

Water/Energy Interactions: Covid-19 and Other Factors Impacting the Water/Energy Nexus

Heather Cooley, The Pacific Institute

Luke Eastman, Raftelis

Frank Loge, UC Davis Center for Water-Energy Efficiency



Tuesday, April 6, 2021
9:00am-10:30am

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#WSC2021



VIRTUAL EVENT: APRIL 6, 13, 20, 27

PRESENTED BY:





Water Conservation Showcase

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*East Bay
Municipal
Utility District*



San Francisco
**Water
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Services of the San Francisco Public Utilities Commission



**NORTHERN
CALIFORNIA**

Safety Message

- **Egress**: two paths out in case first is blocked.
- Have “**Go**” bag prepared with essentials.
- Set up and rehearse **convening location** with family.
- **Duck and cover** in case of an earthquake.
- **Take ergonomic breaks.**
- Continue to regularly **wash hands** and where a **face mask** and keep **socially distant** in public.



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Outreach Partners

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tinyurl.com/WCSexhibitor

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Virtual Exhibitor Packet

TO ENTER THE RAFFLE

Look for the letters!

1. Collect the 7 letters located on the Premium Exhibitor pages
2. Unscramble the 7 letters to spell a water-related word
3. Enter that word and your contact info at tinyurl.com/WCSraffle

Raffle prizes generously donated by:
High Sierra Showerheads, EBMUD, San Jose Water, Rain Bird, Lane Community College, and Richard Heath & Associates



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Premium Exhibitors



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And after our next session: Waterside Chat



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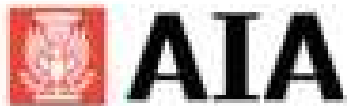
Continuing Education Credits



LEED Professionals may self-report 10.5 continuing education hours TOTAL for 2021 WCS.

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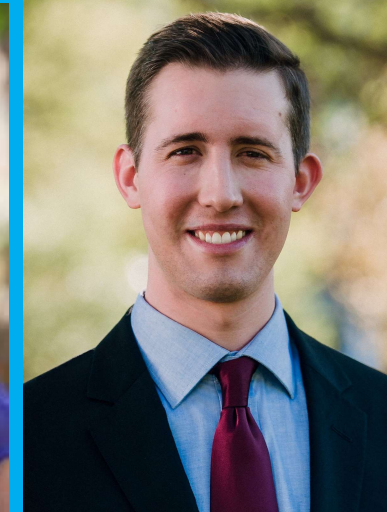
Course number: WS0024

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Water and COVID-19: From Risk to Resilience

Heather Cooley
Director of Research
Pacific Institute



About the Pacific Institute

Mission: Create and advance solutions to the world's most pressing water challenges.

Vision: We envision a world in which society, the economy, and the environment have the water they need to thrive now and in the future.

2030 Strategic Goal: Catalyze the transformation to water resilience in the face of climate change.

Overview



Changes in municipal water demand



Implications of changes in demand



Conclusions and recommendations

COVID-19 has altered water demand patterns.



Household water demand has increased.



Non-household water demand has declined – in some cases dramatically.



Overall reduction in water demand, though varies from community-to-community.



Shift in the timing of demand, with later peak use.



These changes are likely temporary, though some may last longer.

Sudden changes in water demand have a ripple effect.



Building operations and water quality



Water and wastewater system operations



Customer bills and utility revenue

Building operations and water quality



Stagnant water in buildings.



Potential for unpleasant taste/odor and presence of bacteria, metals, and disinfection by-products.



Actual risk depends on shutdown length and characteristics of building and water system.



Building managers may be unaware of risks and management responses.

Water and wastewater operations



Sudden changes in demand can stress system operations.



This is compounded by reduced staffing, remote work, and other COVID-related changes.



New digital technologies and approaches can help utilities respond to these changes.

Customer bills and utility revenue



Household water bills are likely to rise, and non-household bills are likely to fall.



Revenue losses are compounded by higher costs and increases in nonpayment.

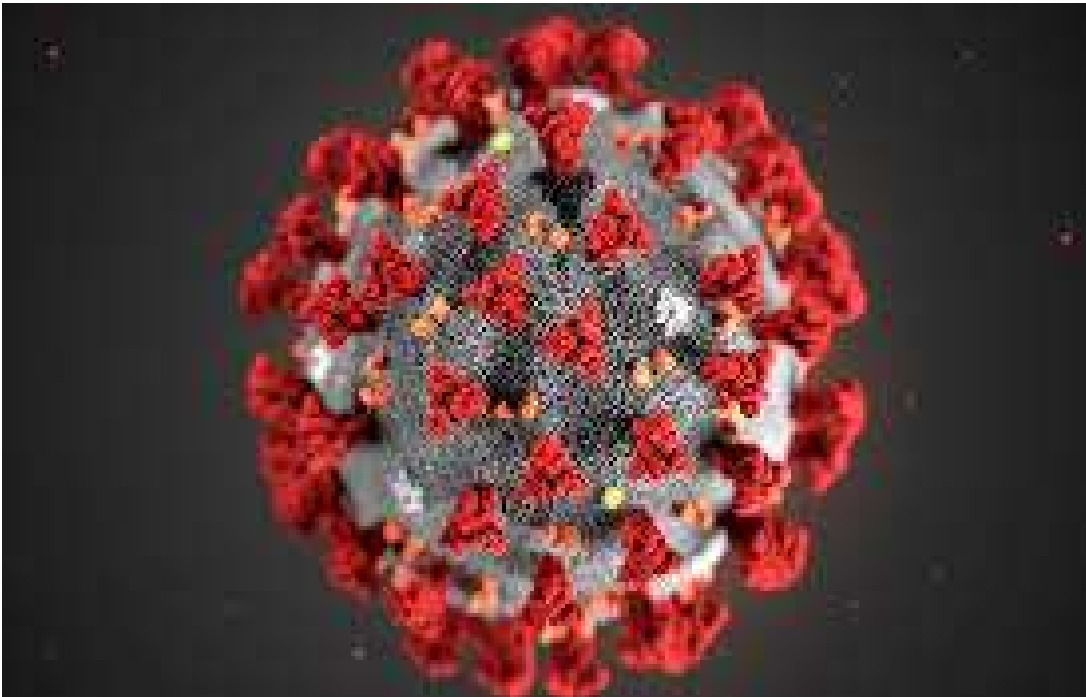


Infrastructure investments may be delayed.



Small water systems are especially vulnerable.

Water and COVID-19: Closing Thoughts



- Extreme events - from severe floods and droughts to social disruptions like the COVID-19 pandemic - are becoming more common.
- COVID-19 has highlighted perennial and new water management deficiencies.
- Immediate and sustained action is need to enhance water resilience for a more variable and uncertain future.

Action is needed to enhance water resilience.



Develop and implement robust and sophisticated resilience plans.



Adopt digital monitoring and operational technologies.



Update pricing and financial policies.



Appropriate federal funds to increase infrastructure investments and stimulate economic recovery.

Additional Resources

For more information from Pacific Institute's Water & COVID-19 Series please visit:

<https://pacinst.org/water-and-covid-19-risks-and-opportunities/>



Thank you!

Heather Cooley, Pacific Institute

hcooley@pacinst.org

Pacific Institute's Water & COVID-19 Series:

<https://pacinst.org/water-and-covid-19-risks-and-opportunities/>

Learn more about our water work:

www.pacinst.org

Stay informed on important water issues with our newsletter:

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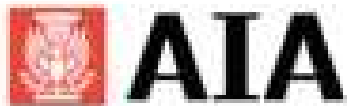
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Showcase Raffle: Two Ways to Win!



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Next Session

Trends in Water Use, Efficiency Technologies, and Conservation Priorities

Amy Vickers, Amy Vickers & Associates, Inc.

Tuesday, April 6, 2021
11:00am-12:30pm

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Conservation Showcase 2021 Virtual Exhibitor
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