

The Missing  
Ingredient  
is...

Water

Mike Collignon  
Green Builder® Coalition



## Energy & Water

- The industry's immense focus on energy
- Poll: How many could live 48 hours without energy?
- Poll: How many could live 48 hours without water?
- Embodied energy of potable vs. reuse
- How can we make informed decisions if we don't measure? (Data is our friend)





# Energy Footprint of Water

- California: "The water sector is the largest user of energy in the state, accounting for 19% of all electricity consumed in the state and 30% of nonpower plant-related natural gas use."<sup>1</sup>
- "U.S. public drinking water systems use roughly 39.2 billion kWh per year"<sup>2</sup> or 3.92 trillion LED (A19) bulbs<sup>3</sup> or 2x annual electrical consumption of San Diego County in 2016<sup>4</sup>
- Between 1996 & 2013, electrical use for supply & wastewater treatment increased by 39% & 74%, respectively<sup>2</sup>

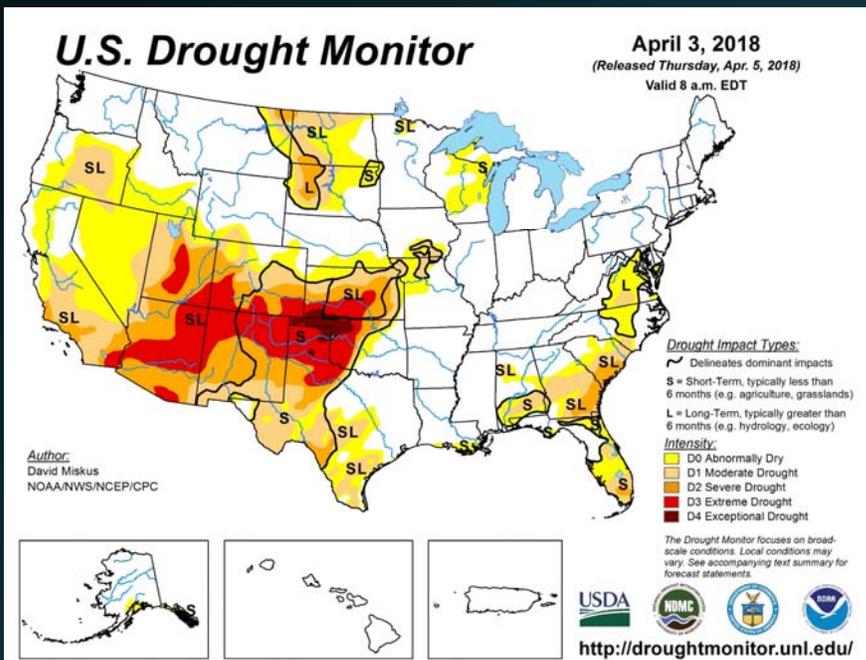
Sources:

1 *California's Water-Energy Relationship* Water-related energy included that amount of energy directly consumed by water agencies in the collection, extraction, conveyance, treatment, and distribution of water to end users, and the treatment and disposal of wastewater. It also included the amount of energy used to consume water, e.g., to heat water for a shower or to pump it through a cooling tower.

2 *Electricity Use and Management in the Municipal Water Supply and Wastewater Industries*, November 2013

3 Office of EERE, <https://www.energy.gov/eere/articles/how-much-power-1-qlgawatt>, October 2016

4 California Energy Commission, <http://ecdms.energy.ca.gov/electbycounty.aspx>



31 of 50 states have at least a D0-level intensity drought



## What Are the Benefits of using a Water Rating?

- Long term conservation of a precious, essential resource
- Earning tax credits
  - WERS cited in the rules for compliance of NM Sustainable Building Tax Credit
- Support of codes, regulations, and enforcement
  - Went into effect in the City of Santa Fe 3 weeks ago
  - All new single-family detached units must submit a preliminary WERS of 70 (or less) with their building permit application, and a verified 70 (or less) to obtain a certificate of occupancy
- Green Building Programs
  - GreenStar: Transitioning to be the water criteria
- Potential financial incentives
  - Reduced storm water impact fees
  - Reduced tap fees
  - Shortened permit review time



7

## Questions?

## Contact Us for More Info

Green Builder® Coalition  
[info@greenbuildercoalition.org](mailto:info@greenbuildercoalition.org)



[www.wers.us](http://www.wers.us)

Thank you!



# Introduction to Water Ratings

What Is A Water Rating?  
What Are The Benefits?



# Copyright Materials

This presentation is protected by US and International Copyright laws. Reproduction, distribution, display and use of the presentation without written permission of the speaker is prohibited.

© Green Builder® Coalition 2018

April 26, 2018

11