Self-care](#) is important to your well-being and how you show up for yourself and others.

- **Allyship requires:**

  * Active [listening](#): It's one of the most powerful tools in EDI work;

  * An [active practice](#) that includes holding space for others to speak, to be heard, to notice who is present and absent.

- **Embrace complexity:**

  * EDI work is layered and involves long-term commitment and continuous improvement;

  * The connections between people, climate, and economy are [accelerating](#) faster and becoming more complex. Leaders must be intentional about preventing and reversing inequities.

INCLUSIVE LEADERSHIP IN WATER RESEARCH

- **Redefine Professionalism:** "Professionalism" is coded — by <u>white middle/upper social class standards</u>, the <u>segmentation of work and non-work</u>, <u>European appearance standards</u>, and the expectation that people <u>bring only their "work selves" to work</u>" - (Roberts and McCluney 2020).

- **Design Thinking:** Designing experiences with <u>inclusion in mind</u> from the start with consultation and opportunities for feedback.

- **Innovation:** People who have experience with a challenge are the most likely to solve it, in essence innovating their own problems. Many technologies that are commonly used today started as adaptations by the <u>dis(ability)</u> community.

- **Systems Based Approaches:** Inequities are rarely one time events, yet the people experiencing them often feel profoundly isolated. Leaders need to be able to connect individual experiences to <u>system</u> wide change.
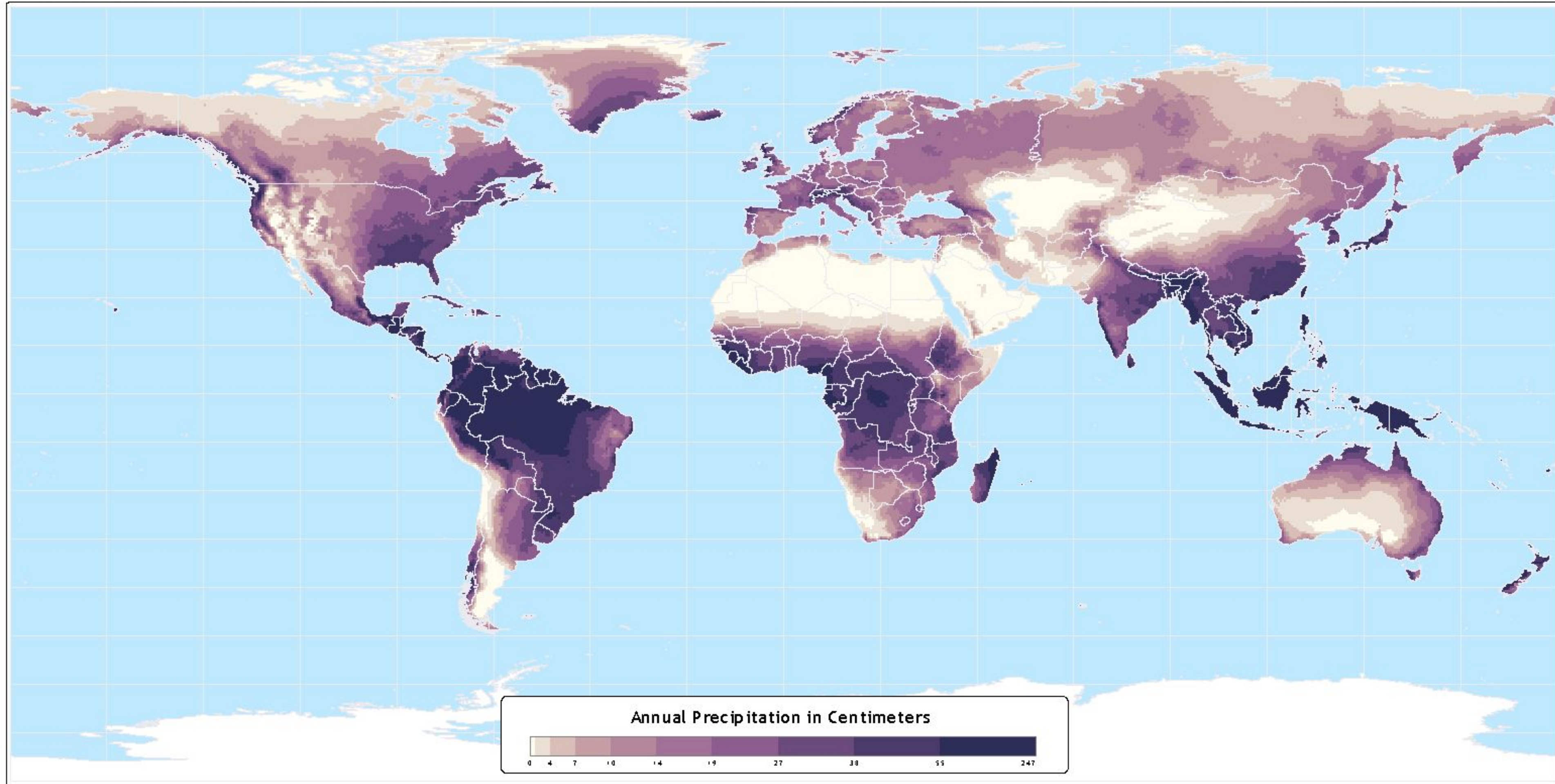
PEOPLE AND WATER

1. Water is not evenly distributed around the world

Annual Total Precipitation

Annual Precipitation in Centimeters
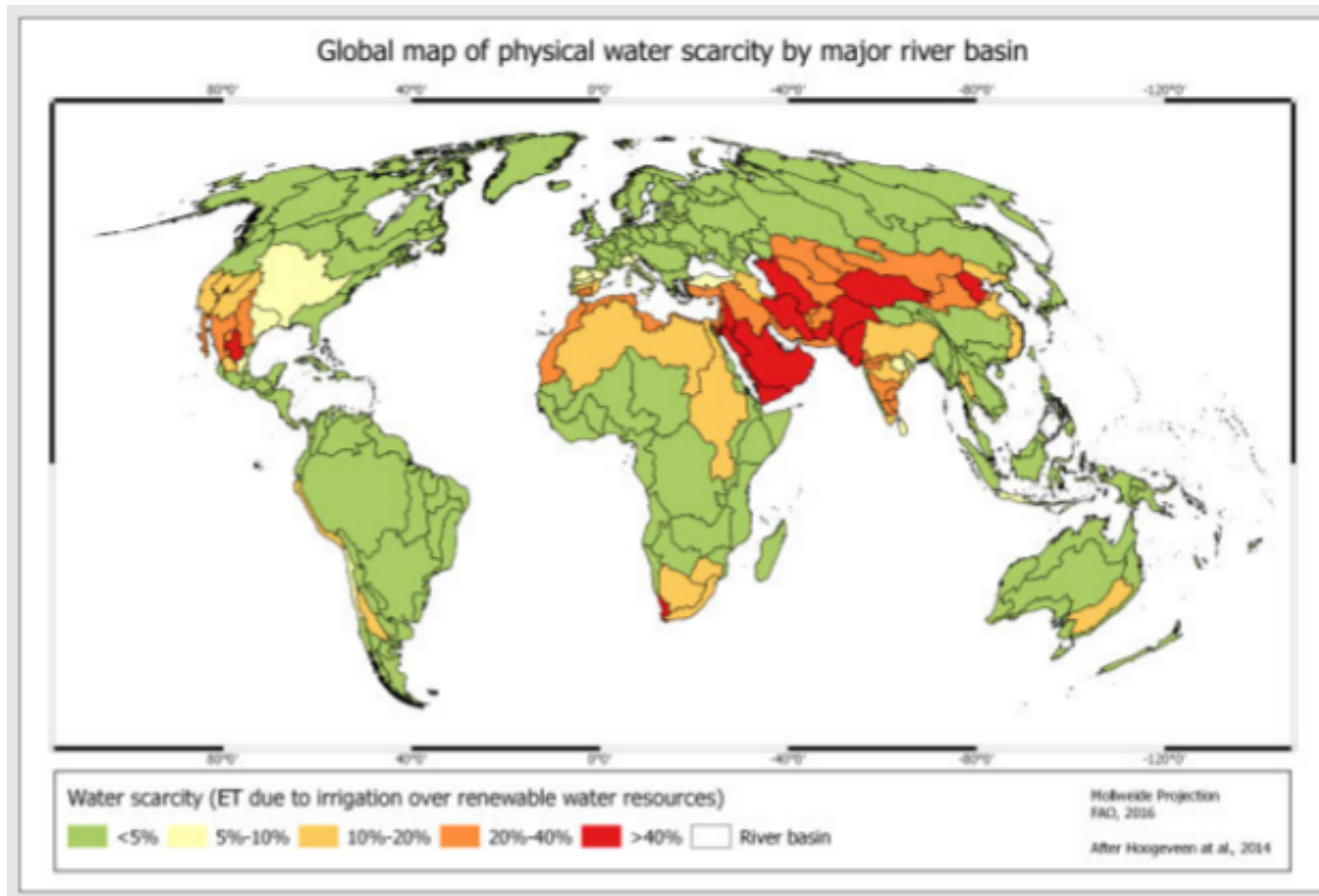
0   4   7   10   14   19   27   38   55   247

Data taken from: CRU 0.5 Degree Dataset (New et al)

Atlas of the Biosphere
Center for Sustainability and the Global Environment
University of Wisconsin - Madison

WATER STRESS AROUND THE WORLD

Global map of physical water scarcity by major river basin

Water scarcity (ET due to irrigation over renewable water resources)

<5%   5%-10%   10%-20%   20%-40%   >40%   River basin

Mollweide Projection
FAO, 2016

After Hoogeveen at al, 2014

UN Water SDG 6 Synthesis Report 2018
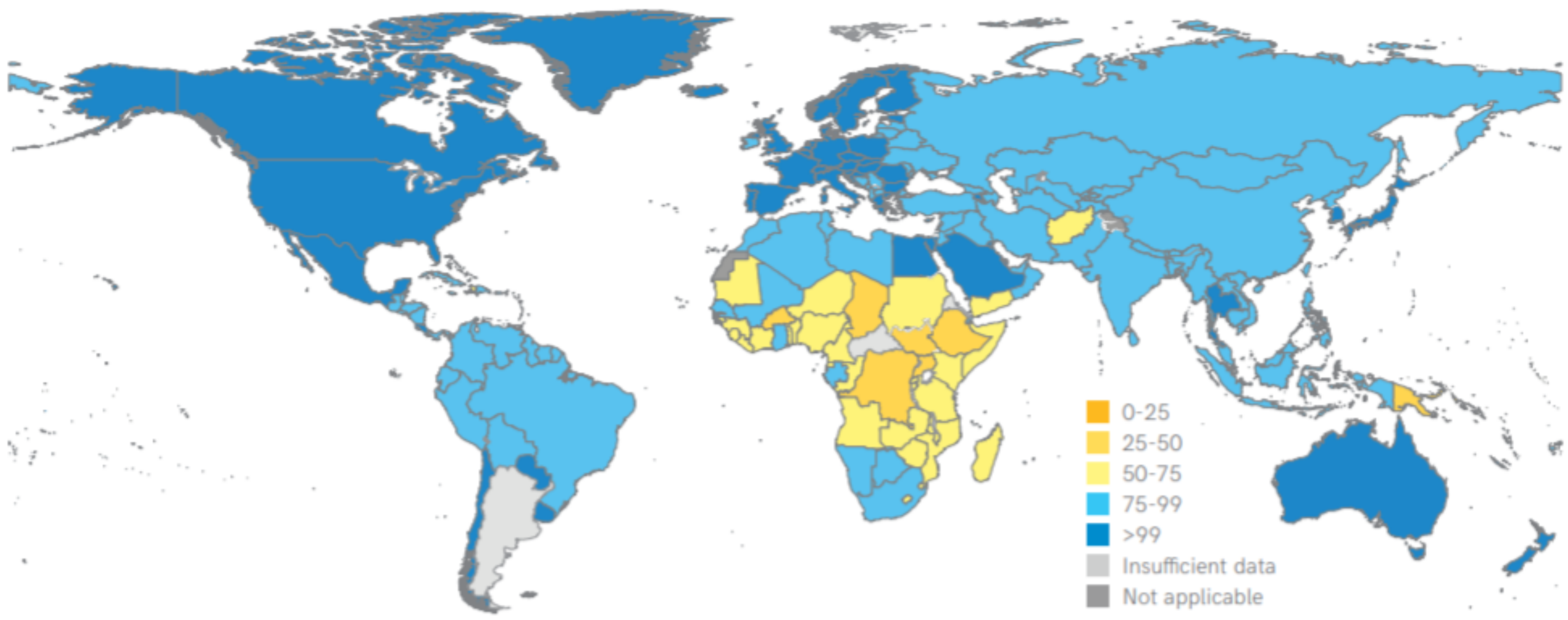
PEOPLE AND WATER

1. Water is not evenly distributed around the world

2. **Water infrastructure and access are not evenly distributed around the world**

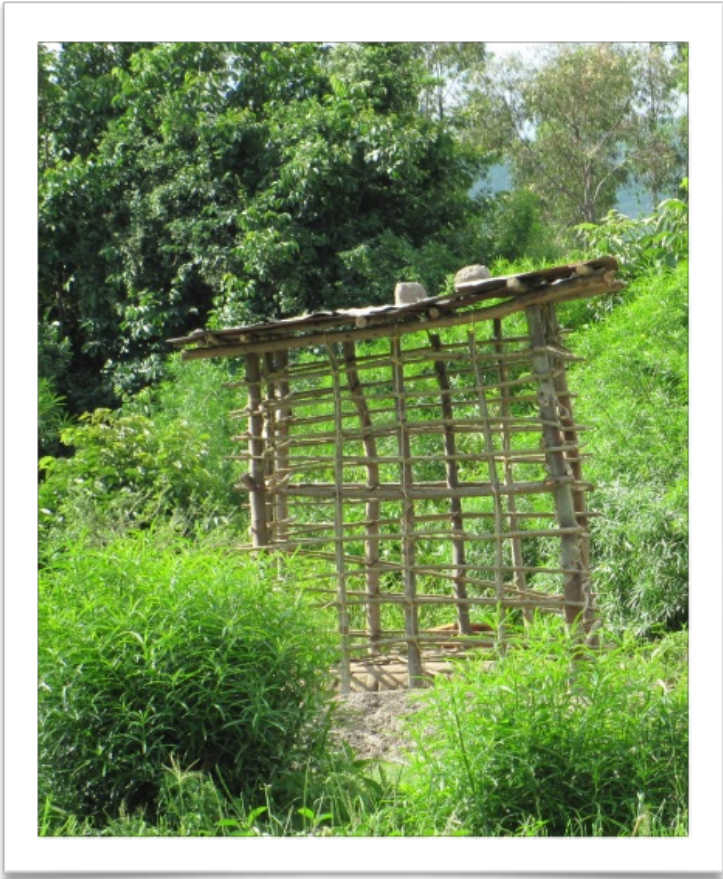# In 2017, 80 countries had achieved 'nearly universal' coverage of at least basic drinking water services
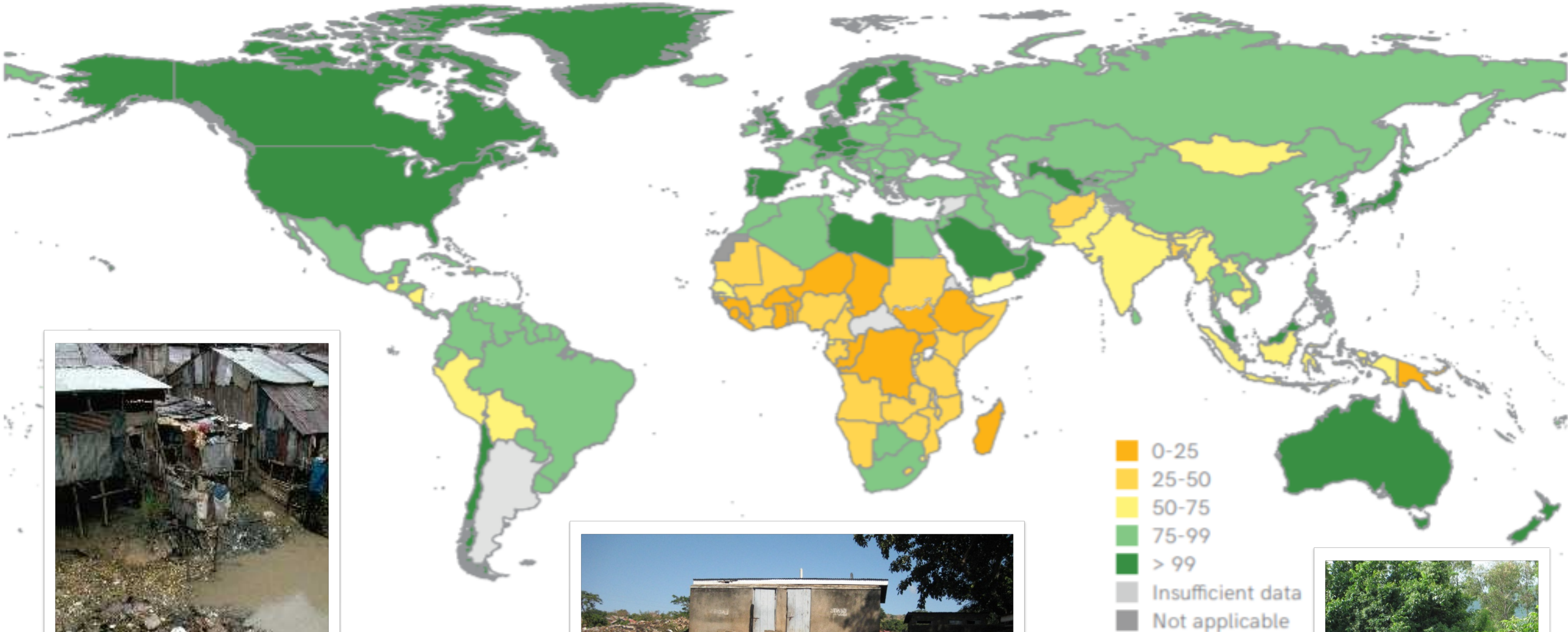

Legend:
- 0-25
- 25-50
- 50-75
- 75-99
- >99
- Insufficient data
- Not applicable

SDG 6.1

JMP 2019 Households Report

In 2017, 51 countries had achieved 'nearly universal' coverage of basic sanitation services

- 0-25
- 25-50
- 50-75
- 75-99
- > 99
- Insufficient data
- Not applicable

JMP 2019 Households Report

PLUMBING POVERTY IN THE USA

Proportion of Households

High : 100

Low : 0
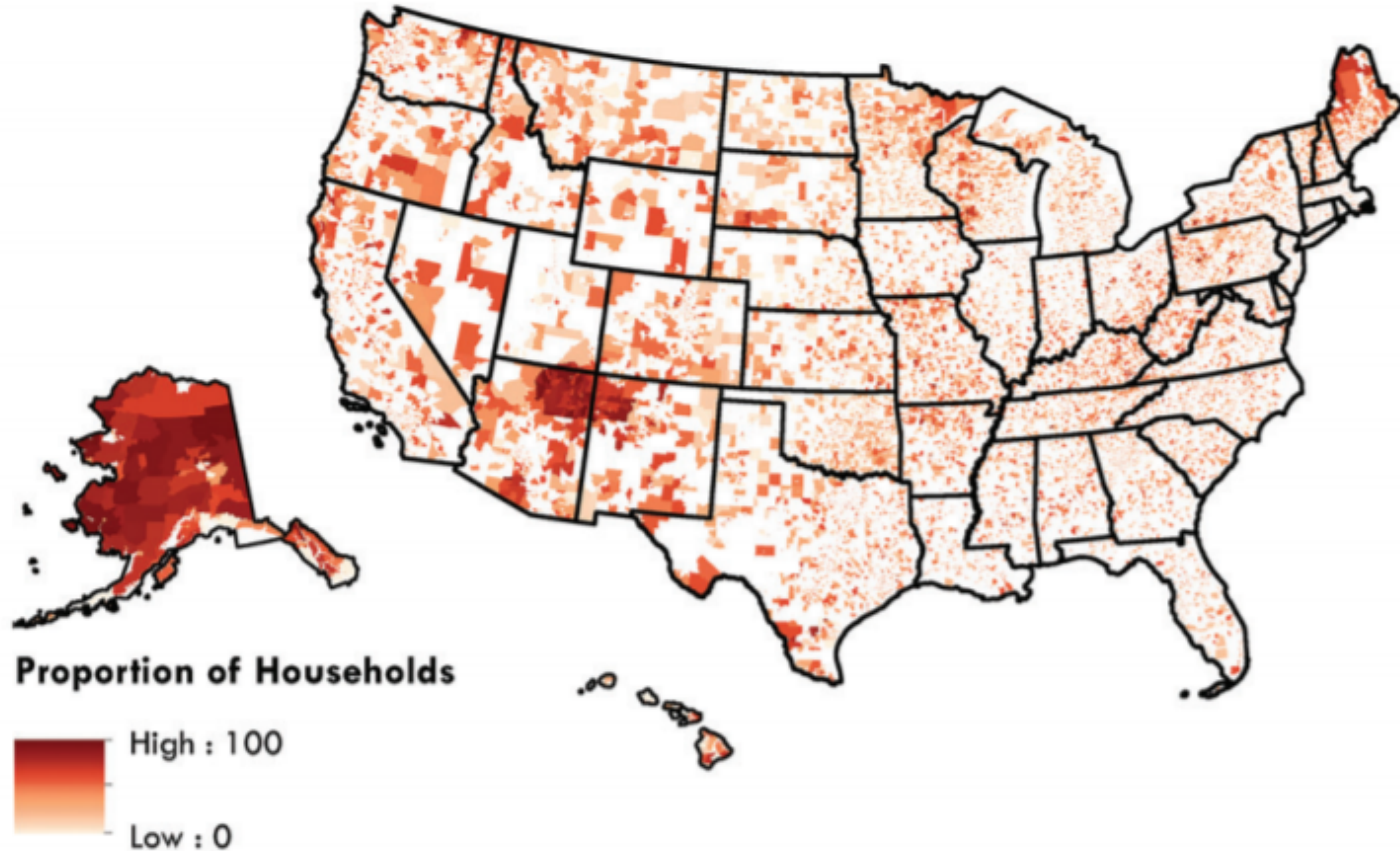
Who is more likely to lack complete plumbing?

- AIAN households (3.7 times more likely)

- Black and Hispanic (both 1.2 times more likely)

- Mobile homes (2.5 times more likely)

- Renters (1.4 times more likely)

Deitz & Meehan. 2019. Plumbing poverty: mapping hot spots of racial and geographic inequality in US household water insecurity. *Annals Am Assoc Geog 109*(4)

WASH AND COVID-19*

In 16 out of 69 countries with data available, more than 20% of health care facilities had no water service in 2016
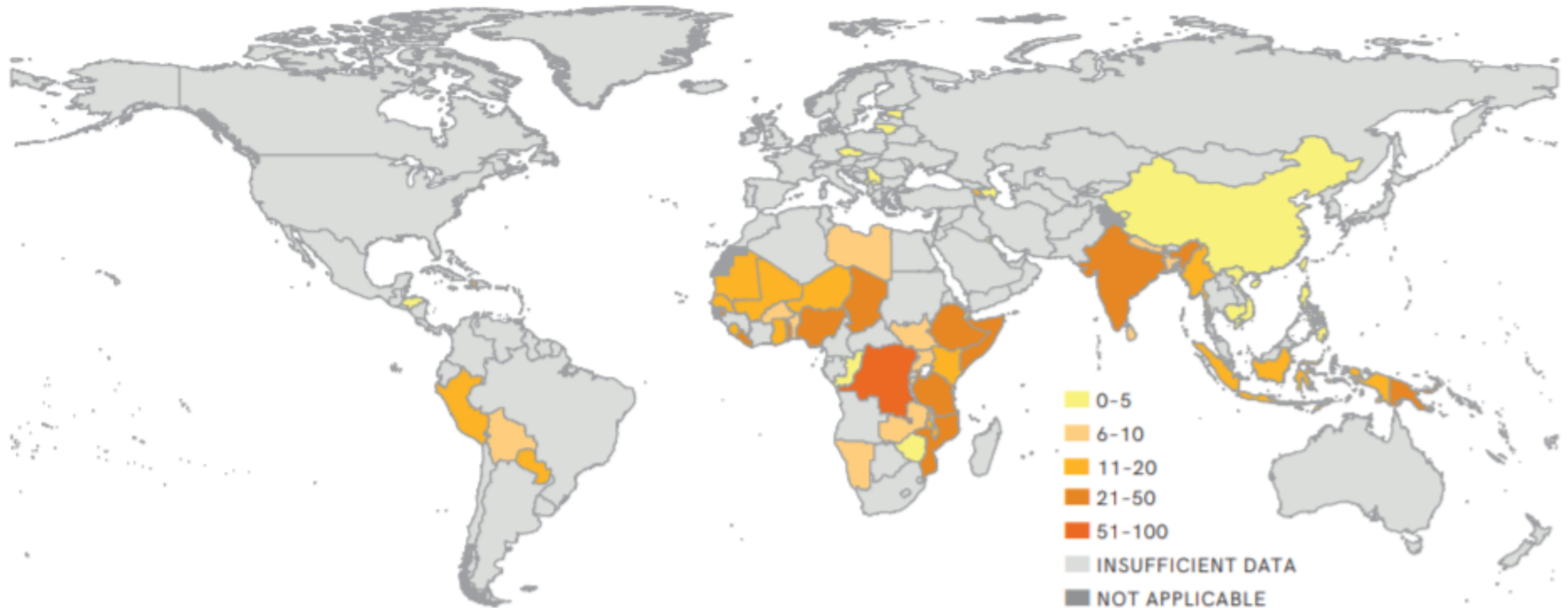

Legend:
- 0–5
- 6–10
- 11–20
- 21–50
- 51–100
- INSUFFICIENT DATA
- NOT APPLICABLE
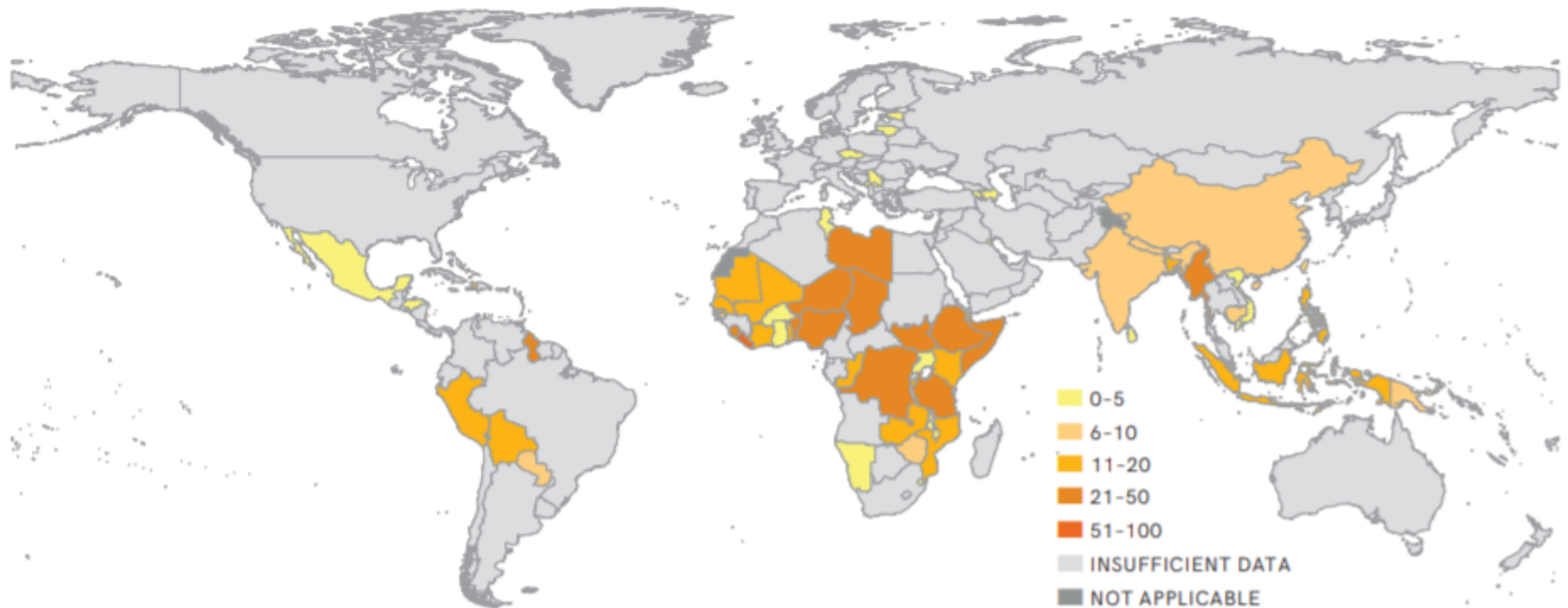
FIGURE 4   Proportion of health care facilities with no water service, 2016 (%)

* Or any other infectious disease outbreak...

https://washdata.org/sites/default/files/documents/reports/2019-04/JMP-2019-wash-in-hcf.pdf

In 28 out of 66 countries with data available, more than 10% of health care facilities had no sanitation service in 2016

Legend:
- 0–5
- 6–10
- 11–20
- 21–50
- 51–100
- INSUFFICIENT DATA
- NOT APPLICABLE

FIGURE 7   Proportion of health care facilities with no sanitation service, 2016 (%)

https://washdata.org/sites/default/files/documents/reports/2019-04/JMP-2019-wash-in-hcf.pdf

In 8 out of 55 countries with data available, more than half of health care facilities lacked handwashing facilities at points of care in 2016

Legend:
- 0–5
- 6–10
- 11–20
- 21–50
- 51–100
- INSUFFICIENT DATA
- NOT APPLICABLE
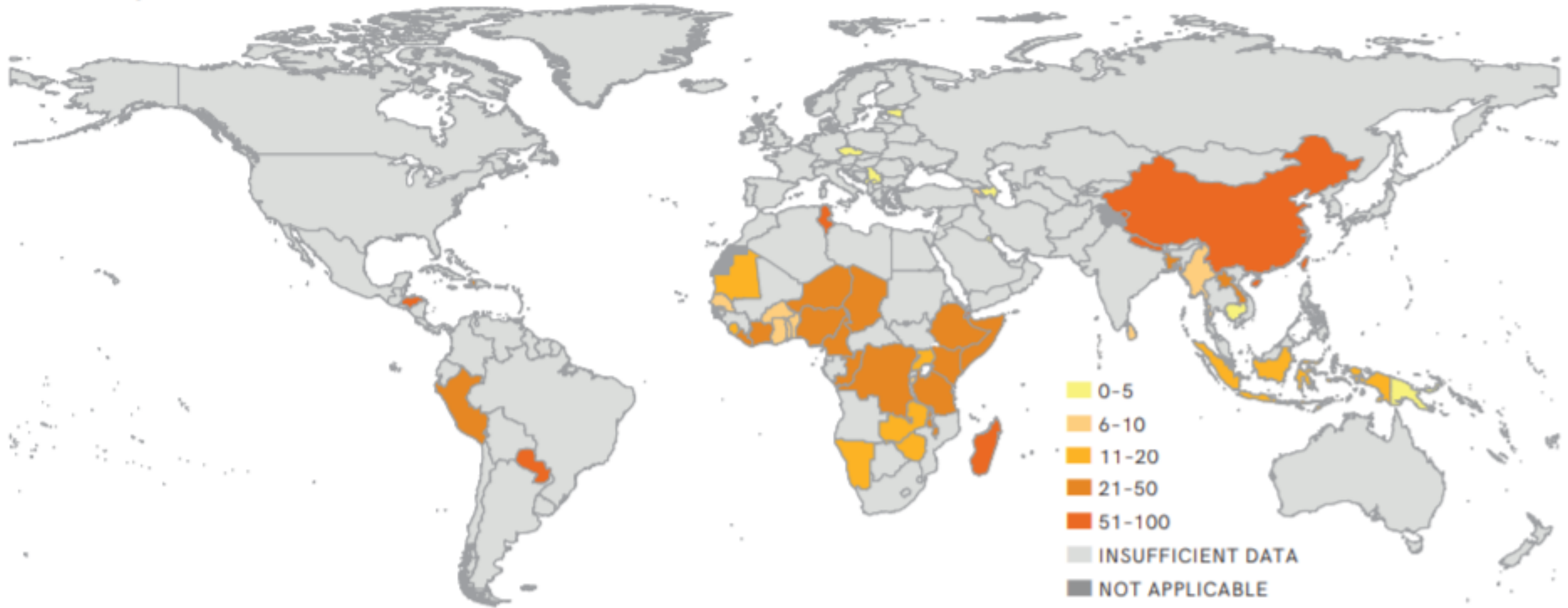
FIGURE 10 Proportion of health care facilities lacking hand hygiene facilities at points of care, 2016 (%)

https://washdata.org/sites/default/files/documents/reports/2019-04/JMP-2019-wash-in-hcf.pdf
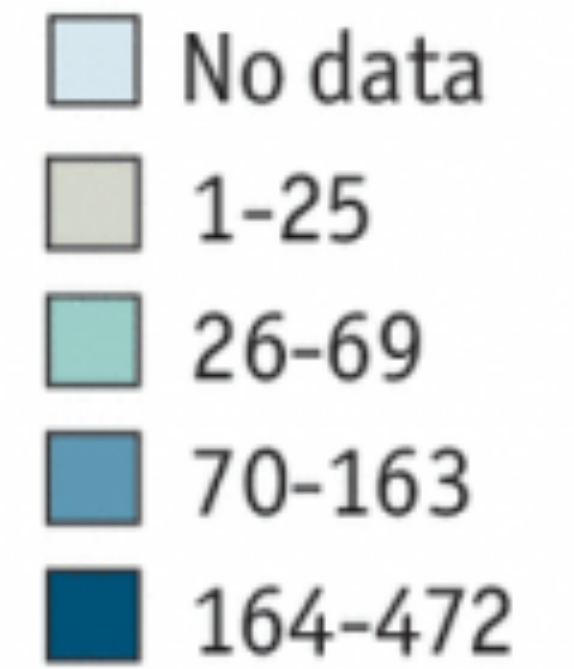
PEOPLE AND WATER

1. Water is not evenly distributed around the world

2. Water infrastructure and access are not evenly distributed around the world

3. Threats from water quality and quantity are not evenly distributed around the world

Disaster zones

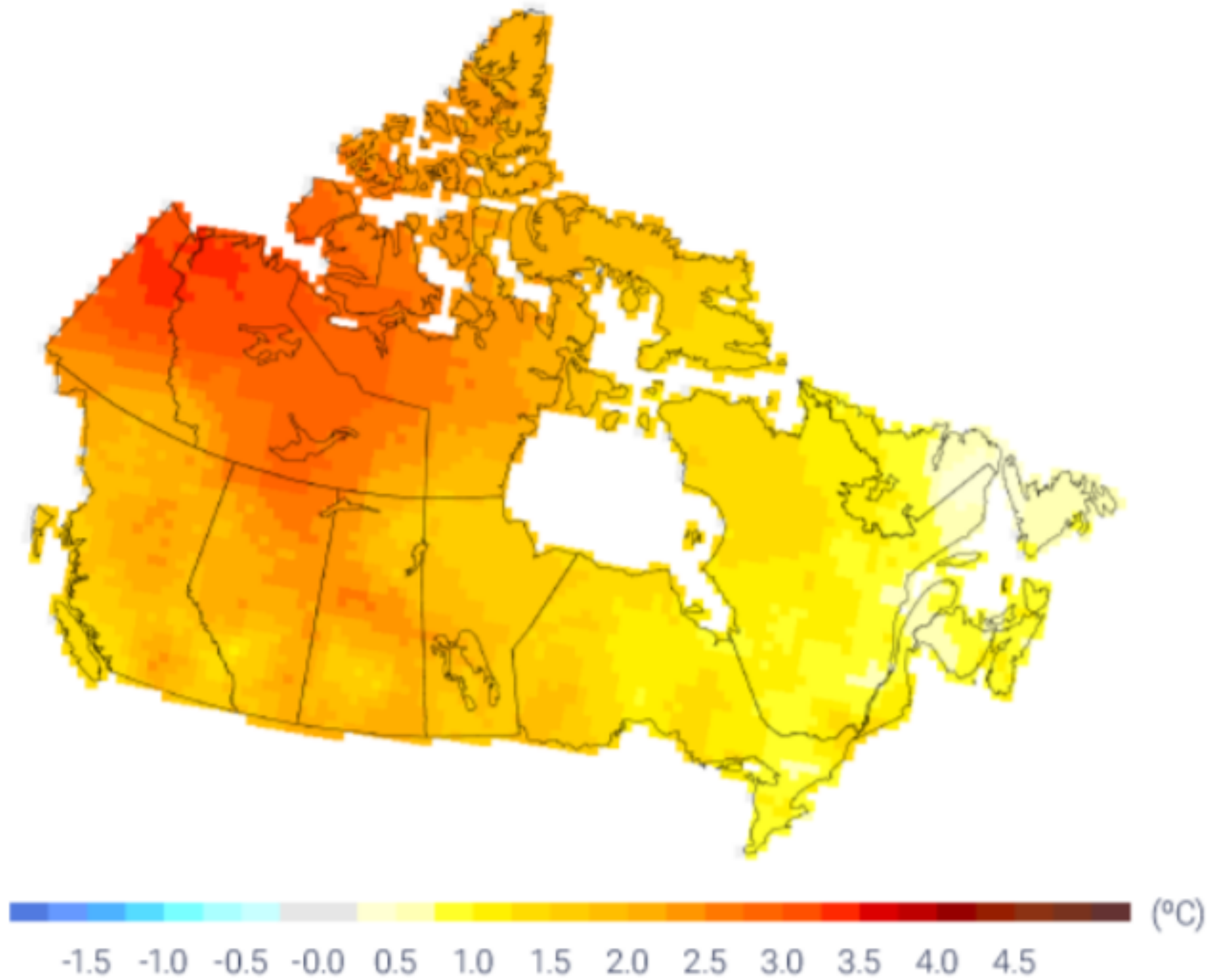Total number of natural disasters* reported per country, 1995-2015

- No data
- 1-25
- 26-69
- 70-163
- 164-472

BC Government

Toronto Star

*Hydrological, climatological and meteorological

1948–2016

(°C)

-1.5 -1.0 -0.5 -0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5

Canada's Changing Climate Report, 2019

"... racial discrimination in environmental policy-making, the enforcement of regulations and laws, the deliberate targeting of communities of colour for toxic waste facilities, the official sanctioning of the life-threatening presence of poisons and pollutants in our communities, and the history of excluding people of colour from leadership of the ecology movements."
Benjamin Chavis, 1982

ENRICH Layers - WasteDisposalFacility

ENRICH Layers - ThermalGeneratingStation

ENRICH Layers - OtherToxicIndustry

ENRICH Layers - FirstNationsCommunity

ENRICH Layers - AfricanNSCommunity

ENRICH Project: https://www.enrichproject.org/map/

PEOPLE AND WATER

1. Water is not evenly distributed around the world

2. Water infrastructure and access are not evenly distributed around the world

3. Threats from water quality and quantity are not evenly distributed around the world

4. **Solutions do not benefit everyone equally**

INDIGENOUS PEOPLES IN CANADA

- **99% of Canadians have safely managed drinking water access**

- **1% of the Canadian population represents approximately 360,000 people**

ALL long-term drinking water advisories on public systems on reserves **lifted** by **March 2021**

88 long-term drinking water advisories lifted since November 2015

61 long-term drinking water advisories in effect

Projects underway or completed as of September 30, 2019

**441** projects to repair, upgrade or build infrastructure

59 supporting projects and initiatives

74 feasibility studies and projects in the design phase

the national challenge of ensuring safe drinking water for First Nations reserves has persisted for many, many years, due to deep institutional issues rather than a lack of technology

Biggs and McArthur, 2018 A Canadian North Star
Aboriginal and Northern Development Canada, 2018
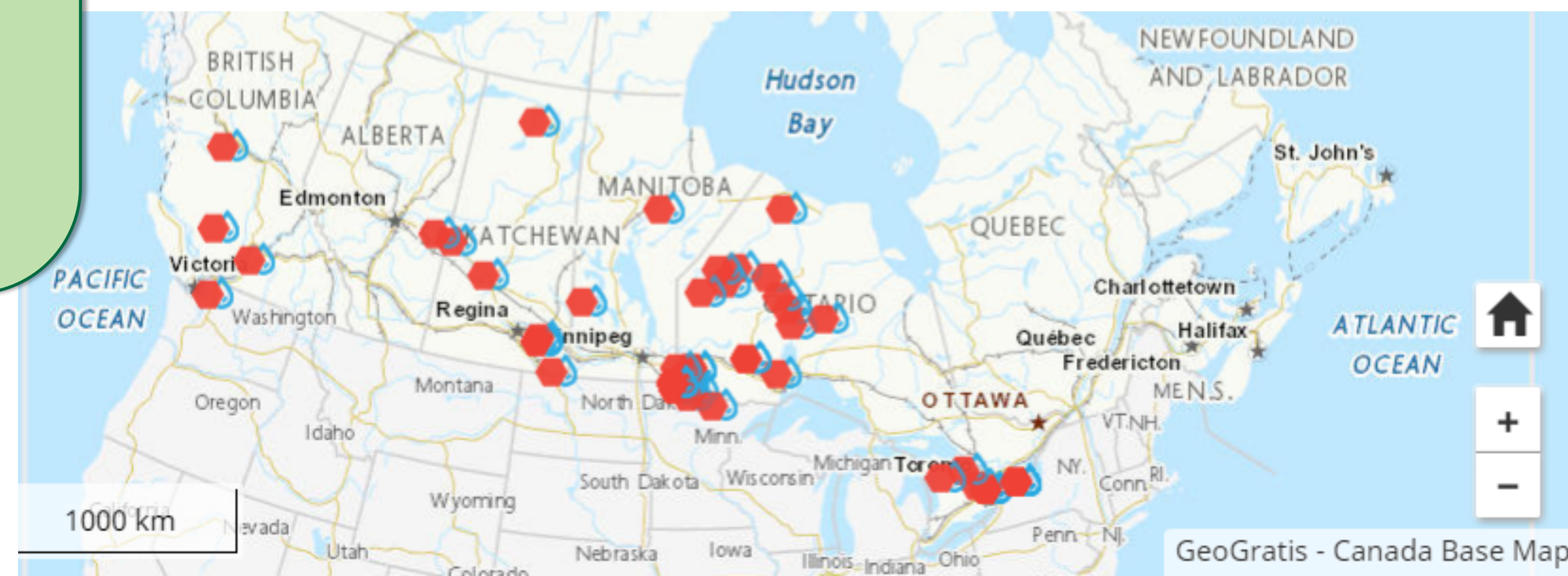
WHAT CAN WE DO?

- Better Data
- Better research design
- Better Research
- Better knowledge mobilization
- Better Policies, Programs, and Practices
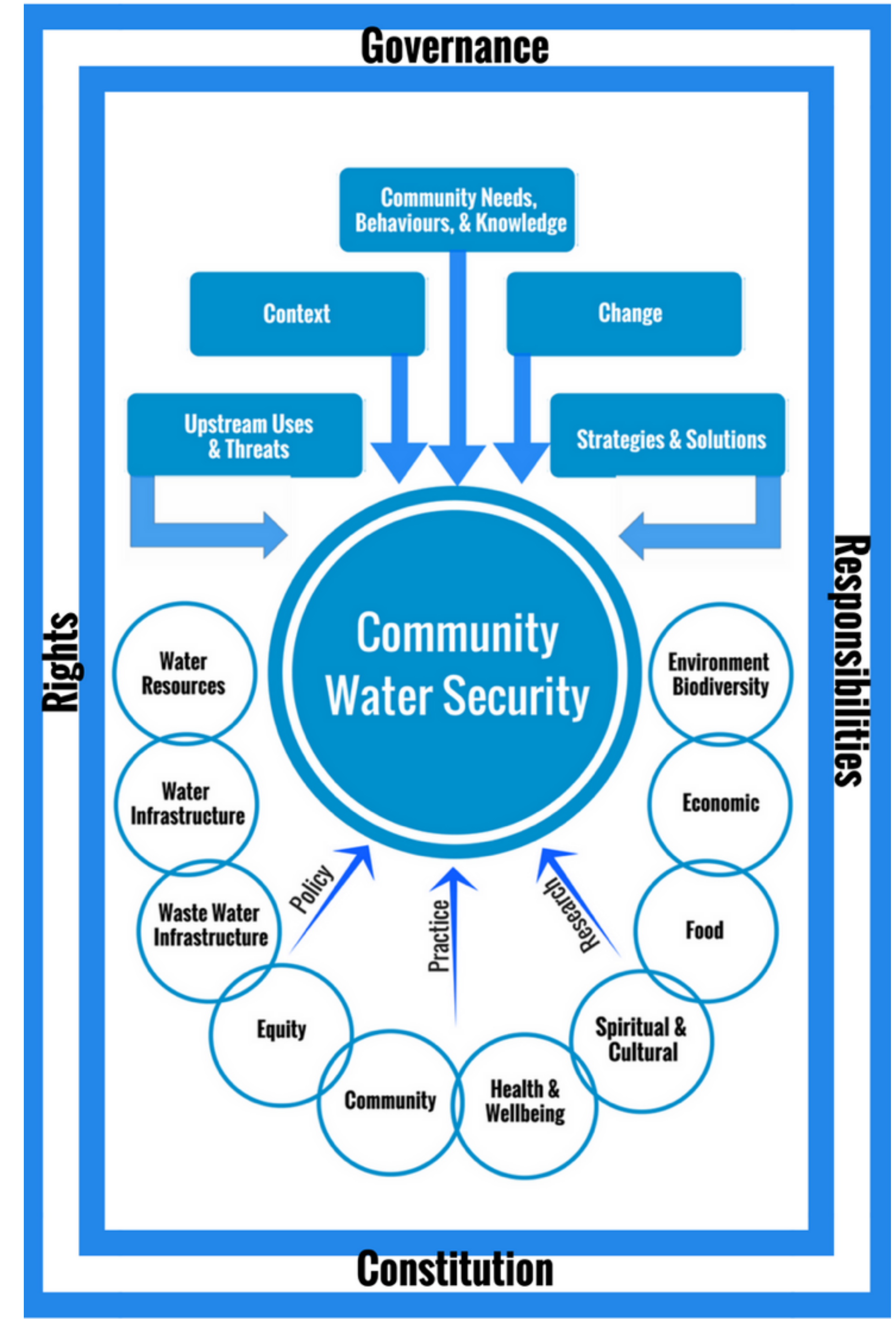
What?

Who?

How?

Why?

FINAL THOUGHTS – WATER SECURITY AND INTERSECTIONALITY

FRAMING LOCAL WATER SECURITY WITH INDIGENOUS COMMUNITIES

Latchmore et al., 2019 J. Water Health

"HUMAN EXPERIENCE IS CONSTRUCTED AT THE INTERSECTION OF BOTH SOCIAL AND ECOLOGICAL SYSTEMS" - (THOMPSON, 2015)

- Status
  - Low- and middle- versus high-income
  - Rural versus urban
  - Ability
  - Age
  - Sex & Gender
  - Socio-economic
  - Ethnicity & Culture

- Dimensions of Water Security
  - Water availability
  - Water quality
  - WaSH access
  - Water fetching
  - Ecosystem services access, use, value
  - Water-related disasters
  - Water sector employment
  - Water management & governance

CONCLUSION AND QUESTIONS?

THANK YOU

For Additional Information Please Contact: Dr. Andrea May Rowe, Equity, Diversity and Inclusion Specialist, Global Institute for Water Security, and Global Water Futures at andrea.rowe@usask.ca or Dr. Corinne Schuster-Wallace, Associate Director Global Water Futures, Professor Geography and Planning at cschuster.wallace@usask.ca.

*Please note the language in this document reflects a certain time and place, Canada in 2020. The language used in EDI work is continually evolving to reflect the preferences and experiences of people and communities. This document will be updated periodically to reflect this evolution.

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INDIGENOUS PEOPLES IN CANADA

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The Enrich Project (The Environmental Noxiousness, Racial Inequities, & Community Health Project) https://www.enrichproject.org/map/

Ohneganos: Water is Life Project https://www.ohneganos.com/

WHAT CAN WE DO?

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