



Building Companies that Shape the Future

Water Investment Overview

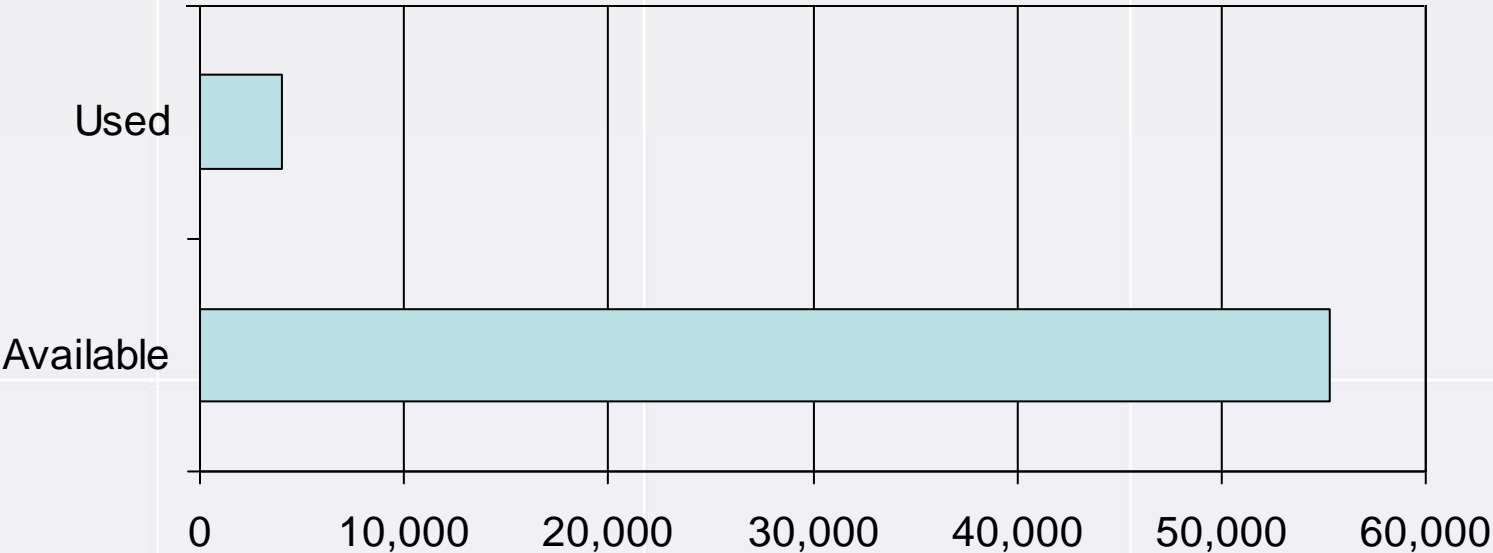
Matthew M. Nordan

Presented at Bluetech Innovation Forum

June 8, 2010

On one hand, there's plenty of water

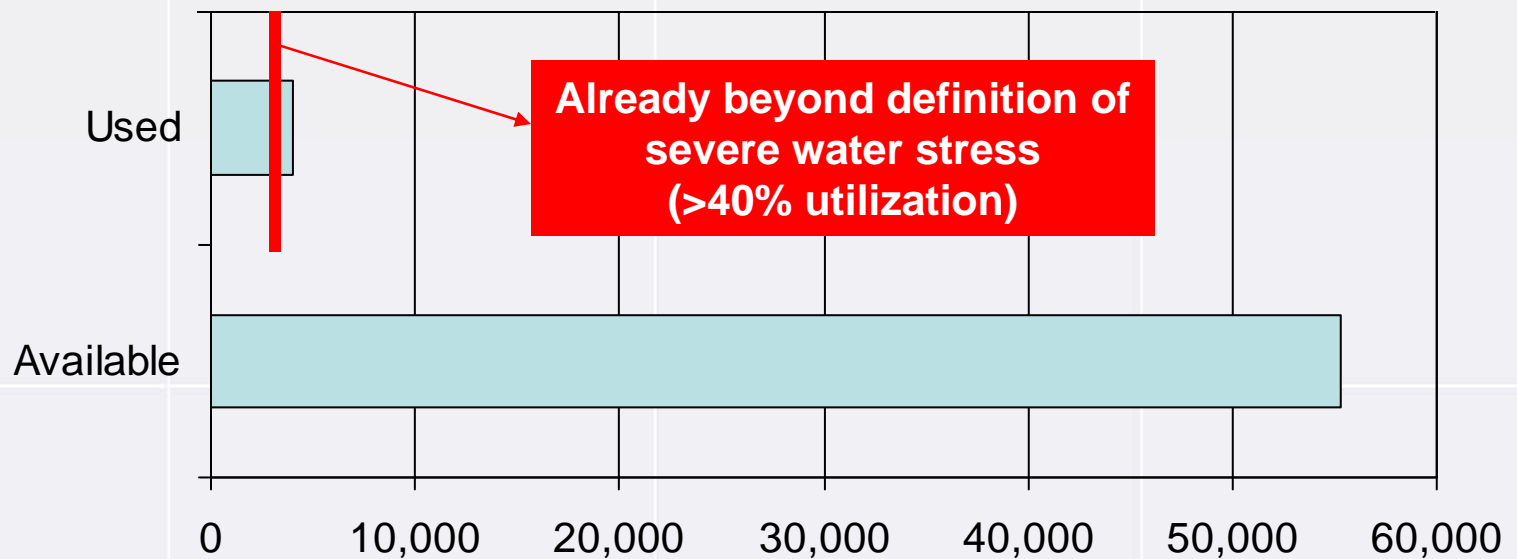
Global water availability and use, 2008 (km³)





On the other hand, it's poorly distributed

Global water availability and use, 2008 (km³)

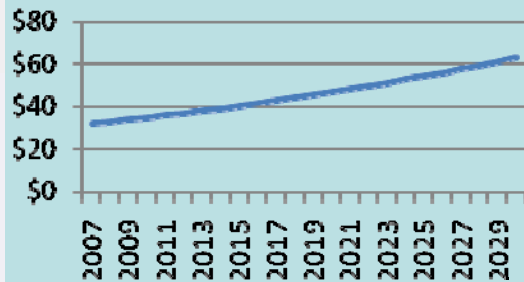


Three factors determine future water needs

1) GDP

US\$1M GDP/yr =
22,000 m³ of water

World GDP (US\$ trillions)



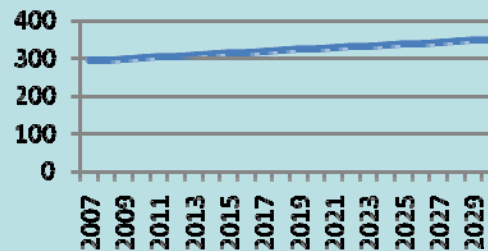
Source: U.N. Population Division.

CAGR to 2030:
3.0%

2) Irrigation

1 hectare of land/yr =
10,000 m³ of water

Irrigation (M hectares)



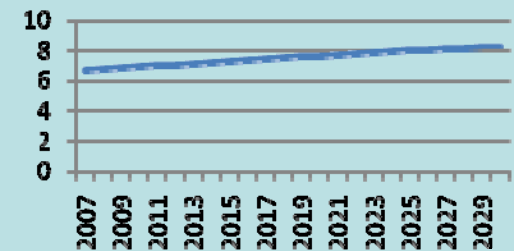
Source: U.N. Food and Agriculture Org.

CAGR to 2030:
1.5%

3) Population

1 person/yr =
60 m³ of water

Population (billion people)



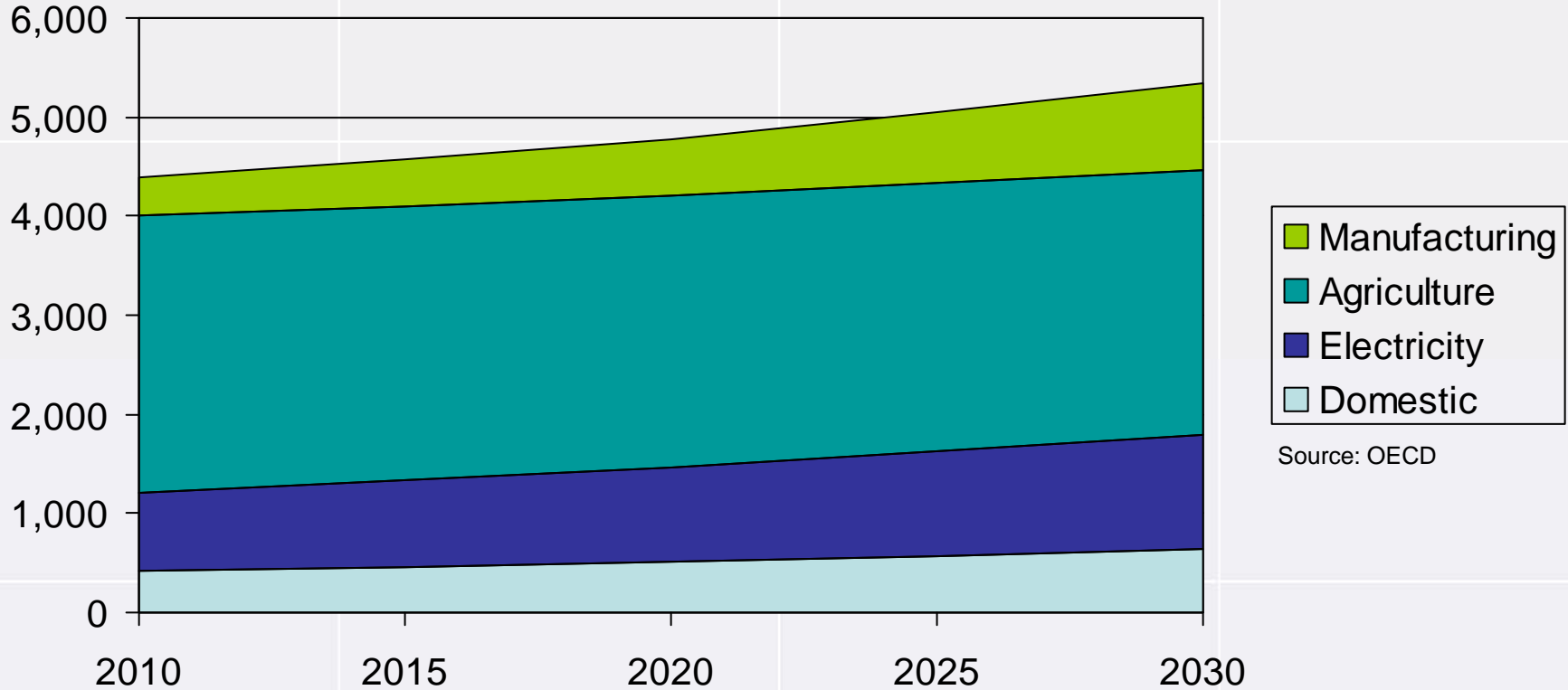
Sources: IMF, World Bank.

CAGR to 2030:
0.9%

Together, these factors account for more than 98% of the variance between different countries' annual water usage

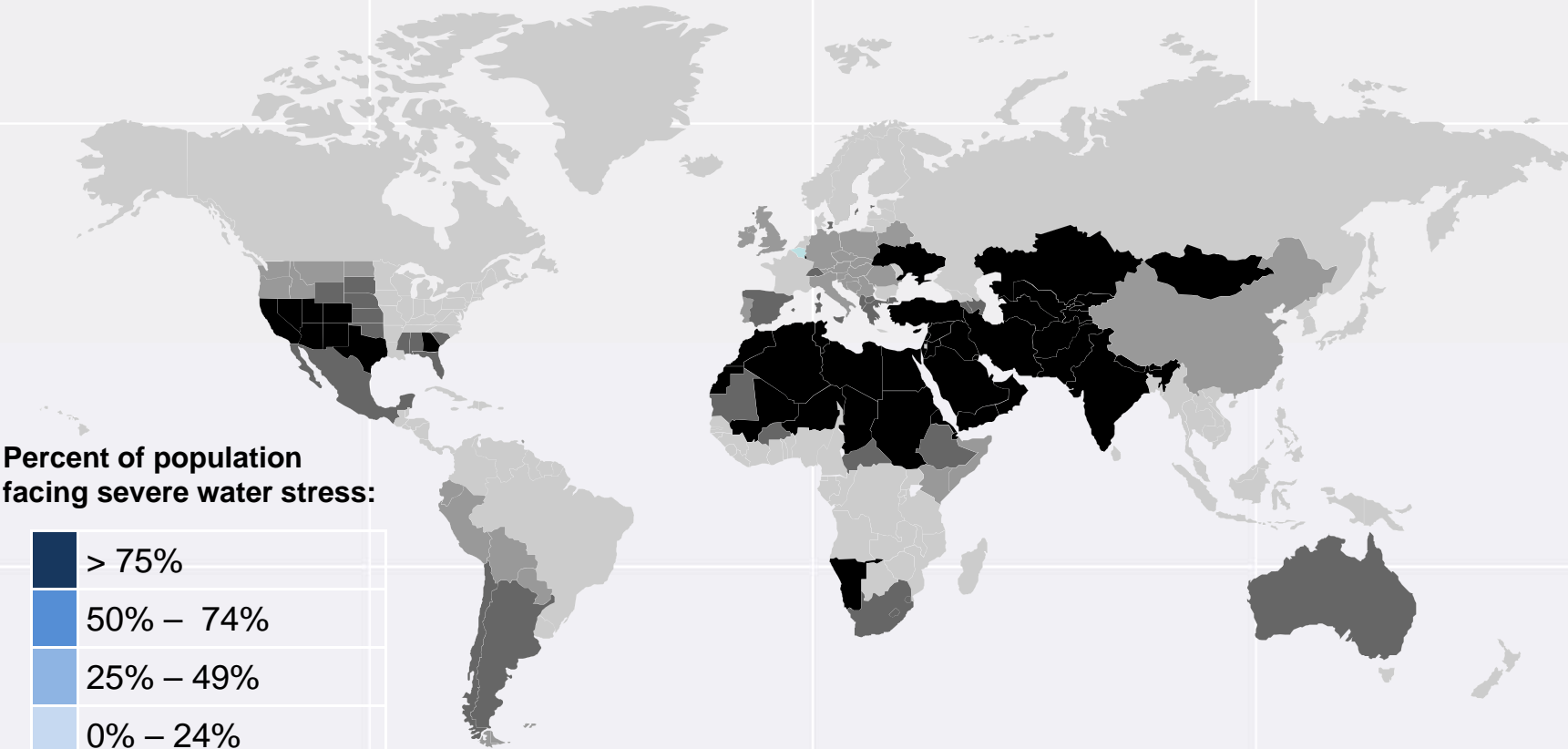
Baseline: 22% more water in 2030

Water

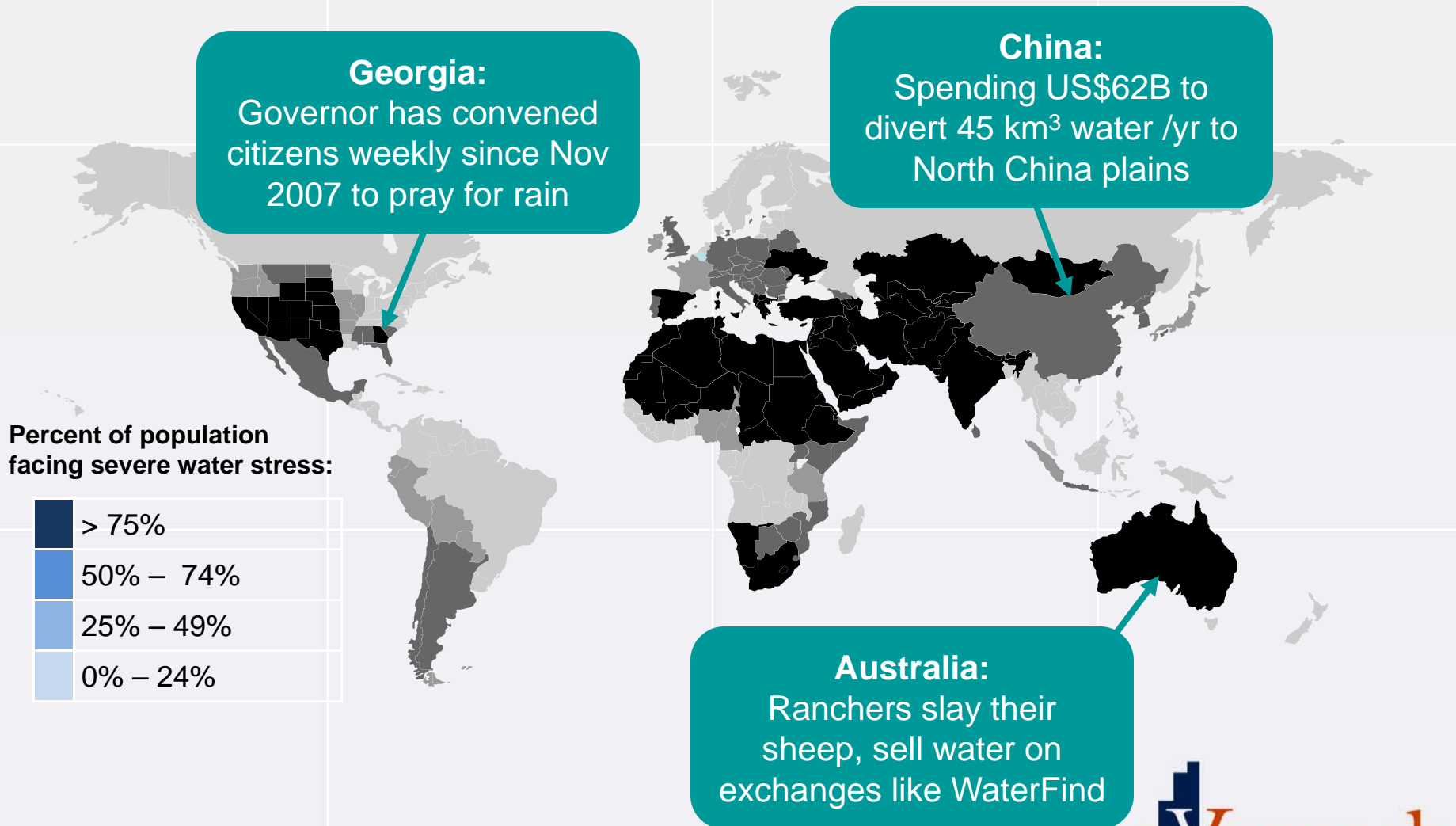


- Looks small here...
- ...but takes world to 63% of annual renewable water resources
- = much more water stress
- = in a hyper-local fashion

Areas of severe water stress in 2007

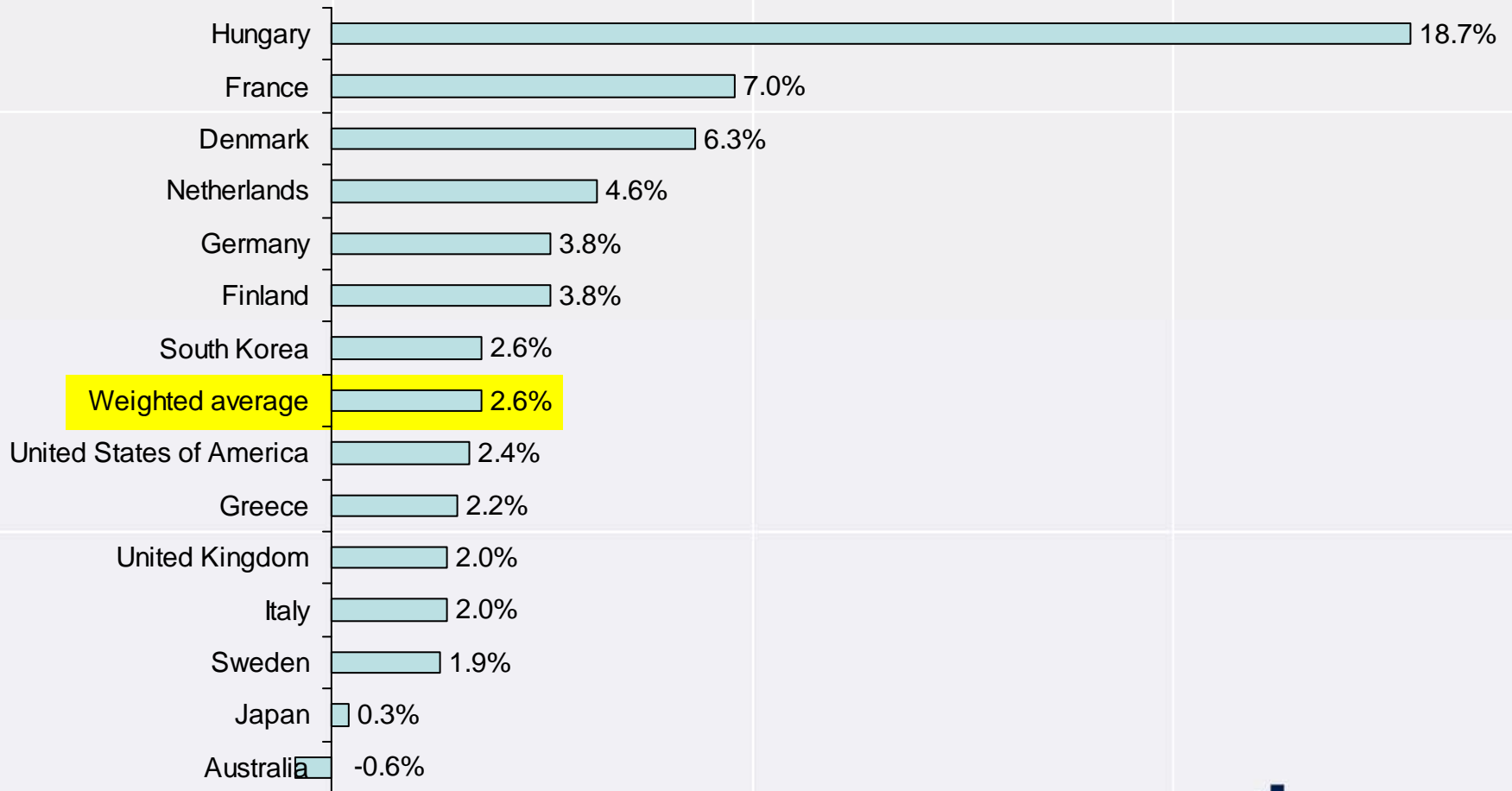


Areas of severe water stress in 2020

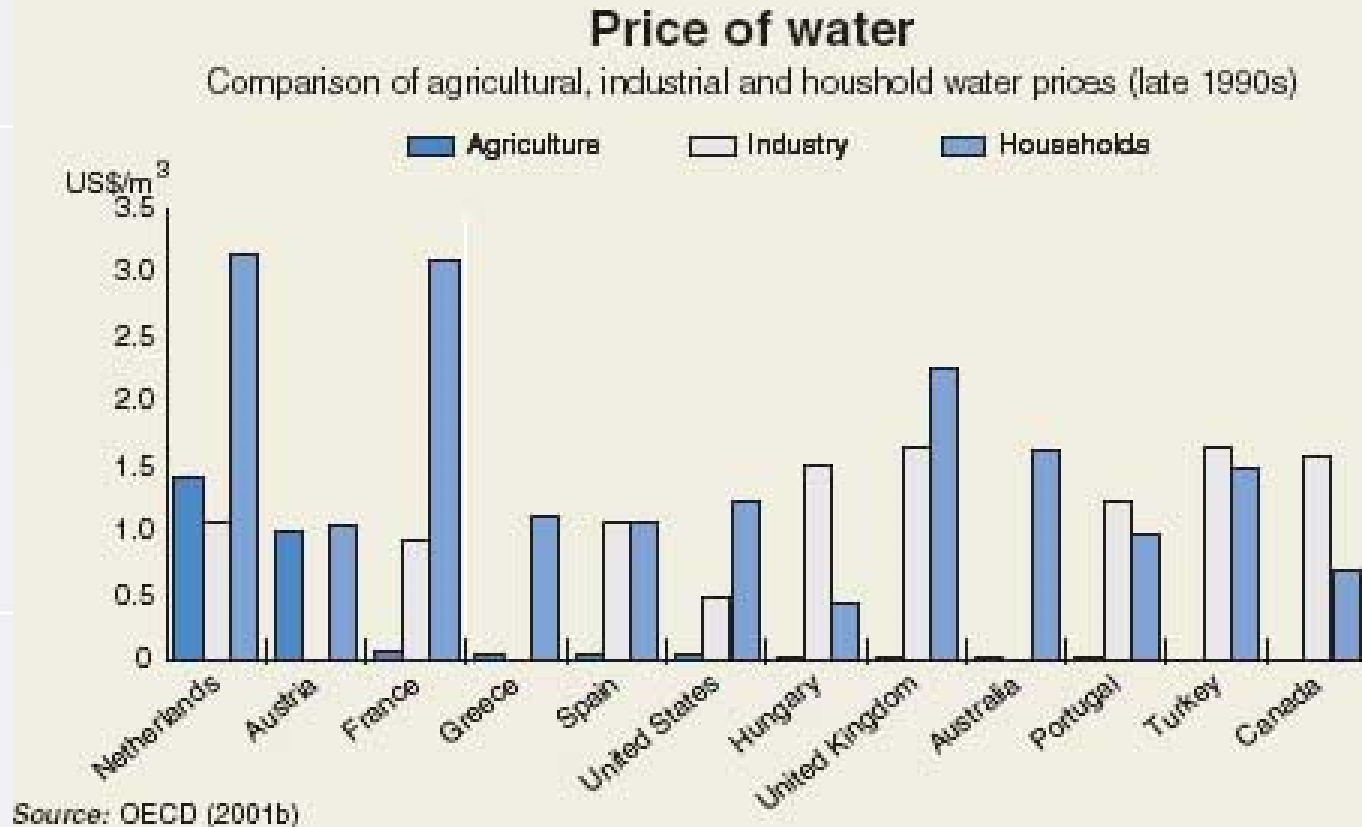


Price signals are missing in water...

Real residential water price changes, most recent time series (1990 to 1999)



...especially where it matters most!



Investing in water: The market is...

Fragmented

- Segments vary widely by model, size, margins, customers
- Market share fragmented within segments (e.g. pipes)

Hyper-local

- Treatment processes customized for each installation
- Water execs hesitant to generalize about demand

Undervalued

- Water prices rising only 2.6%/year in OECD countries
- Stressed Australia: 3,000 L tap water = 1 L bottled water

Conservative

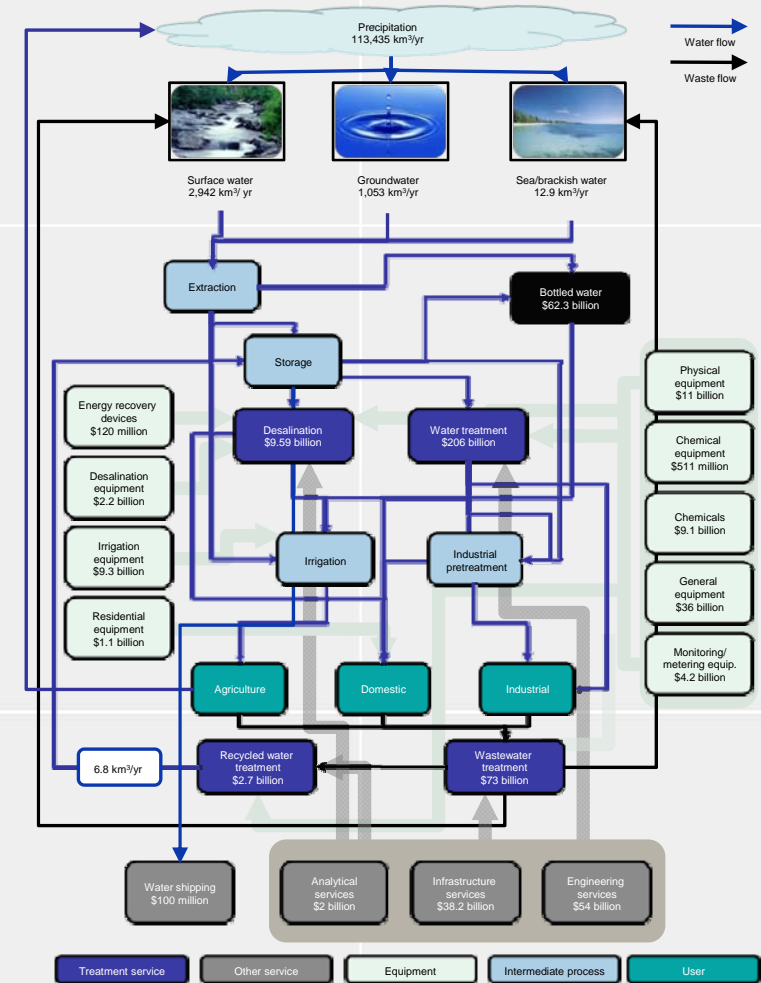
- Cost reigns over all
- Wooden 19th-century pipes still working under London

Methodical

- Adoption cycles generally take decades, not years
- UV: Invented 1801, installed 1900, exceeded 100 plants 2003

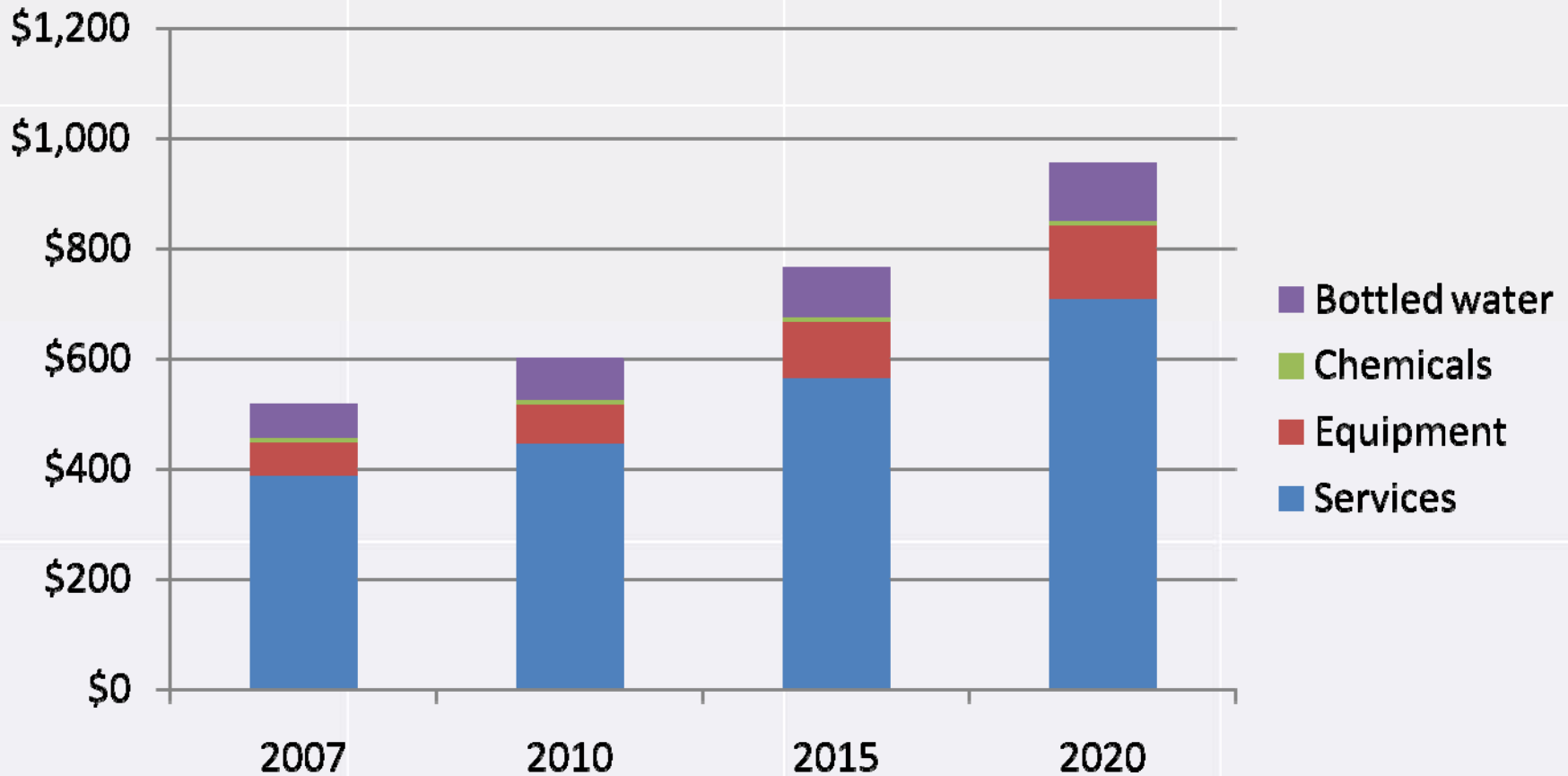
Mapping the hydrocosm

- The hydrocosm is immensely complex and interconnected
- Total 2007 revenue US\$522 billion
- Four top-level categories:
 - **Services:** \$386 billion (74%)
 - **Equipment:** \$64 billion (12%)
 - **Chemicals:** \$8.9 billion (2%)
 - **Bottled water:** \$62 billion (11%)
- 85 individual segments within these four top-level categories



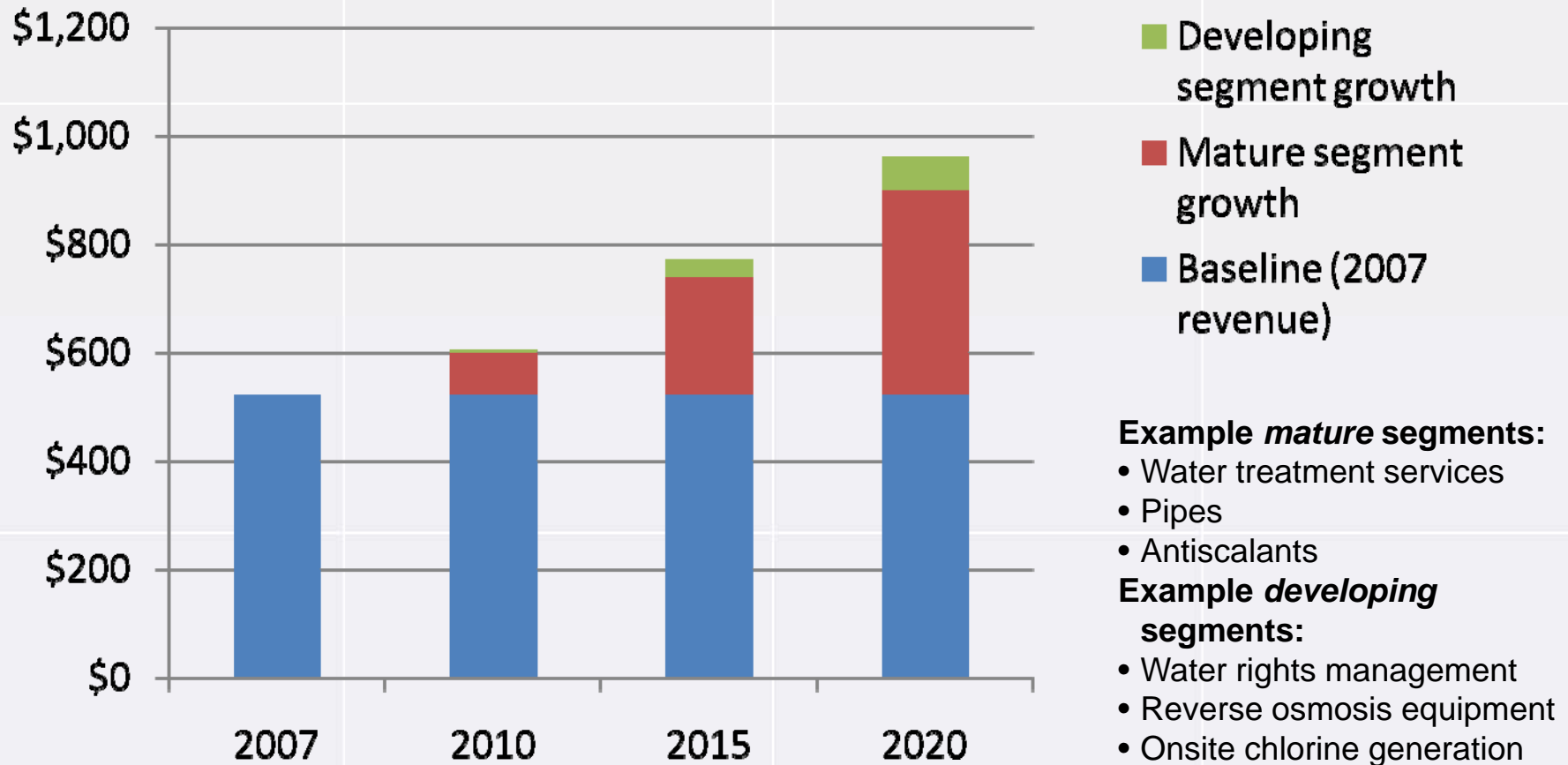
Plotting the growth...

Hydrocosm revenue by category, 2007 to 2020 (US\$ billions)



...finds mostly mature segment expansion

Hydrocosm revenue by growth driver, 2007 to 2020 (US\$ billions)



Thank you

Matthew M. Nordan

mnordan@venrock.com

(617) 995-2020