## UPSTREAM STRATEGIES: Future Water Research & Innovation Solutions

# COMMUNITY ENGAGEMENT



## **Public Trust**



In the next 10 to 20 years, decreasing public trust in government institutions may disrupt the ability of water utilities to meet their committed levels of service for their ever-changing service areas. As customer expectations shift, how can utilities best meet the needs of their communities?

### **CRITICAL FUTURE DISRUPTORS**

For the purposes of this effort, a disruptor is defined as something that interrupts an event, activity, or process by causing a disturbance, problem, or opportunity. Disruptors can arise as barriers to normal operations or may present opportunities to do things differently/innovate.

The following items were chosen by a diverse group of water leaders and experts as the most significant future disruptors that water utilities must anticipate and plan for.



#### WATER QUALITY AND CONTAMINANTS

Water quality has a very significant impact on public trust or distrust. However, customers who hear of water quality issues in other geographic areas or who receive incomplete or incorrect information regarding water quality may end up distrusting their own utility. Moreover, there is significant marketing from commercial suppliers of bottled water that reinforces distrust in public water services. Public trust can be lost in an instant and rebuilding it can take years. As analytical methods become increasingly sensitive and new compounds are detected in water, and when waterborne disease outbreaks occur anywhere in the water sector, effective communication by all utilities will become critical. Utilities may be expected to provide more real-time water quality information, e.g., a "water quality index" like an air quality index. From a regulatory perspective, the trend may swing toward more state-level standards instead of federal standards. A lack of consistency among different state-level standards can also undermine public trust.



#### **CUSTOMERS AND POPULATION**

In response to climate change and movement into or out of urban centers, population shifts and demographic changes are likely to occur in many utility service areas. Utilities will need to anticipate what those changes mean for their systems, including whether they could result in increased affordability and utility revenue challenges or new communication challenges associated with newly arrived immigrant populations.





#### **FINANCE**

Utilities are likely to face increased treatment costs without significant change in their rate bases. Economic downturns are certain to occur over time, and these events can significantly impact equity and affordability issues and may increasingly include water shutoff moratoriums. Many are calling for safe water to be seen as a human right—this will force utilities to rethink how to fund their operations and price their services.



#### **TECHNOLOGY**

Increased adoption of technology at utilities can increase potential exposure to cyber threats and data breaches. These threats also create the potential for failures in the treatment train or distribution system and can impact water quality and service delivery.



#### WATER RESOURCES AND DEMAND

Drought and water scarcity can require the use of alternative water sources (e.g., reuse) and may also require behavioral changes on the part of customers (e.g., outdoor watering restrictions), all of which could impact public trust.



## RESEARCH OPPORTUNITIES

Based on these critical future disruptors, experts prioritized the following targeted research areas:



#### SOCIAL SCIENCE RESEARCH

Research is needed to better understand the relationship between customer service and public trust. More social science research is needed to understand how utilities can best connect with their customers and other critical audiences.



#### WORKFORCE

Research is needed identify effective strategies for building a utility workforce that is diverse and inclusive in terms of demographics and skillsets, including both the technical know-how needed to control water quality and the communication skillsets needed for customer service and building public trust.



#### **SOCIAL MEDIA CHANNELS**

Research is needed on the best ways for utilities to integrate social media use across their organization to strengthen connections with their workforce and to build trust with their customers. This is a rapidly changing field, and employees and customers may be far ahead of the utility in leveraging these essential communications tools.



#### MEDIA MESSAGING AND COMMUNICATION

Research is needed on ways for utilities to make their media relationships more strategic and resourceful. How can utilities proactively develop these relationships during the "good times," so that when an issue arises, they can leverage trust they have built with local media and community leaders to share their key messages with the public?



#### **COMMUNITY ENGAGEMENT**

Community engagement goes beyond just communication and must include education, involvement, and ongoing interaction with customers. Research is needed to identify innovative and effective strategies for community engagement, including community services such as water bottle filling stations, education through video games, virtual reality platforms, or virtual trainings, service maps, youth engagement, community challenges or internships, and community partnerships.