

look for



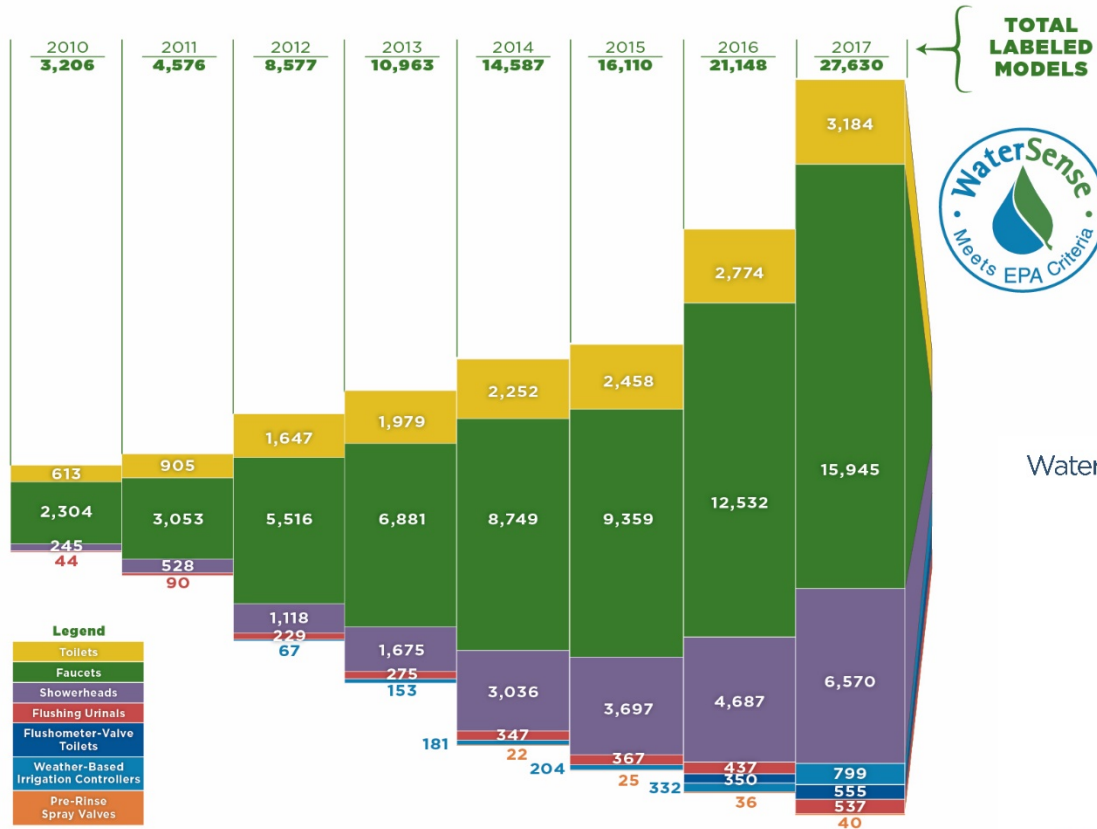
What Increased Efficiency Means for Water Quality, Management, and Systems



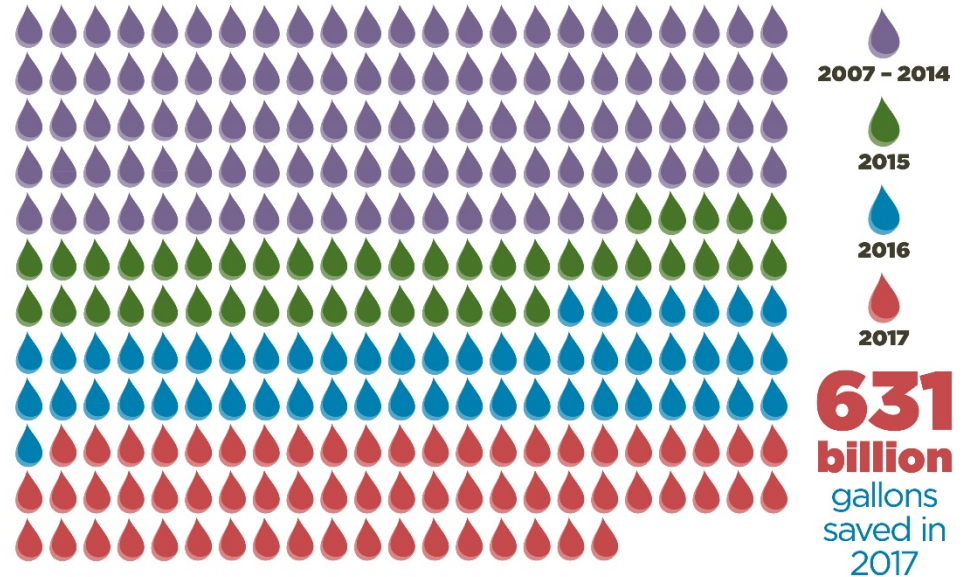
Hot Water Forum
March 13, 2019

Our Job is to Save Water

WaterSense Labeled Products



2.7 trillion gallons of water saved since 2006!



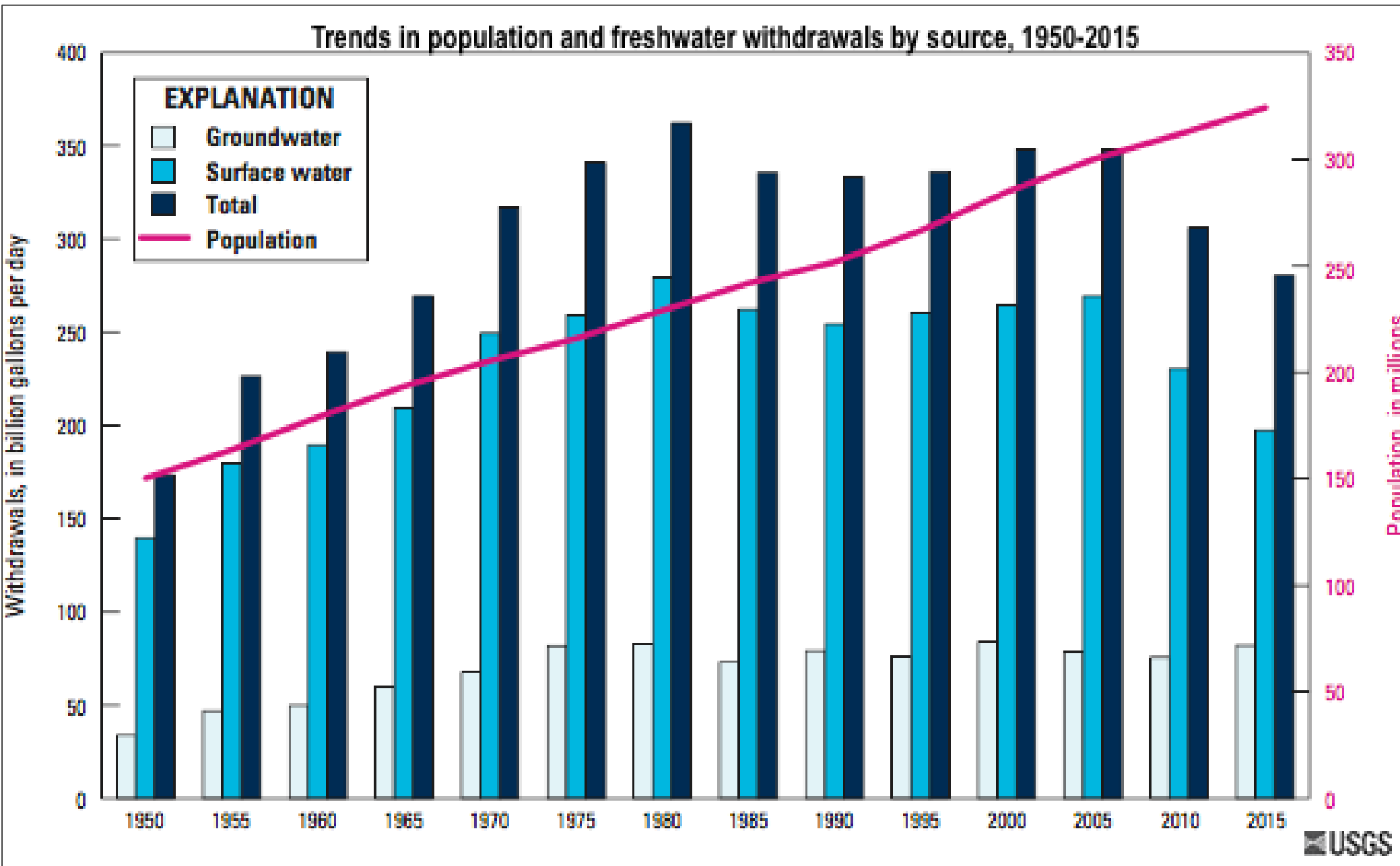
631 billion gallons saved in 2017

WaterSense partners helped...



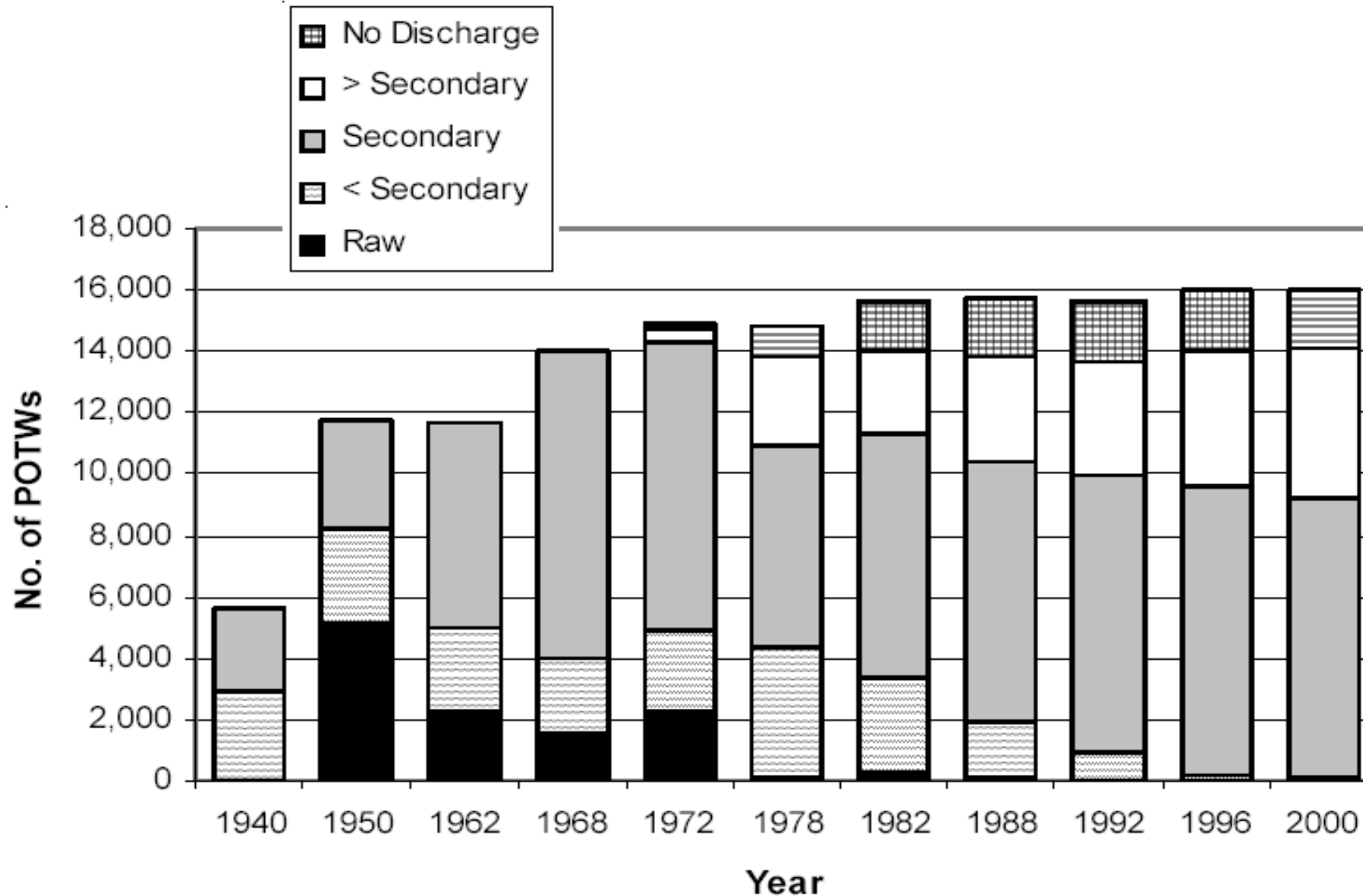
...consumers save
\$63.8 billion
 in water and energy bills

Trends in population and freshwater withdrawals by source, 1950-2015

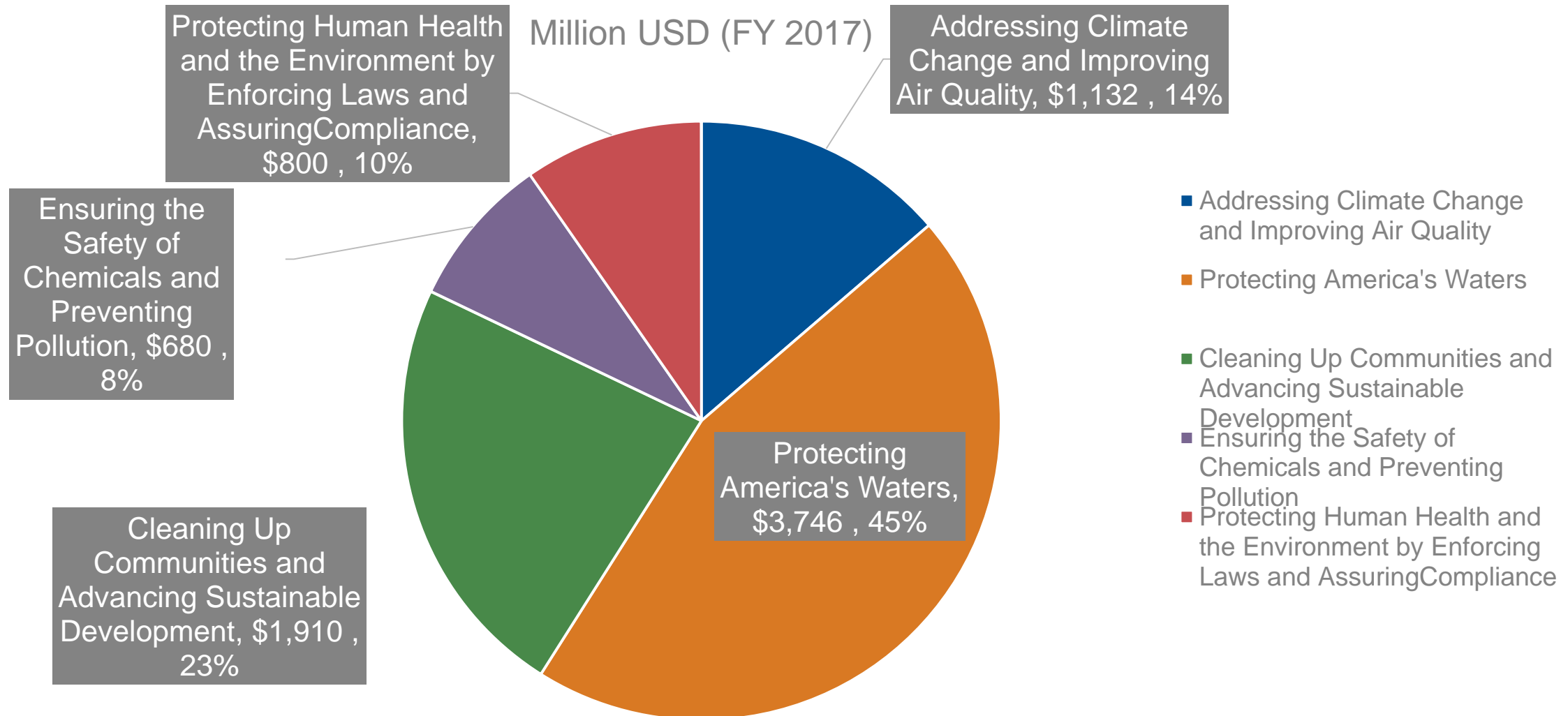


**Overall
 Water
 Demand
 in the
 US**

Water Demand in the US



Where Does EPA's Money Go?



A Drop in the Bucket...

According to the American Society of Engineers (ASCE) estimate to:

- Maintain and expand one million miles of pipes
- Address an 240,000 water main breaks per year
- Stop the loss of two trillion gallons of treated water per year

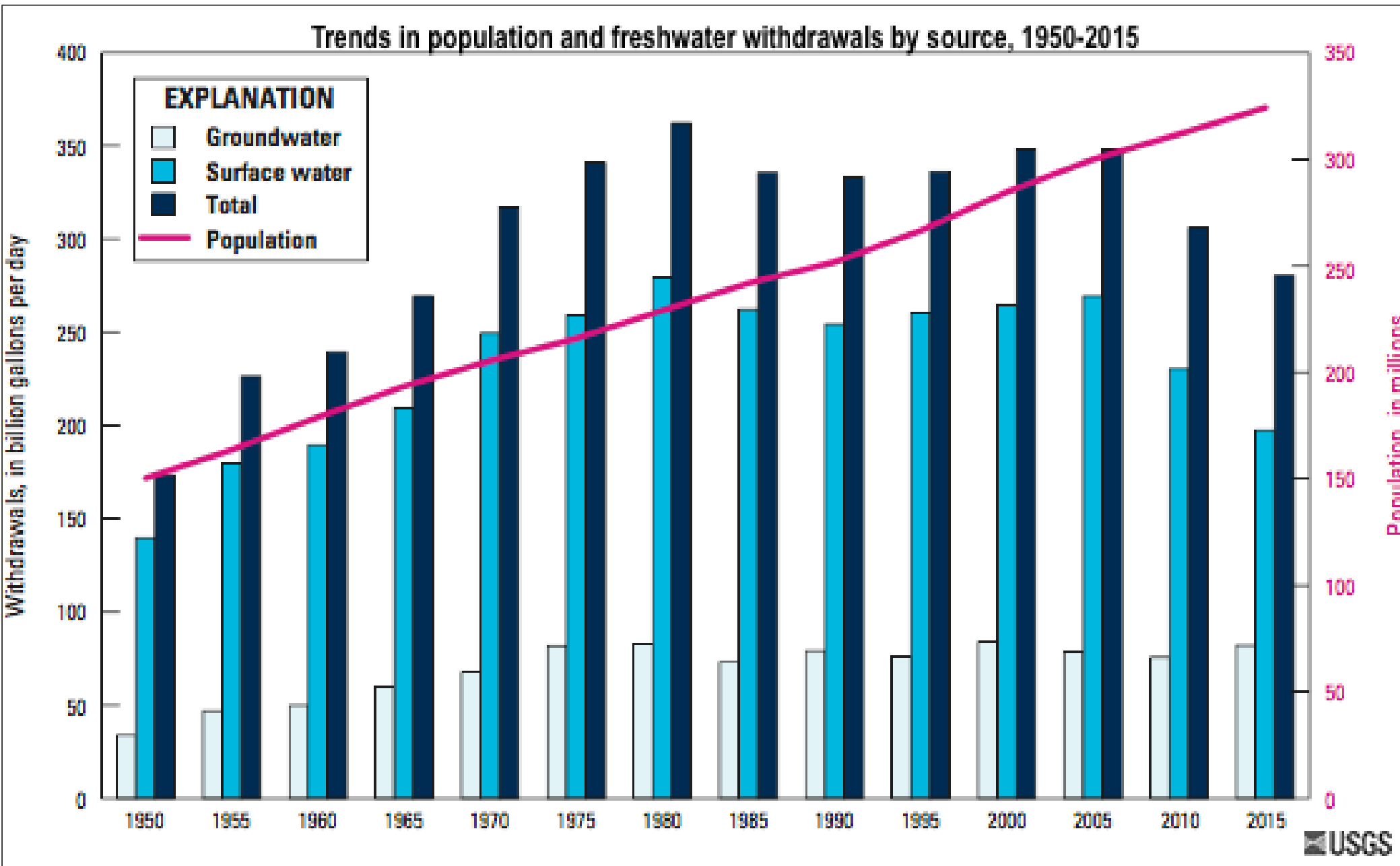
\$1 Trillion

IN INVESTMENT IS NEEDED

to maintain and expand service to meet demands over the next

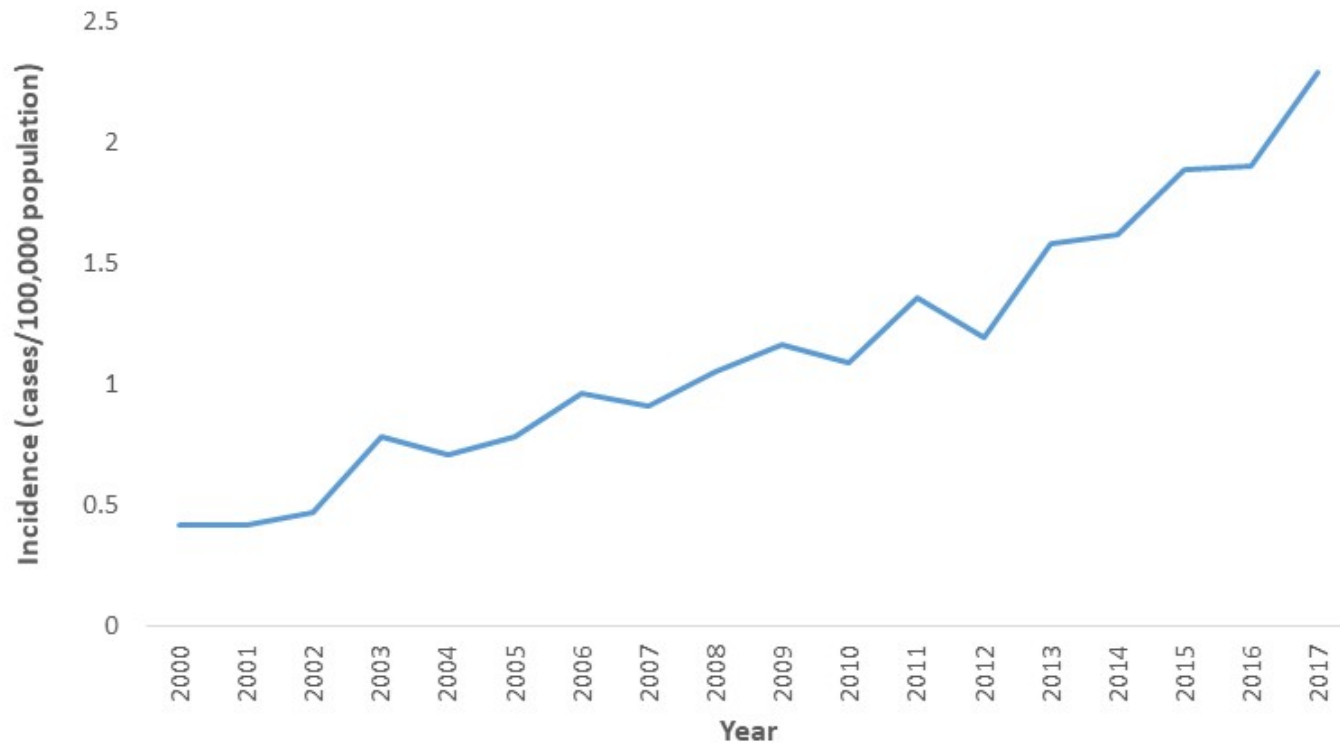
25 years

Trends in population and freshwater withdrawals by source, 1950-2015



**Overall
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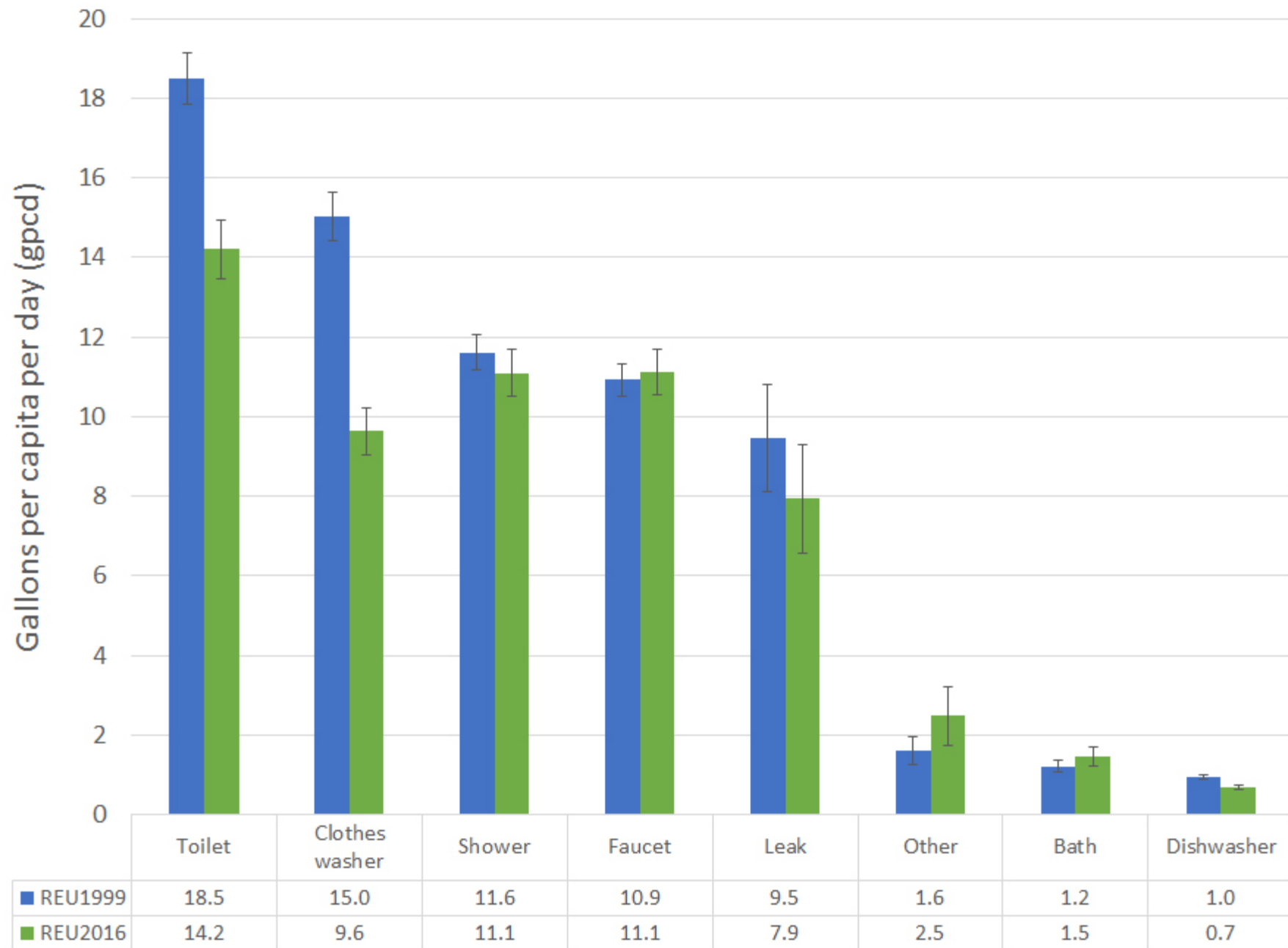
Legionnaires' disease is on the rise in the United States



Rate of reported cases increased 5.5 times (2000–2017)

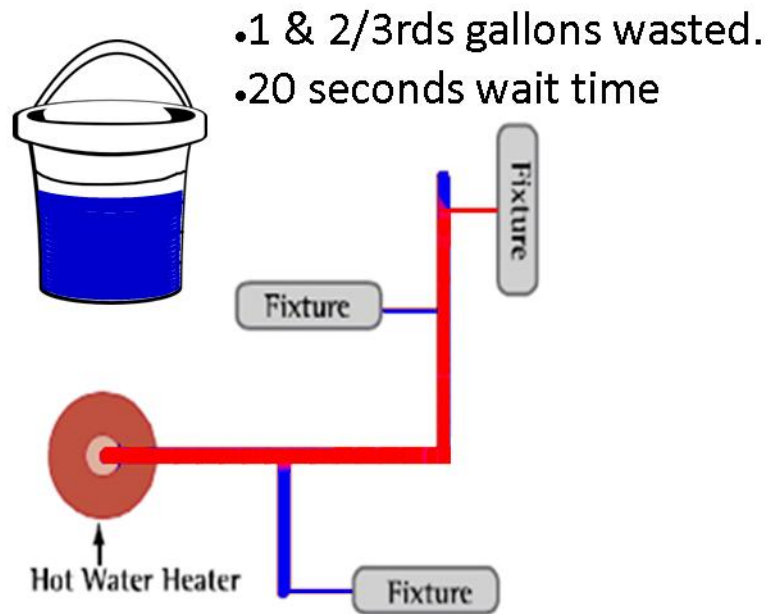
Source: National Notifiable Diseases Surveillance System

- 7,500 documented cases in 2017
 - Actual number could be much higher
 - 1/10 cases is fatal
- Influenza killed roughly 80,000 people last year
- 88,000 die from alcohol-related deaths each year
- >800,000 global deaths a year from improper water and sanitation

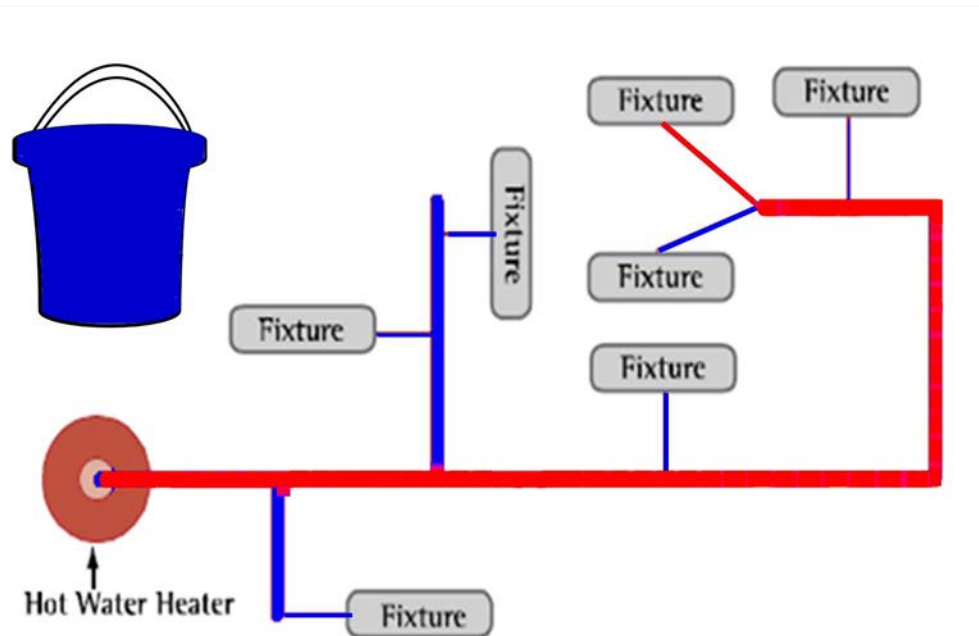


How We Use Water IS Changing

Yesterday's Design



Today's Home



- 3 gallons wasted
- 1 minute 30 seconds wait time

How has this changed how water moves through our buildings?
How has it influenced residency times?

There's So Much We Don't Know

- Conversations on this topic tend to be polarizing
 - Onsite pathogens aren't a big deal
 - Efficiency is bad because it allows opportunistic pathogens to thrive

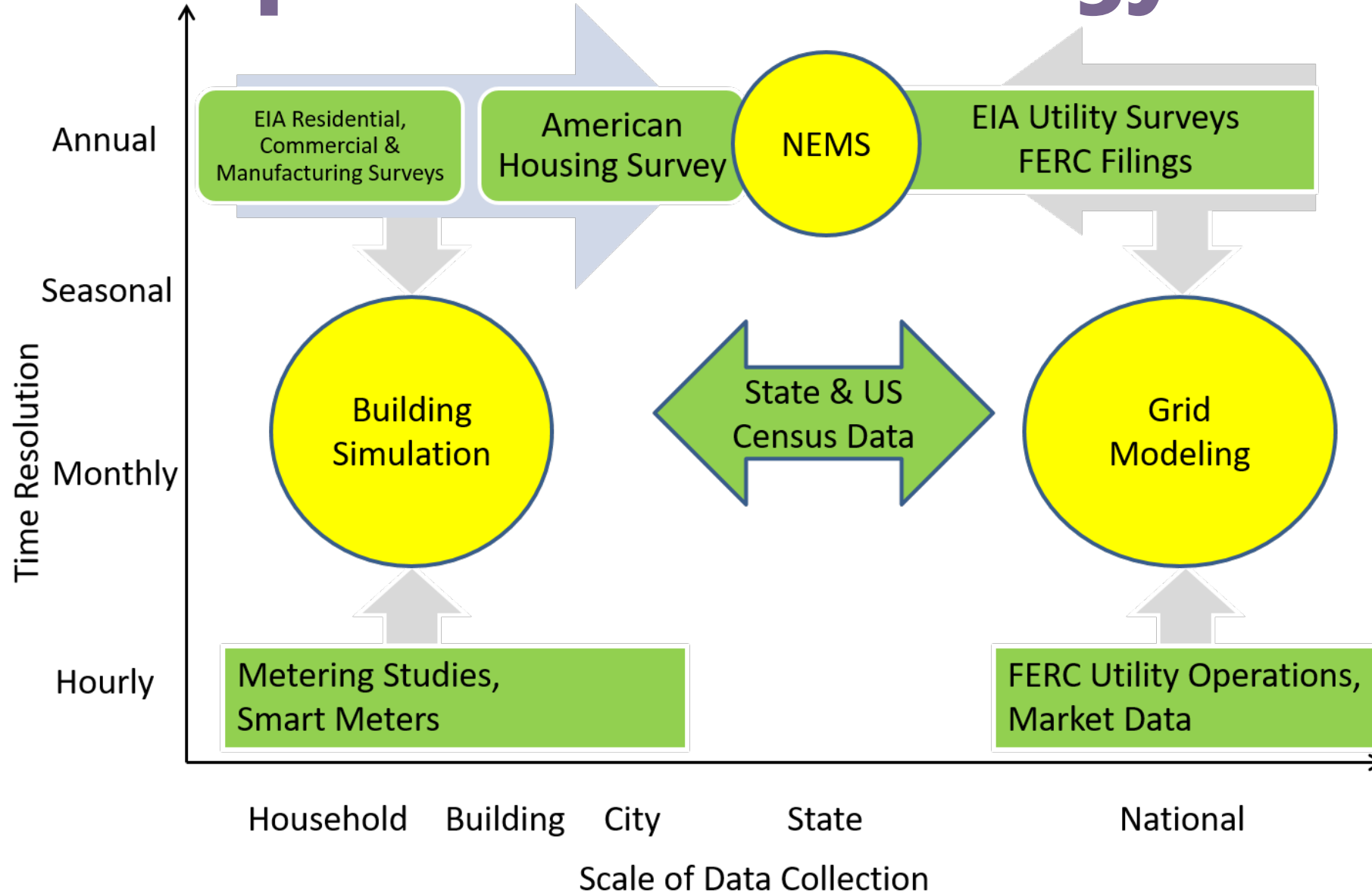
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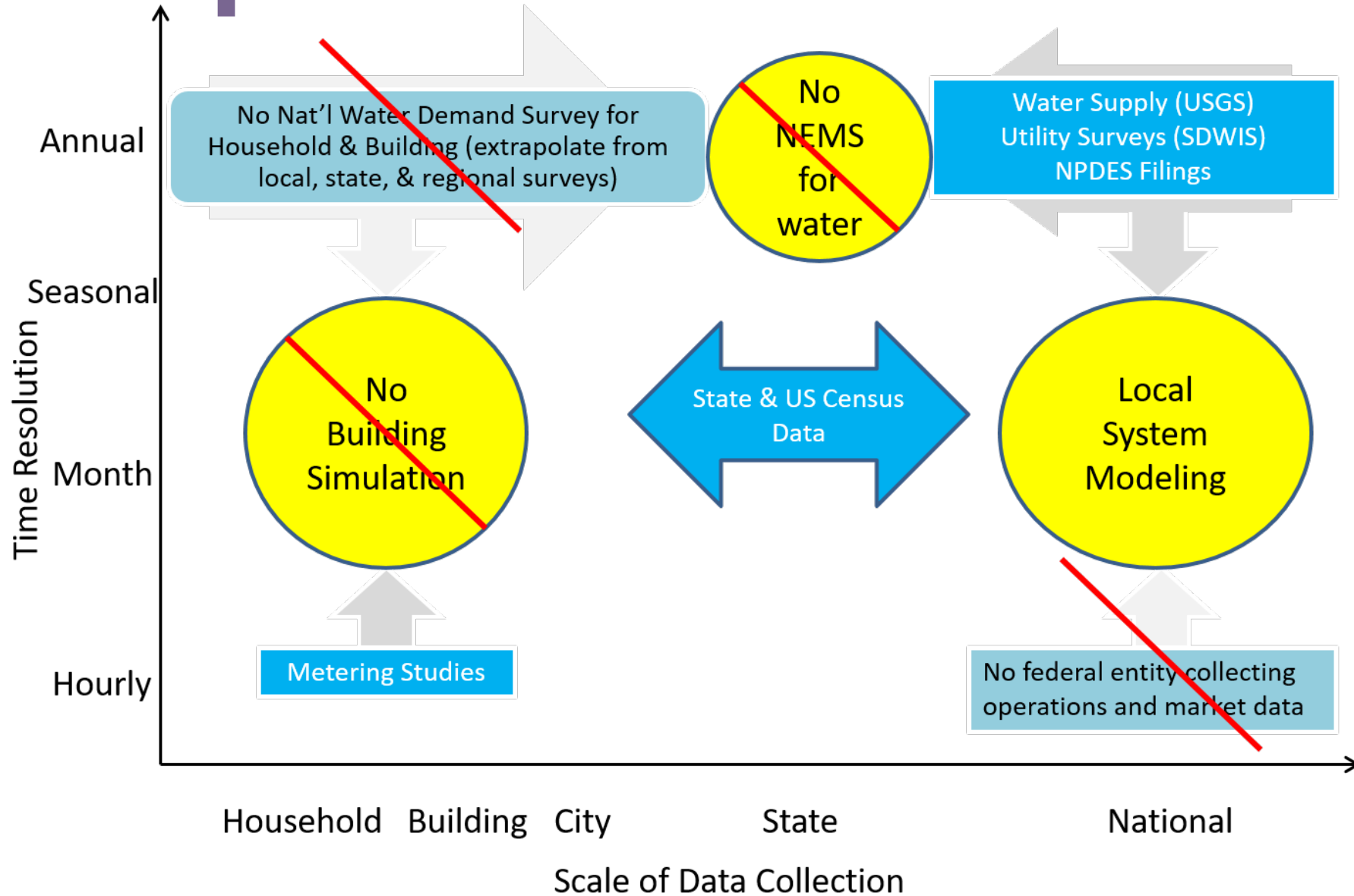
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- We tend to focus too much on residential
 - This may not be where the priority issues lay

Scope of Available Energy Data



Scope of Available Water Data



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- We tend to focus too much on residential
 - This may not be where the priority issues are
- We're at the beginning of this journey



Thank You!

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