

Issues

1. States of Denial
2. The Present Condition
3. The Status and Reception of Climate Refugees
4. Can Climate Change be Addressed Democratically?
5. The Balance Between Adaptation and Mitigation
6. Behaviour Shifts

1. States of Denial

1. Knowing and Not Knowing: The Arendt – Cohen thesis

1a Hannah Arendt, Eichmann in Jerusalem

1b Stanley Cohen, States of Denial

2. Paralysed in the Headlights: The Pavlovian thesis

3. The Disfunctionality of “Crisis” Language

2. The Present Condition

PROJECTED WORLD ENERGY MIX, 2035

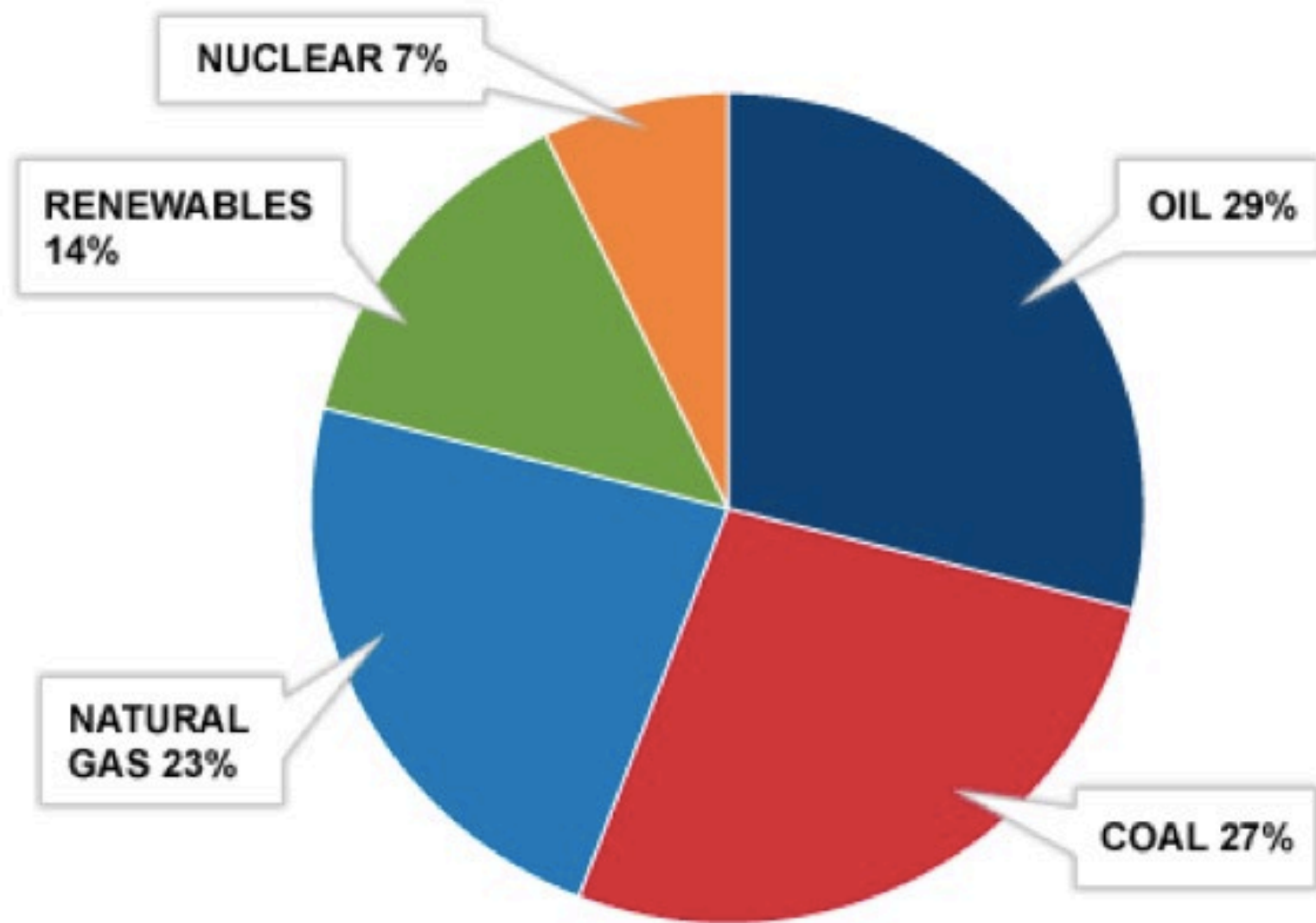
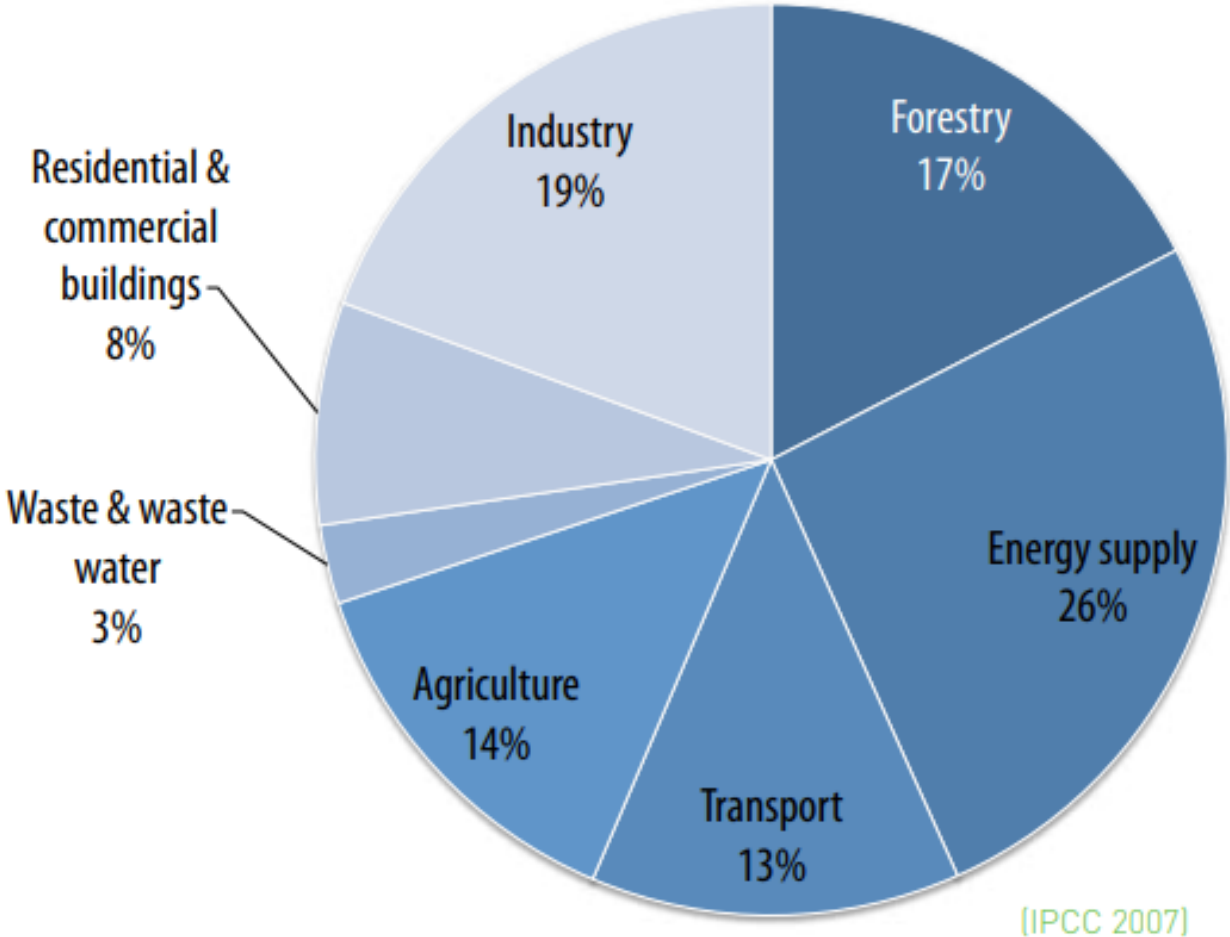
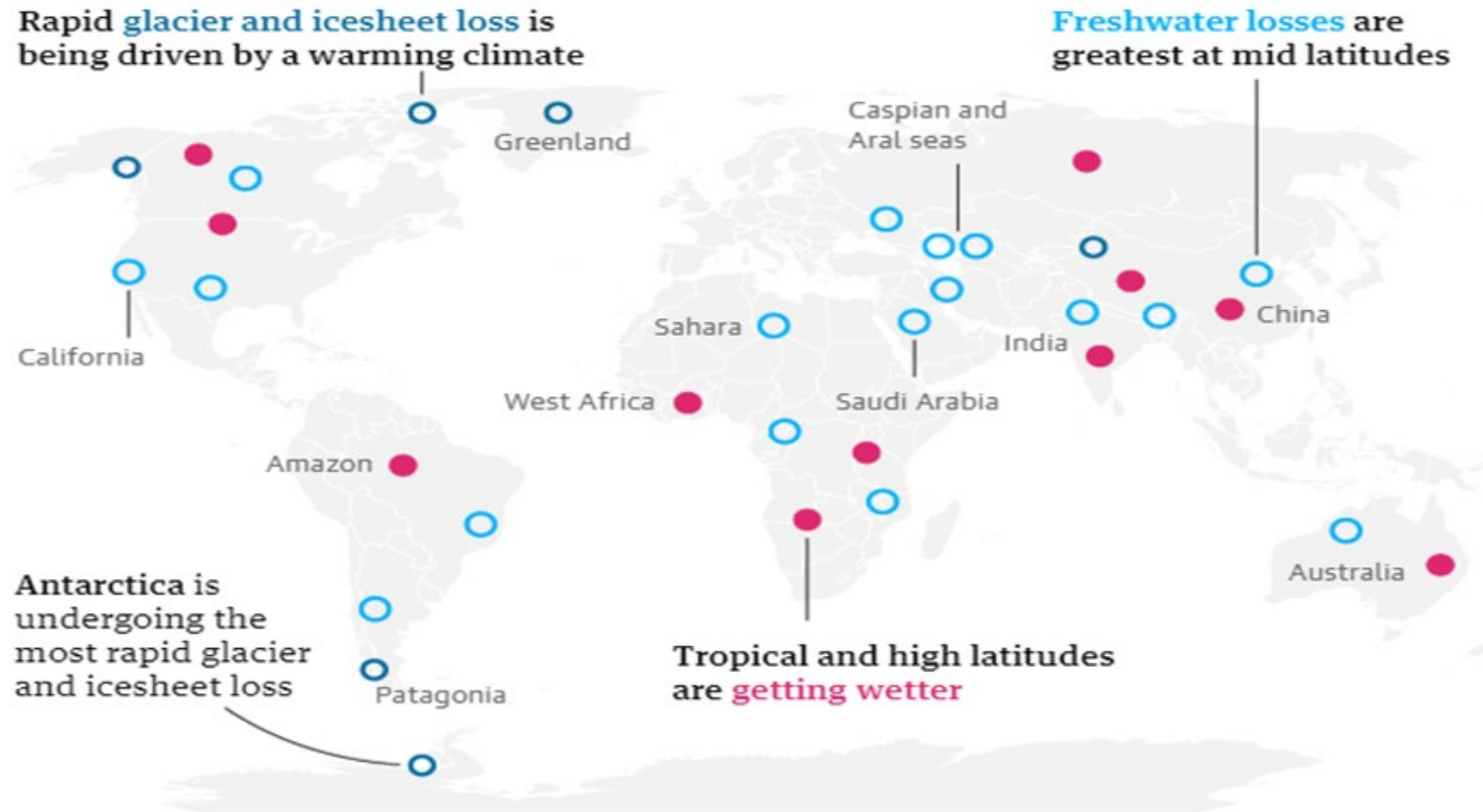


Figure 3.1: Major contributors to global GHG emissions, including land use and land cover change (measured in CO₂ equivalents using a 100 year global warming potential).



Source: United Nations Environmental Programme

30 hotspots where freshwater is in danger



Guardian graphic. Source: Nasa

WATCH

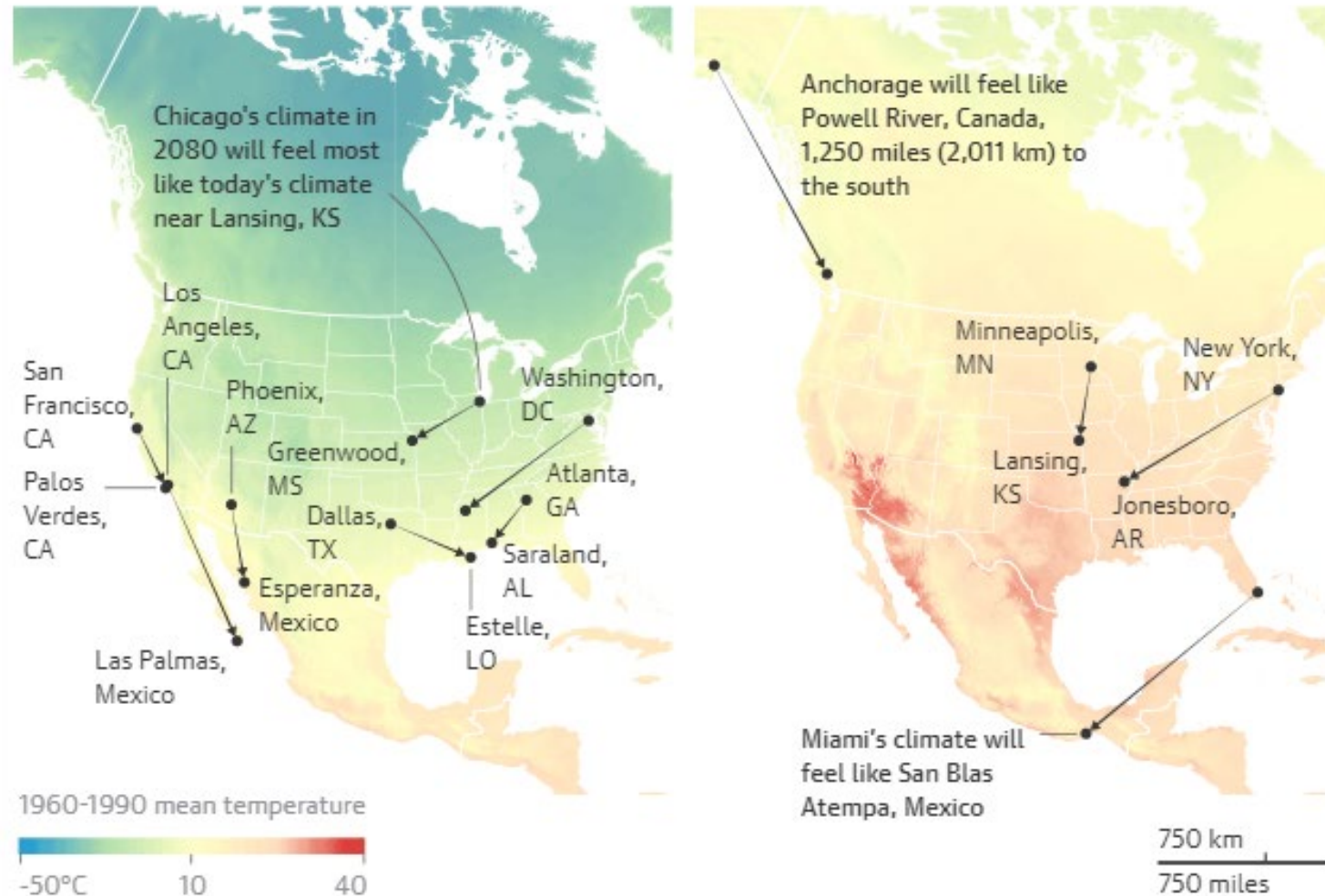
DEFORESTATION



What will the US climate feel like in 60 years if high current emissions continue?

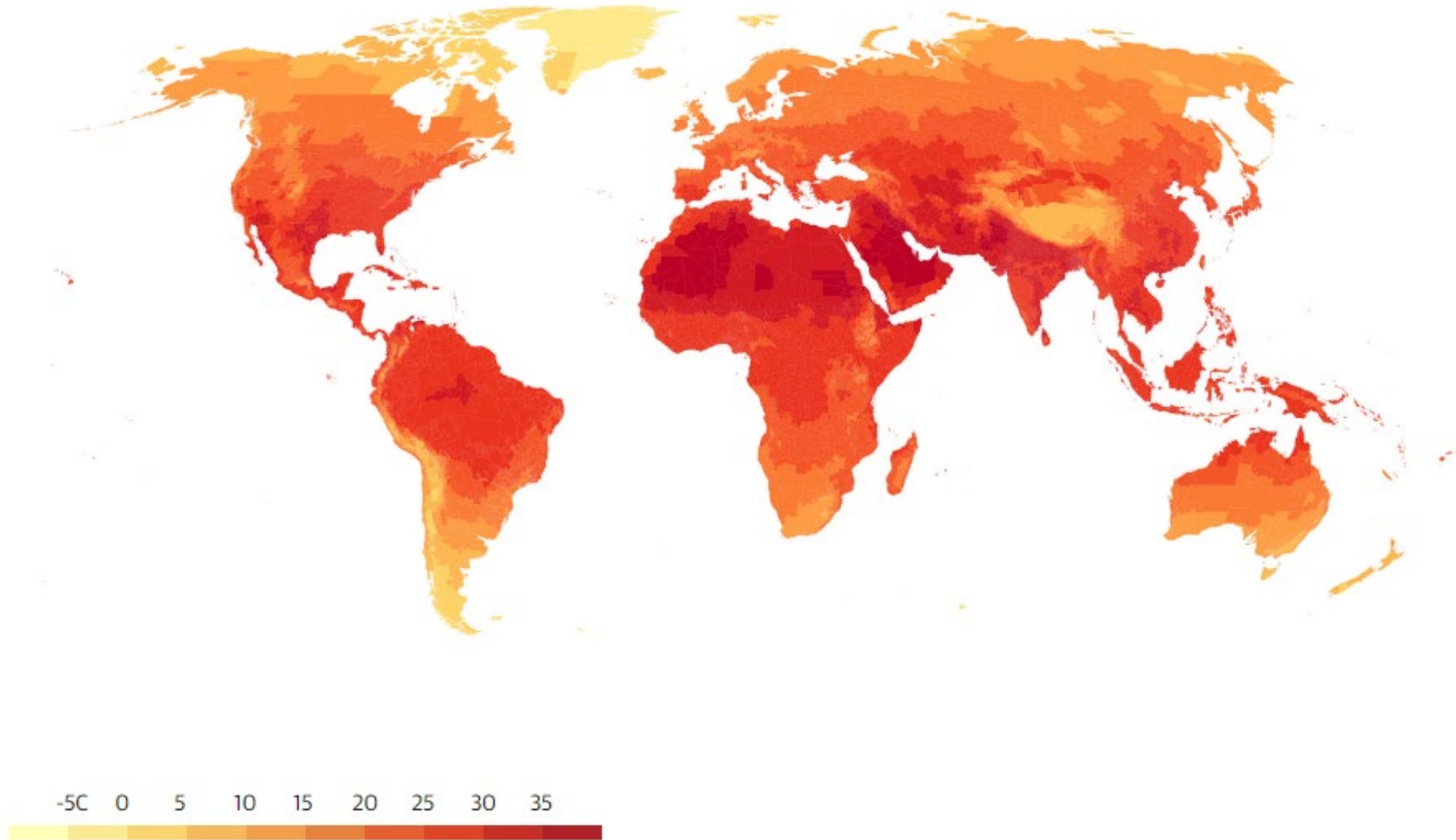
Winter in Phoenix could feel 12.4°F (6.9°C) warmer in 2080 ...

... while summer in Anchorage could feel 9.6°F (5.4°C) warmer



Guardian graphic. Source: University of Maryland, Nature Communications. Note: future data is an average of 27 forecasts. Temperature maps from January and July

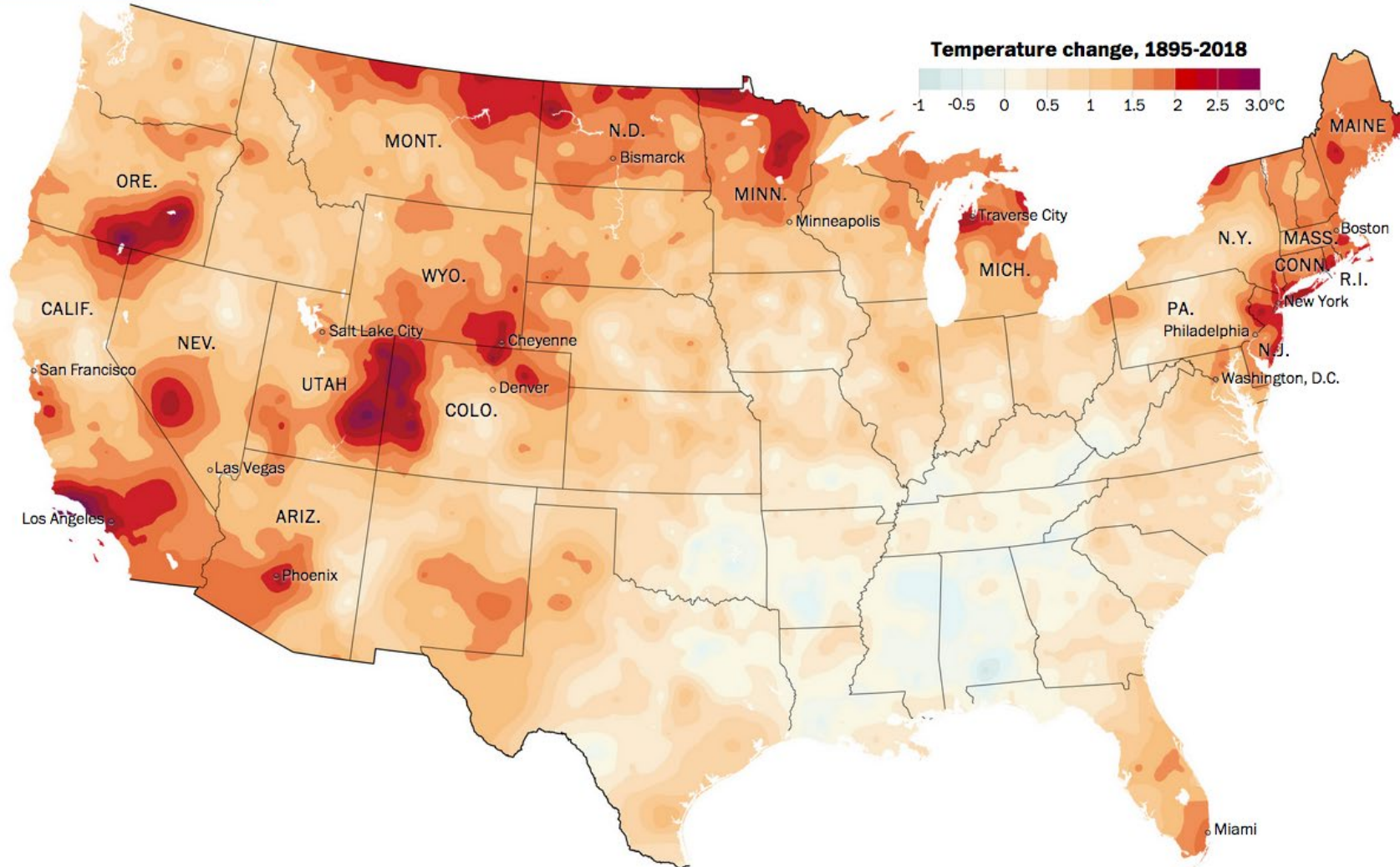
Average temperature between June and August, 2040-2059



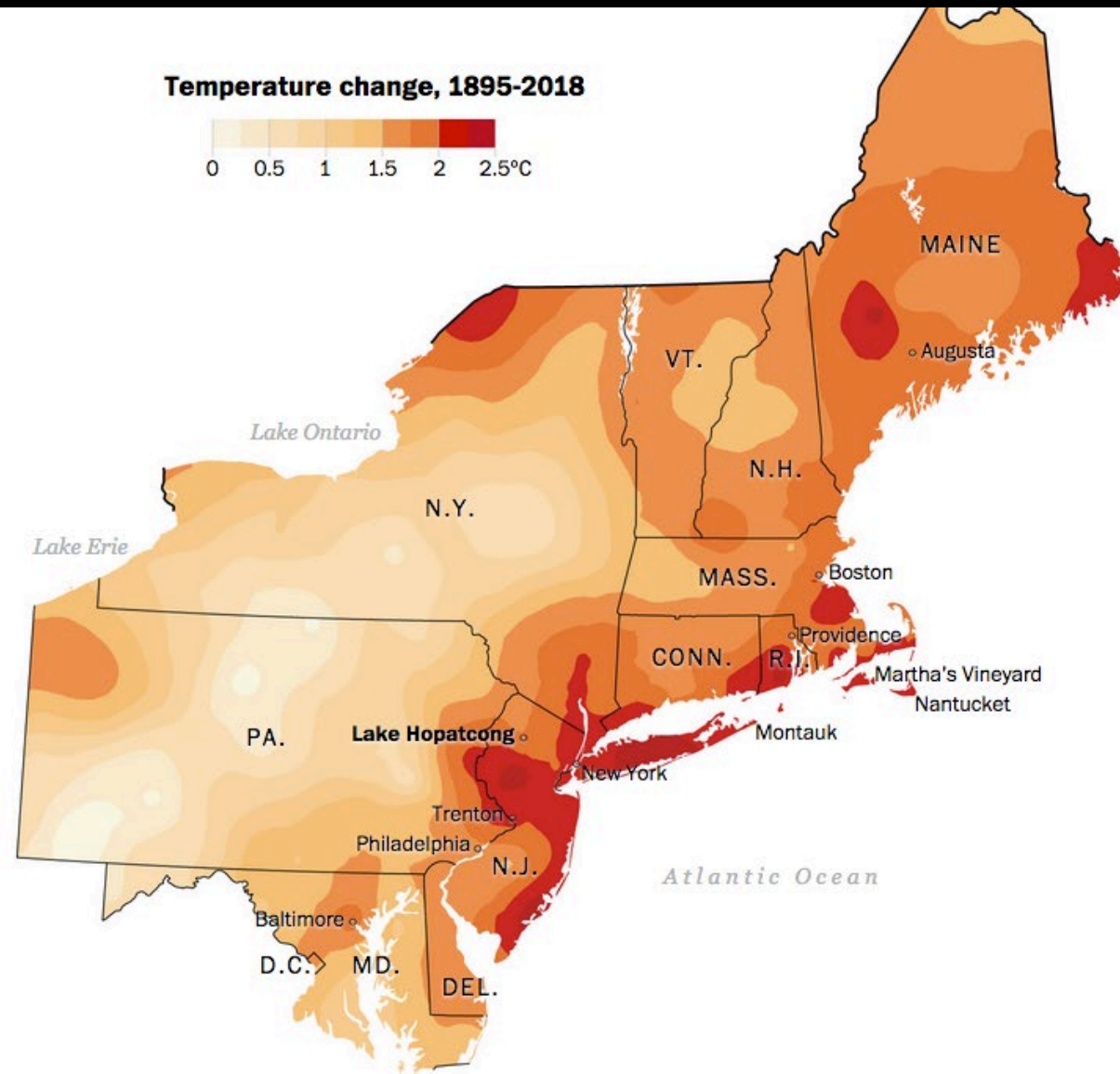
Path dependent irregularities (1) – Hot Spots

2°C: BEYOND THE LIMIT

°C

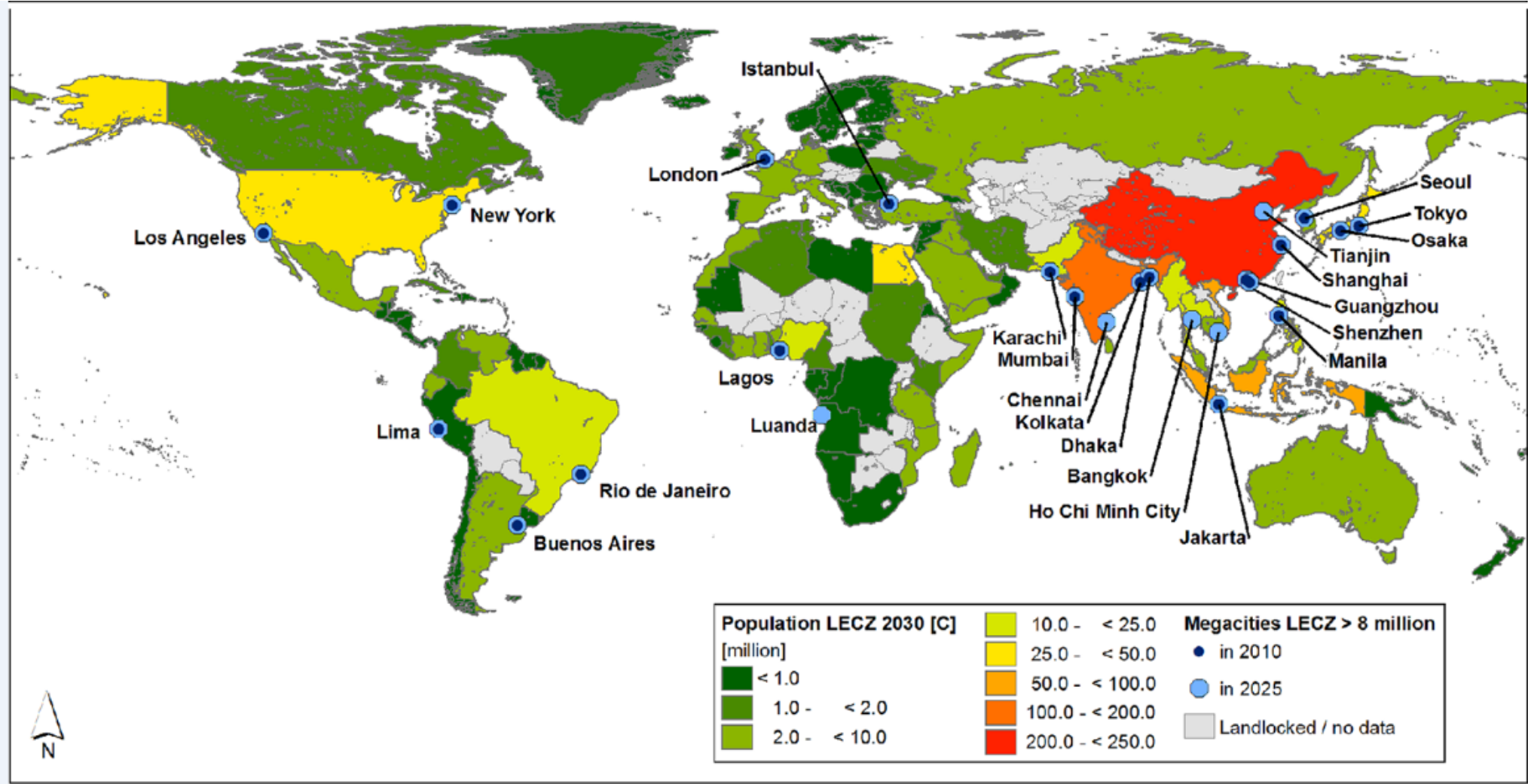


Path dependent irregularities (2)

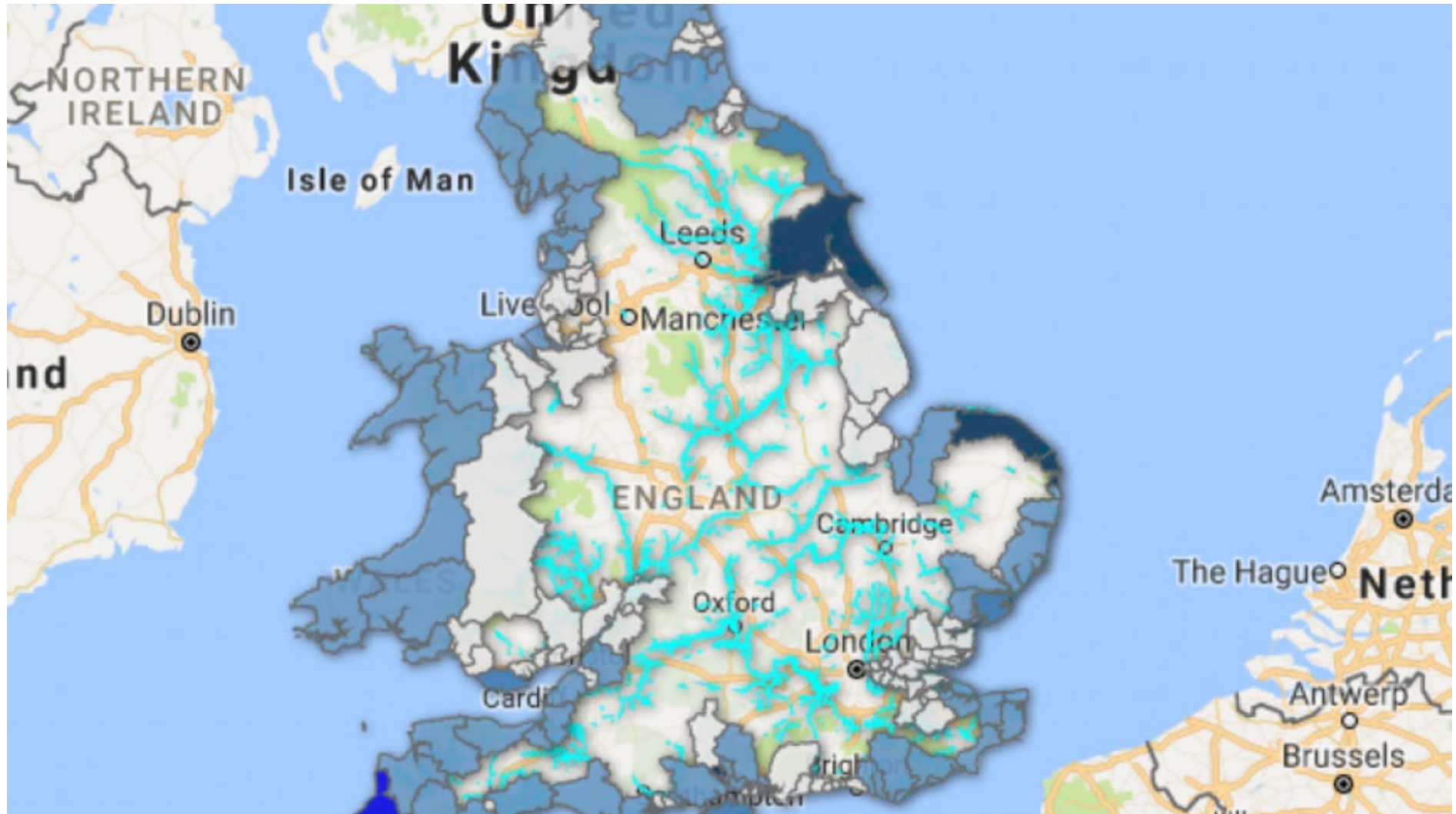


A particularly urban danger: flooding

Population growth by 2030: Coastal Cities



Flood map (UK): Projection 2050



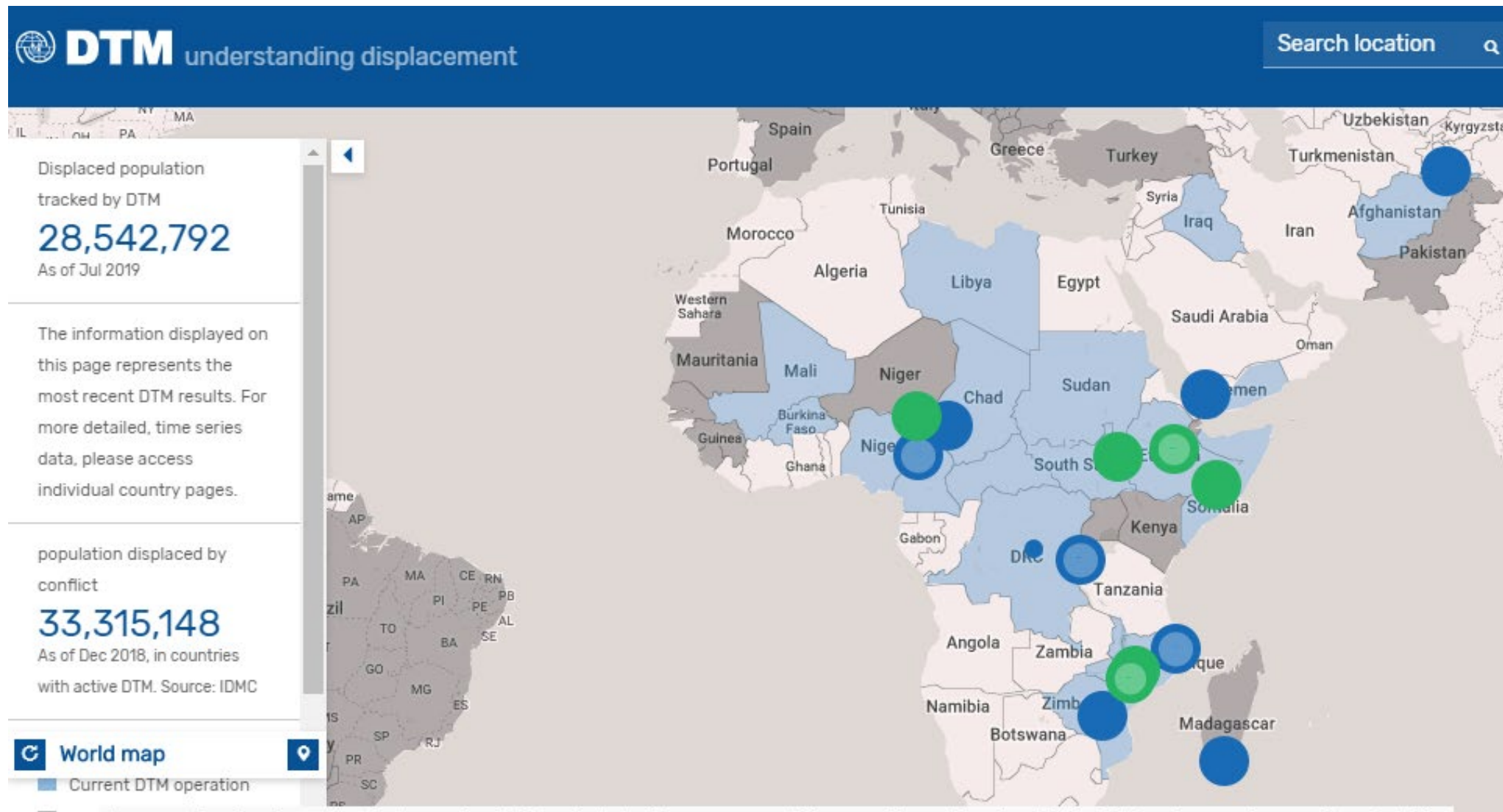


After 4°C of warming

3. The Status and Reception of Climate Refugees

- Desertification and refugees to cities
- Reformulation of refugee – migrant distinction

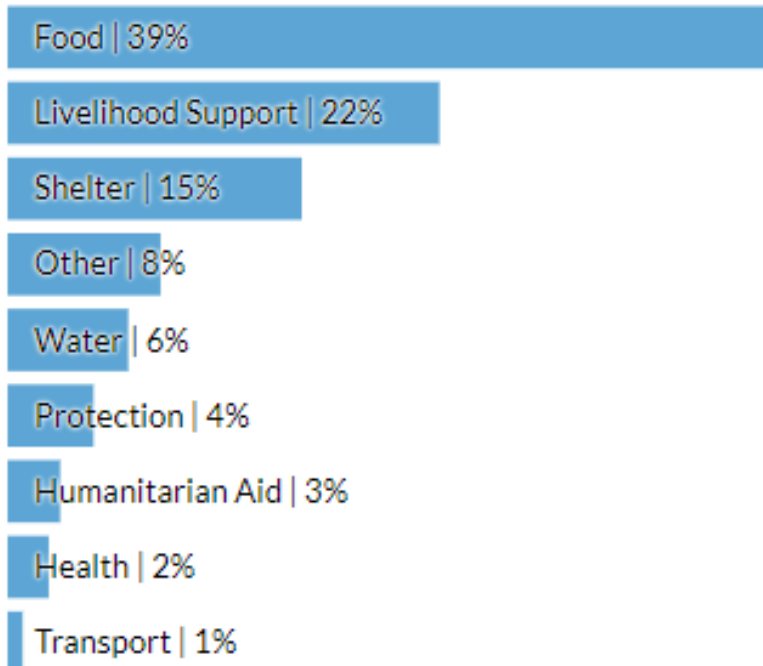
Displacement by natural hazards



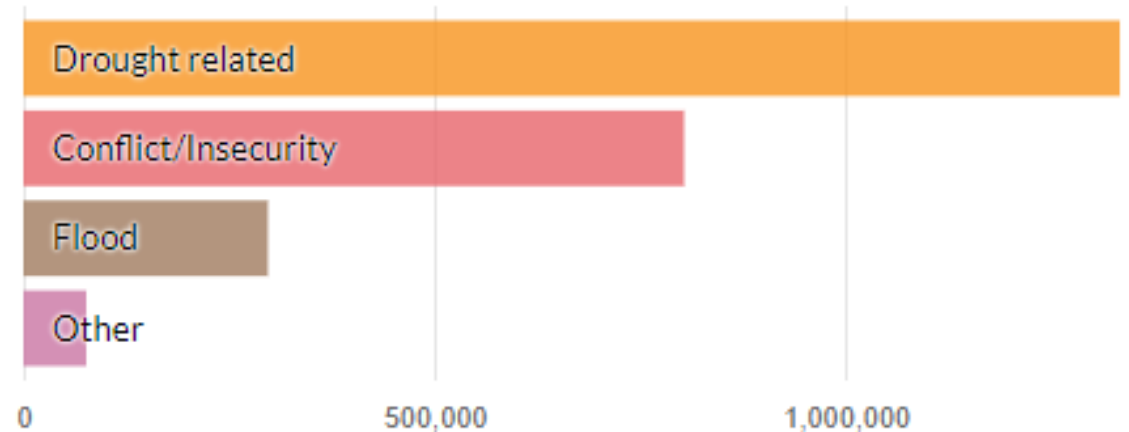
Desertification and urban migration

Displacement: Somalia

Arrival Priority Needs (%) ?



Reasons for Displacement ?



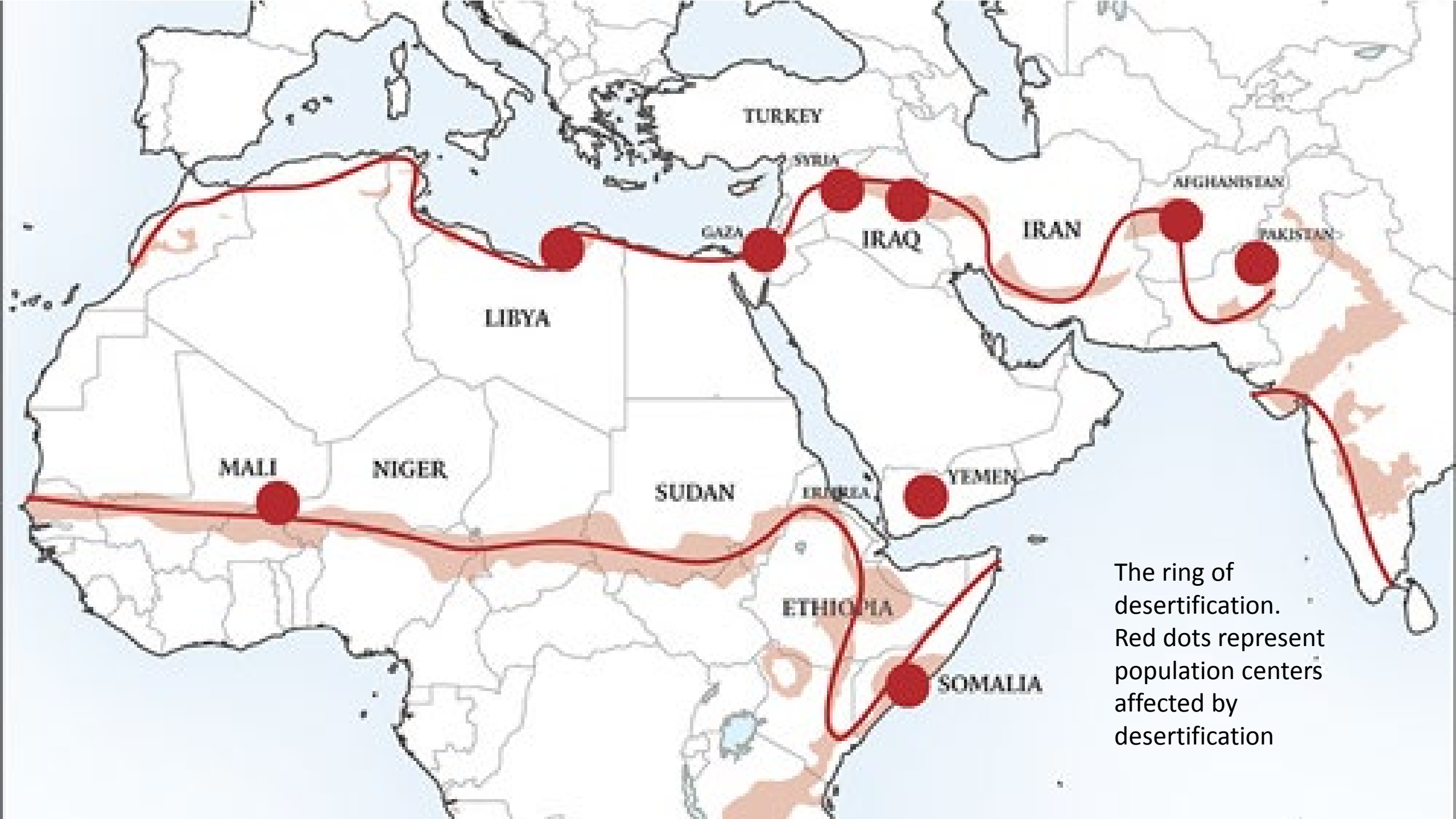
A dry well in Somalia (1)



A dry well in Somalia (2)







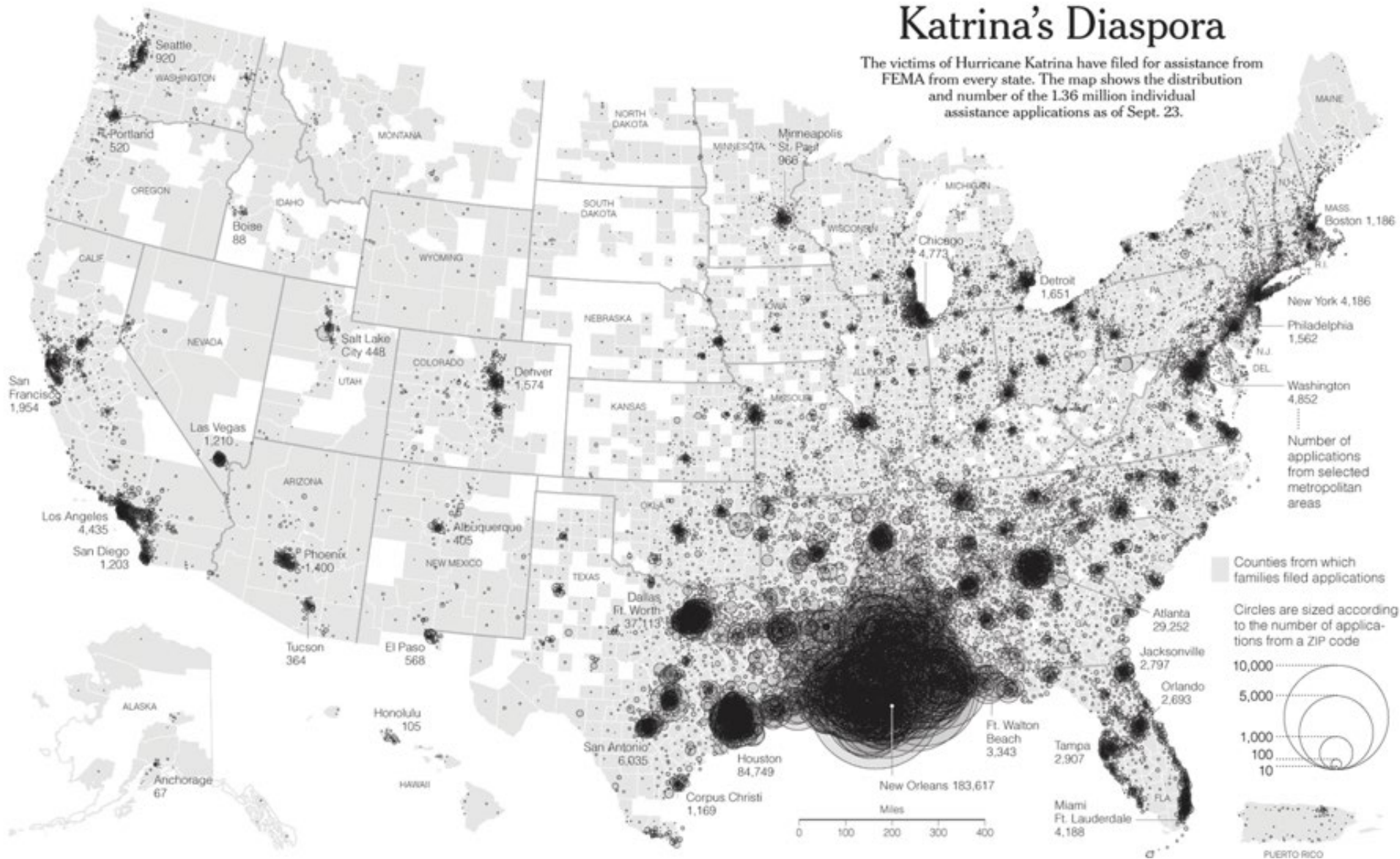
The ring of desertification. Red dots represent population centers affected by desertification

Desertification and the Israeli security fence



Katrina's Diaspora

The victims of Hurricane Katrina have filed for assistance from FEMA from every state. The map shows the distribution and number of the 1.36 million individual assistance applications as of Sept. 23.



4. Can Climate Change be Addressed Democratically?

1. The question of time
2. The question of scale

5. Mitigation and Adaptation

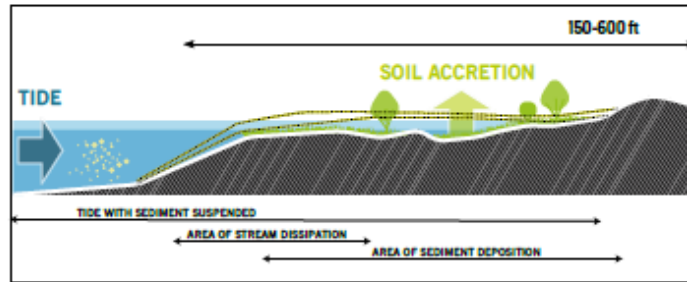
B.I.G.-designed Berm Proposal



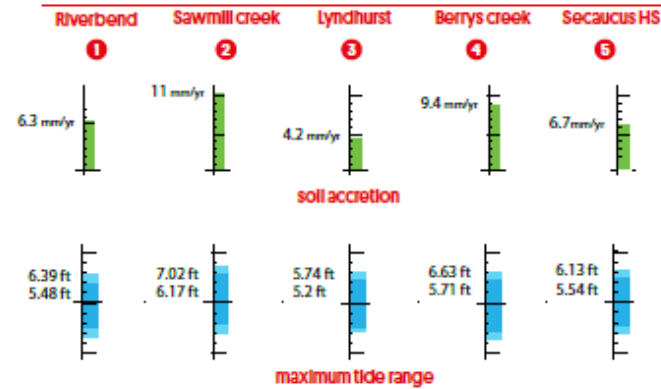
Wetlands and their capacity for gradual transformation form a critical part of the design.

Wetland adaptability over time is a function of soil accretion, which itself depends on using tidal sediment transportation patterns.

How does soil accretion work ?



Data points



BERM
PROPOSAL

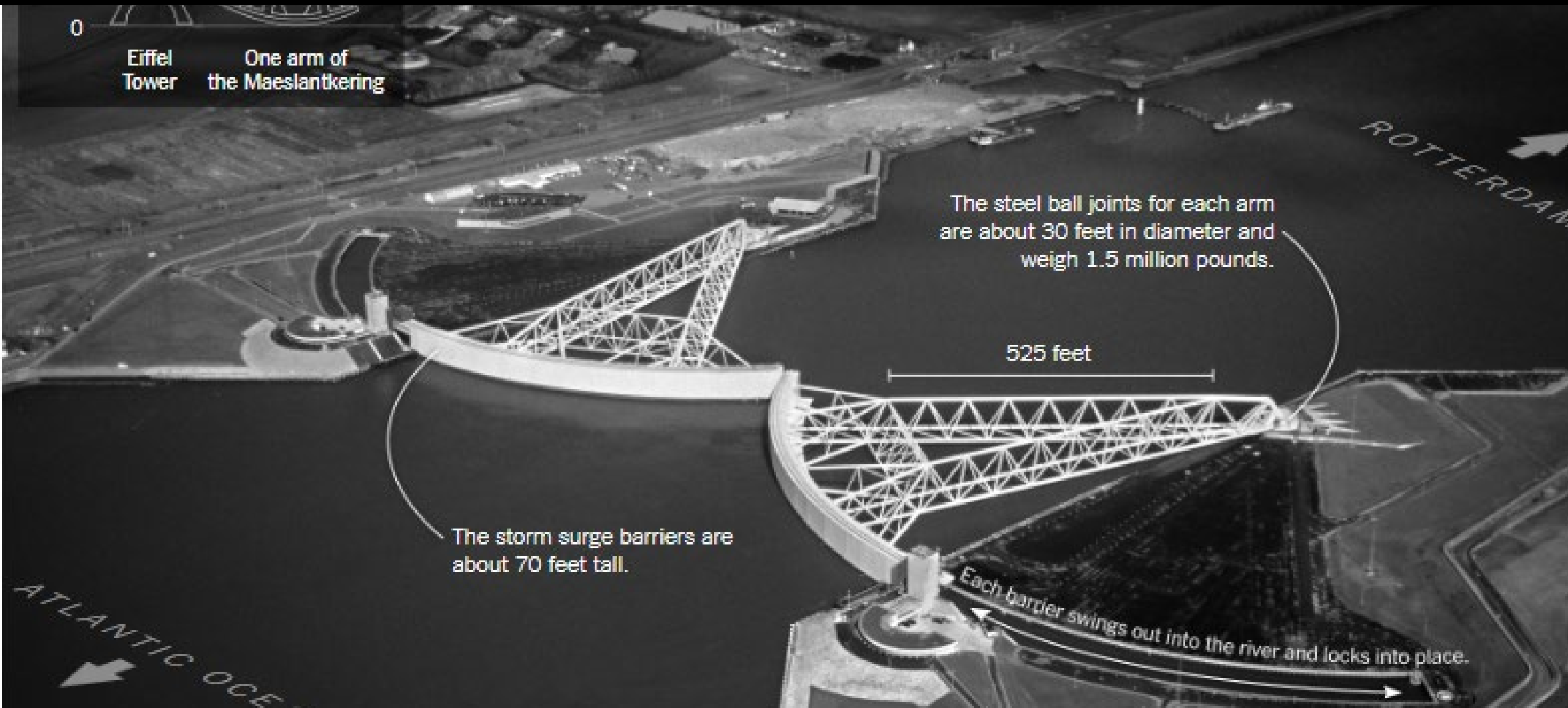
Mitigation, time, and the question of scale

Mitigation: storm surge barrier, Rotterdam (1) – 45 year framework





Mitigation: storm surge barrier, Rotterdam (2)



Adaptation: floating house, Amsterdam



Proposal to green Phoenix, principally to cool surfaces which are now heat absorbing tarmac - 30 year framework



Mitigation: small scale – surfaces: goo

Mitigation: Koolseal goo, water-based, titanium infused Los Angeles



Mitigation: Koolseal goo applied to roof-top, Bronx, NY





Porous version of Koolseal goo combined with bioswales on a Los Angeles pavement, capturing and filtering rain-water and run-off

Mitigation: vertical re-surfacing

Green terraces in Singapore



Total green wall in Singapore: Oasis Hotel



6. Individual Behaviour

how much you can contribute to stopping climate change



Data from Wynes & Nicholas, 2017

Infographic by Sara Chodosh

Sustainable diet

to keep global temperature below 2C

The way we eat now (average person in the UK, per week)	Future recommended diet (average person, per week)
1.6kg meat and 4.2 litres of milk	500g of meat and 1 litre of milk
3 burgers (450g)	1 quarter-pound beef burger
6 sausages (450g)	2 sausages
8 slices of bacon (250g)	3 rashers of bacon
2 chicken breasts (350g)	1 chicken breast
3 litres of milk	1 litre of milk or 100g of cheese
100g of cheese and a helping of cream	
4 ham sandwiches (100g)	

Weekly ration: 1940

- **Bacon & Ham** 4 oz
- **Other meat** value of 1 shilling and 2 pence (equivalent to 2 chops)
- **Butter** 2 oz
- **Cheese** 2 oz
- **Margarine** 4 oz
- **Cooking fat** 4 oz
- **Milk** 3 pints
- **Sugar** 8 oz
- **Preserves** 1 lb every 2 months
- **Tea** 2 oz
- **Eggs** 1 fresh egg (plus allowance of dried egg)
- **Sweets** 12 oz every 4 weeks

