ILLUME

WATER-ENERGY NEXUS MESSAGE TESTING

Megan Billingsley & Anne Dougherty, ILLUME Advising, LLC

Behavior Energy and Climate Change Conference December 8, 2014

1

Acknowledgements

Regina Marston - California Center for Sustainable Energy

Lowe Campbell-Ewald

* The stakeholder advisory group, including the IOUs, the Water Departments

★ The ILLUME team

Key Points

Limited recognition of the connection between household energy use and water.

Most people feel that they, personally, are doing a lot to conserve (not waste), but "others" needed to do more.

★ Effective messages provide a tangible, personal link between water use and energy waste, as well as tips people can act on.



- * Study objectives and design
- * Overall perceptions of water-energy use
- ★ Effective messaging
- ★ Final thoughts



Study Objectives & Design

Study objective and design

- * Test awareness of, and messaging around, the water-energy nexus to support a CA state-wide marketing campaign
- \star The overall study design targeted the following customers:
 - ★ Californians ages 25-55
 - * Those served by the statewide investor-owned utilities
- * Include representation from the following groups:
 - * Three major California regions: Greater Los Angeles, Central Valley, and Northern California
 - * English-, Spanish- and Mandarin-Speaking Californians
 - Major ethnic groups: White (and all others), Hispanic-Americans, African-Americans, and Asian-Americans
- * Study included 8 focus groups and a survey with 1036 respondents

ILLUME

Overall Perceptions of Water-Energy Use

"None of us really understood... 'heating water uses energy."



Energy is perceived to be more "expensive," and water is considered "necessary" to survive.

"Lights are more controllable than with water." (LA Spanish)

> Water is almost like, this time bomb ready to go off." (SF English)

ILLUME

Most participants felt that they, personally, were doing a lot to conserve (not waste), but "others" needed to do more.

* "Others" included family members, neighbors, businesses, agriculture, government entities, and people from other regions.

"I think you can say Northern Californians don't waste." (SF English)

"... Us Asian people, compared with others, save more." (SF Mandarin)

"If you live in the valley, that's our economy, so that's why it's political." (Fresno English)



"The only way I could ever save energy is to ship my family out of state.

I can't get anybody to turn off a light. I can't get anybody to take a shower under 20 minutes.

It just drives me nuts."

(Fresno English)



Effective Messaging

The campaign tested 6 different messages:

Water-related energy use accounts for more than 19% of the state's total electricity use.

Turning off the faucet while you brush your teeth can save 8 gallons of water a day – that equals about 300 gallons of water saved per month.

On the hottest summer afternoons, everyone can help reduce strain on the electric grid by minimizing energy and water use. Turn off all unnecessary lights, postpone using major appliances until after 6 p.m. Also, hold off on using water for things like showering, washing your dishes and clothes. Check with your local water agency for advice on when it is best to water in your area.

Letting your **faucet** run for 5 minutes uses as much energy as leaving a 60-watt **light bulb** on for 14 hours.

You can save 25 gallons of water by irrigating only in the early morning or late evening.

The carbon emissions embedded in California's water use are equal to 7.1 million cars.



Messages that included specific tips were more motivating and encouraged behavior change.



Survey Question: Please indicate how much you agree or disagree with the following statements, where 1 equals "completely disagree" and 7 equals "completely agree." This message is... (a) is clear, (b) is believable, (c) is trustworthy (d) is visually appealing, (e) is motivating, (f) makes me want to change my behavior, (g) gives me tips on actions I can take home, (h) is relevant to me and my family. [MessageSpecific_A_Agree] [MessageSpecific_B_Agree] [MessageSpecific_C_Agree] [MessageSpecific_E_Agree] [MessageSpecific_F_Agree] ** Strongly agreeing refers to the top two categories.

ILLUM**E**

Messages that provide a tangible, personal link between water use and energy waste were impactful.

- * "Knowing that five minutes of a faucet is equivalent to a 14 hour day of leaving the... light on - literally, I'm like oh, crap." (LA English)
- * "I don't think all of us knew [about] the 14-hour light bulb." (Fresno English)



Simple messages and clear, visual illustrations also had a positive impact.

- * The simple message "heating water uses energy" was powerful: Many respondents did not immediately identify heating water for showers as requiring energy. Following this message with a tip to save hot water could have an impact.
 - ★ "The "heating water" is the strongest message." (LA English)
 - * "We were talking about [this in] the beginning, which none of us really understood... "heating water uses energy." (LA English)



Final Thoughts



Limited recognition of the connection between household energy use and water.

Most people feel that they, personally, are doing a lot to conserve (not waste), but "others" needed to do more.

Effective messages provide a tangible, personal link between water use and energy waste, as well as tips people can act on.

Megan Billingsley Managing Advisor

m: 510 512 0586 e: megan@illumeadvising.com

ILLUME

Meganillume

Anne E Dougherty Founding Advisor

m: 608 561 2019 e: anne@illumeadvising.com

