

1

question:

Does the state water plan adequately account for environmental needs?

- A. Yes
- B. No
- C. Aw, hell no!
- D. Kinda

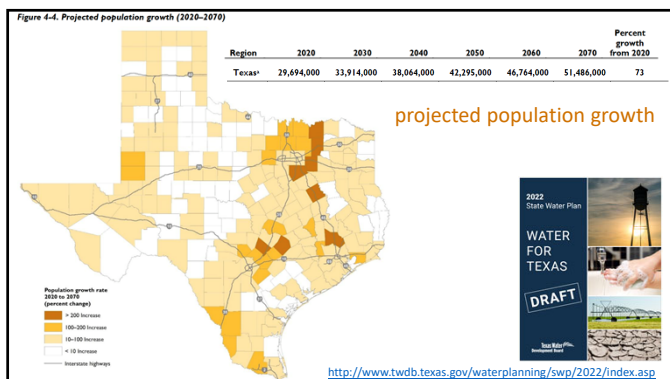
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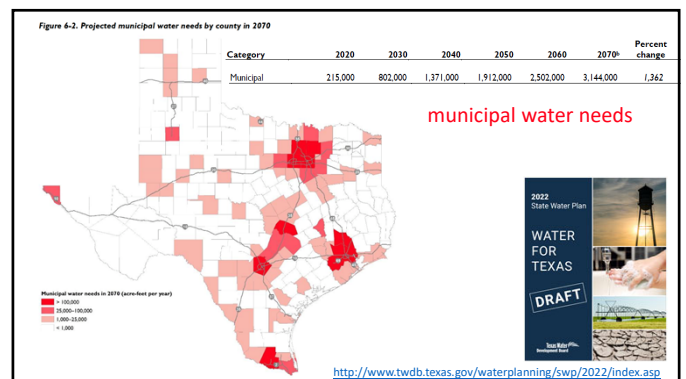
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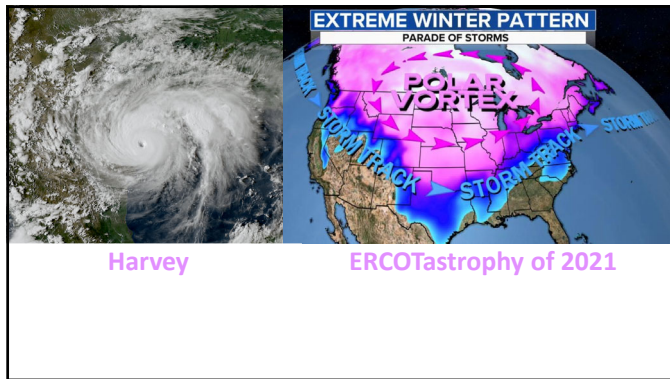
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outline

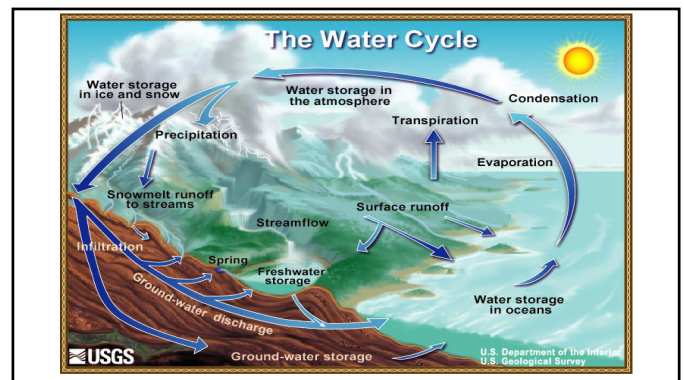
- What is One Water?
- One Waterish things in Texas
- One Water in Austin
- Impediments to One Water

8

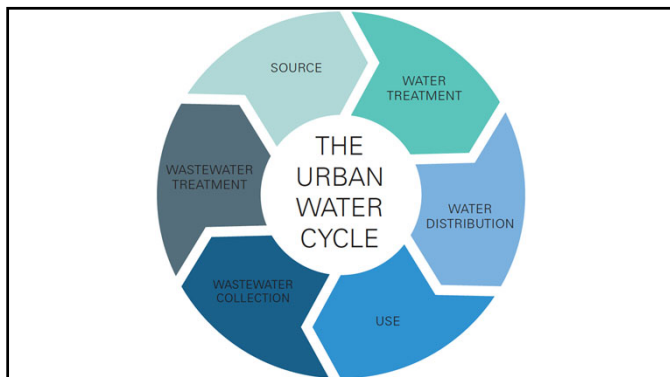
outline

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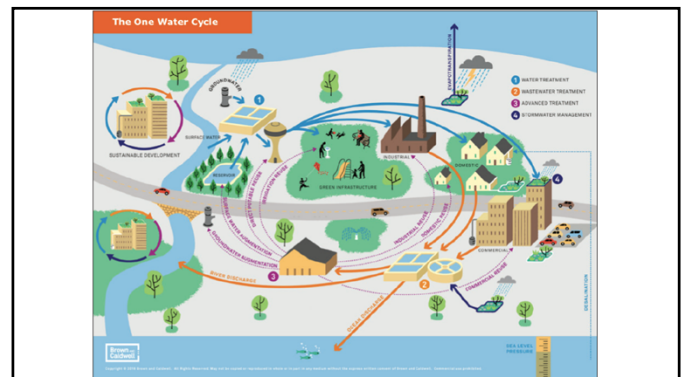
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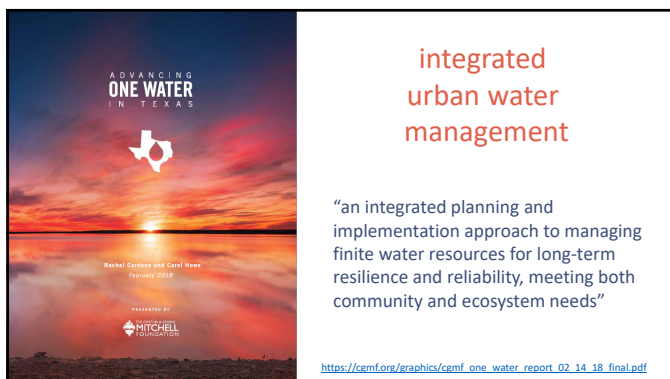
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15



16



17

question:

Who needs to be considered when considering equity?

- A. Folks who struggle to pay their water bills
- B. Urban folks adversely affected by infrastructure and supply
- C. Rural folks who are affected by reservoirs and well fields
- D. People who rely on the rivers and bays
- E. Wood apes

18

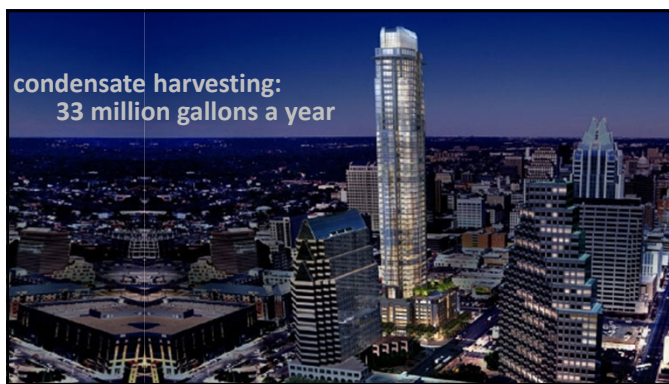
outline

- What is One Water?
- **One Waterish things in Texas**
- One Water in Austin
- Impediments to One Water

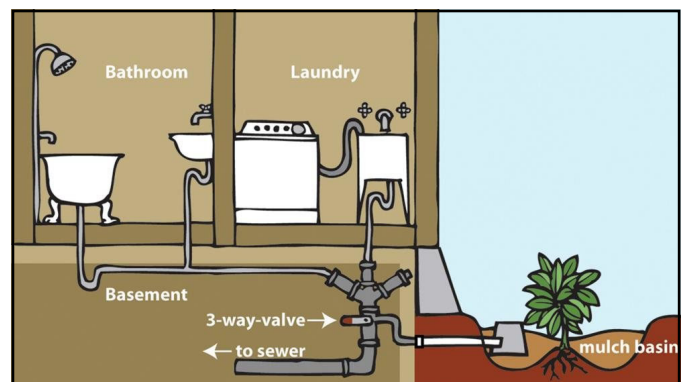
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20

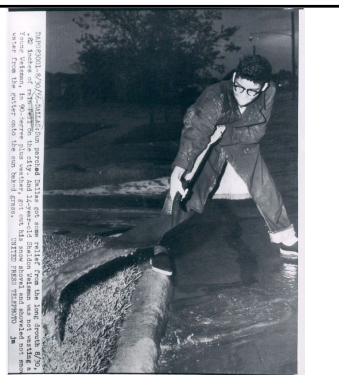


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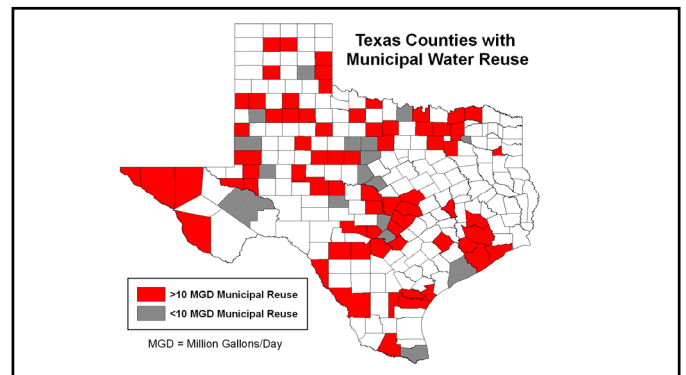


22

stormwater harvesting



23



24

Richland-Chambers Engineered Wetland
Tarrant Regional Water District
indirect reuse



25

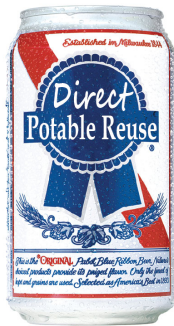


On-site Blackwater Reuse Pilot at new Permitting & Development Center Building. Meet OSCAR & CLARA

CLARA: Closed-Loop Advanced Reuse Assembly

<https://www.youtube.com/watch?v=VatEQMbCv-Q>

26



27



"I guess that means I get to drink my beer twice..."

28



Images from Daily WOD Wear

29



West Travis County PUA

Committed to Providing Clean, Safe Water for All Our Residents

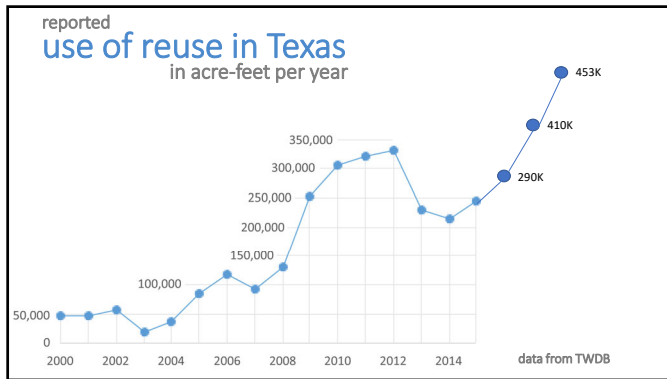
West Travis County Public Utility Agency

BUILD THINGS THAT MATTER

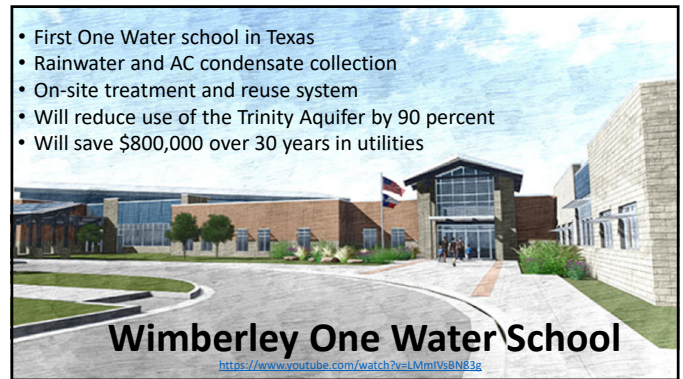
MURFEE ENGINEERING COMPANY

Civil Engineering for Municipal and Land Development Projects

30



31



32

outline

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33

question:

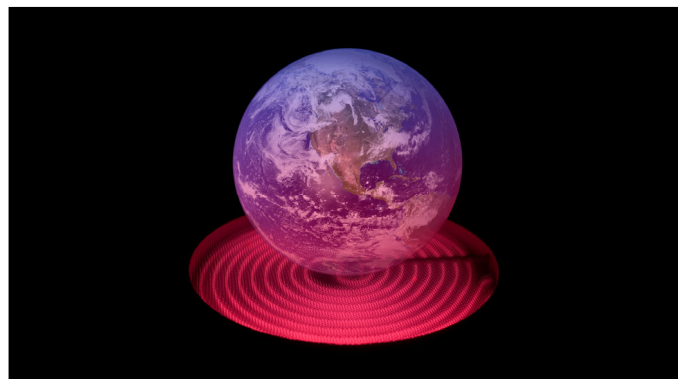
What is sewer mining? (WW = wastewater)

- Open pits to mine raw WW infrastructure in Seward, AK
- Capturing sewer flows before WW plant; treat for onsite use
- Game where you get a surprise when mining in wrong direction
- Someone who takes folks to court a lot

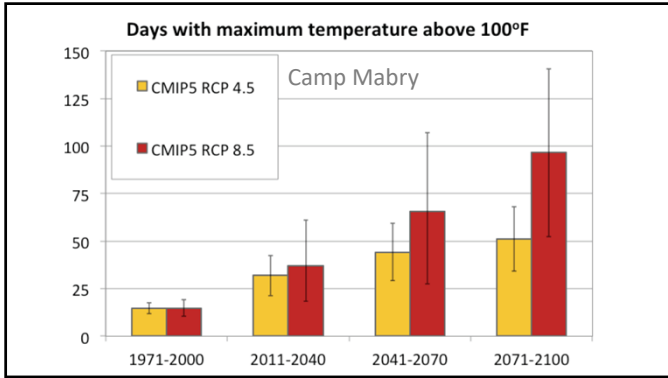
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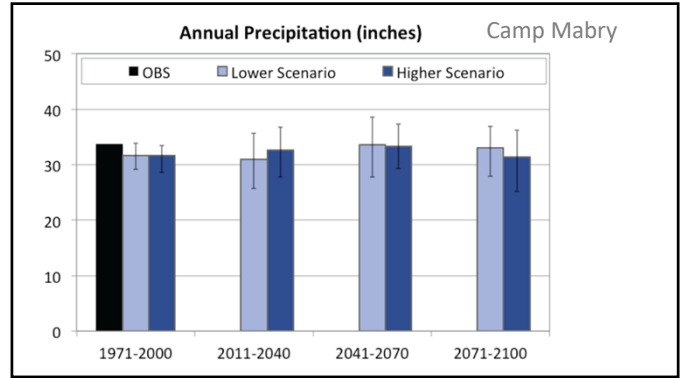
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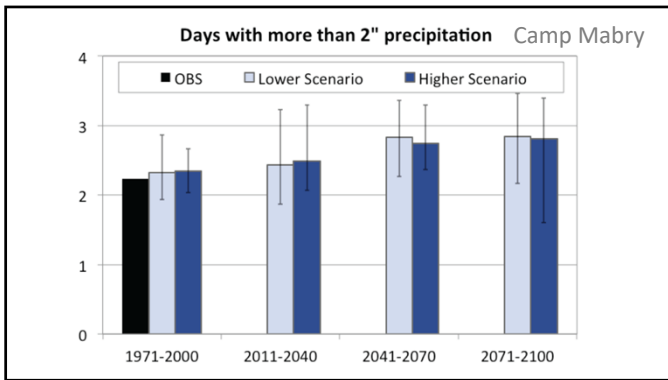
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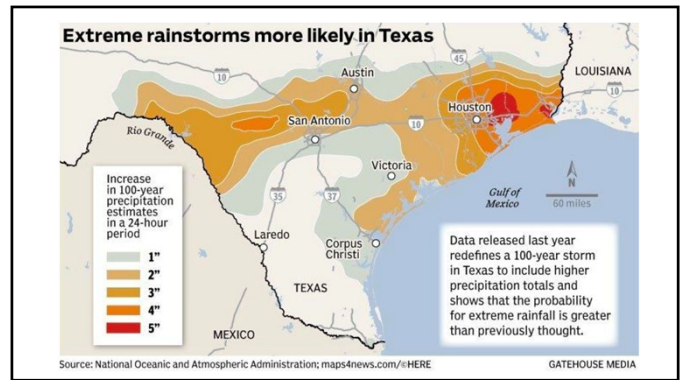
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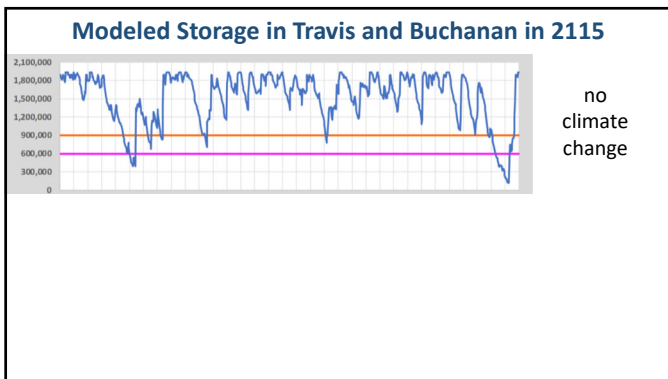
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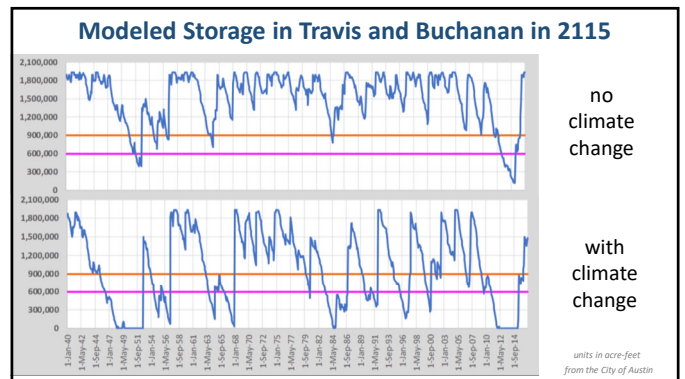
39



40



41



42



- advanced metering infrastructure
- water loss control
- ordinances
- benchmarking
- incentives
- stormwater harvesting
- rainwater harvesting
- greywater harvesting
- condensate harvesting
- building scale wastewater reuse
- wastewater reuse
- indirect potable reuse
- sewer mining
- community stormwater harvesting

43

always watch for

unintended consequences

- water is water is water
- use of one source of water affects another
- conservation and water reuse
- water reuse and water quality
- water reuse and environmental flows
- water reuse and downstream users

44

question:

Does the state water plan consider climate change?

- A. Yes
- B. No
- C. Kinda
- D. We don't use them words 'round these parts

45

to conclude...

- What is One Water?
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46

Texas has a
flexible and accommodating
regulatory environment
for One Water projects



47

Regulatory Impediments to Implementing One Water in Texas

Report: 2018-12
December 2019

 co-authored with
Vanessa Puig-Williams

 funded by the
Cynthia and George Mitchell Foundation

 available at
www.meadowscenter.txstate.edu


48



Senate Bill 905

- Perry/Springer (Frank)
- Requires TCEQ to develop a regulatory guidance manual on permitting for direct potable reuse

49



**TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY**

50

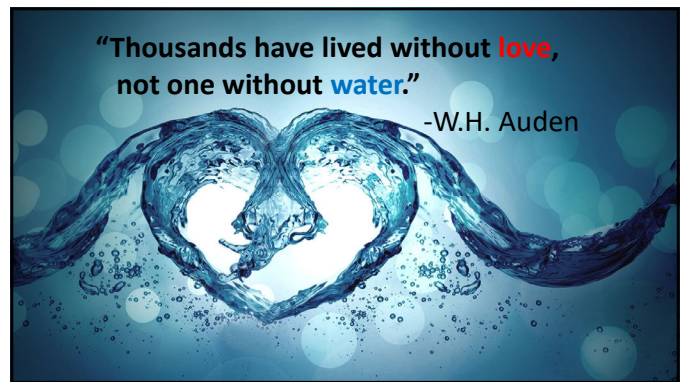
to conclude...

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51

"Thousands have lived without **love,
not one without **water**."**

-W.H. Auden



52



questions?

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53

53