



# Water Utility Resilience Forum

December 13 – 15, 2021 | Miami, FL

Cyber Resilience: Exercising Leadership



# Cyber Resilience: Exercising Leadership

- What does it mean?
  - Recover from setbacks
  - Adapt well to change
  - Keep going in the face of adversity
- How can we work together and help each other?



# Why is Cyber Resilience Critical No

- Water Systems are critical infrastructure targets
- Many utilities provide both water and wastewater services: One Water
- Local governments, which often include water and wastewater systems, are common targets
- Attacks are increasing in frequency (+400% since 2020)
- Reported losses are increasing significantly
- Modified and remote operations due to COVID-19 introduce new vulnerabilities



DECEMBER 13-15 MIAMI, FL

2021 Water Utility Resilience Forum

# Cyber Resilience: Exercising Leadership

Facilitators



**Sharon Peters**  
EMA, Inc.



**Nick Claudio**  
EMA, Inc.

Panelists



**Andrew Hildick-Smith**  
WaterISAC



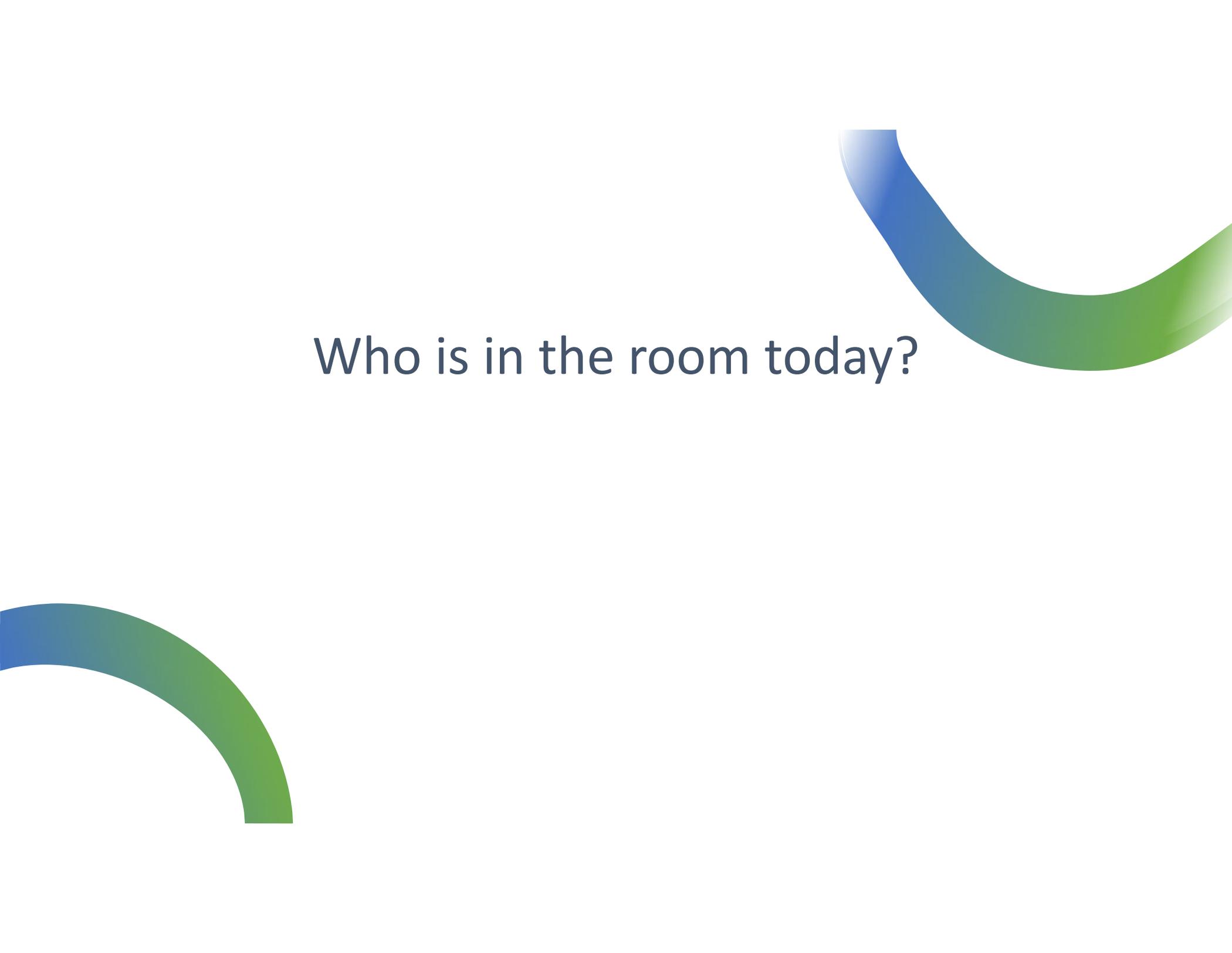
**Matthew Gabrick**  
Boston Water &  
Sewer Commission



**Ehinomen Nwani**  
Los Angeles Department  
of Water and Power



**Steve de Mik**  
Hampton Roads  
Sanitation District



Who is in the room today?



**Steve de Mik**  
Hampton Roads  
Sanitation District



**Matthew Gabrick**  
Boston Water &  
Sewer Commission



**Ehinomen Nwani**  
Los Angeles Department  
of Water and Power



**Andrew Hildick-Smith**  
WaterISAC

## Panel Stories



One Key  
Message

- For Utility Leaders

Your Questions?



# Adventures in AWIA – Part 1



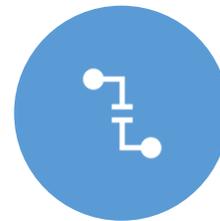
TeamViewer access directly to the SCADA system



Bypass cable around the firewall



One login for all SCADA HMI's



Outdated (7+ years) firewall that was never updated

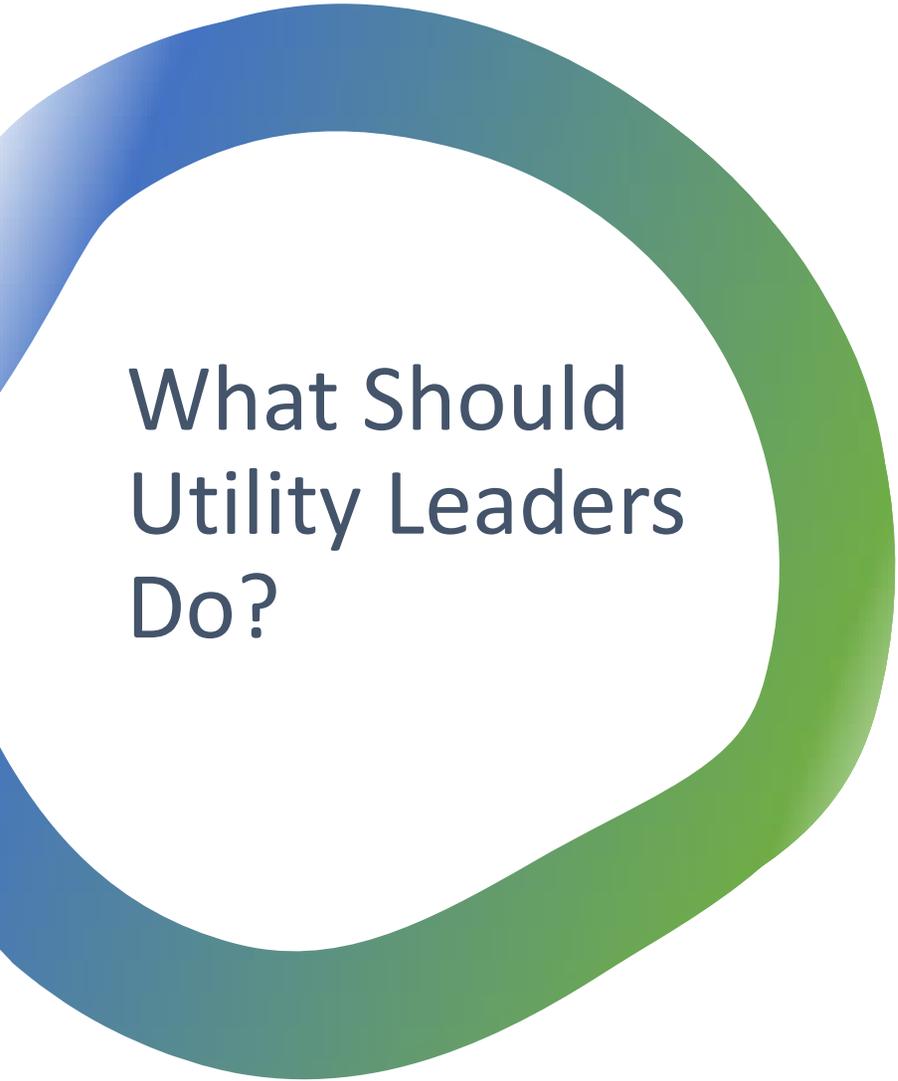


Who has experienced an attack?

Who has been involved in try to prevent an attack?



Who has been involved in recovering from an attack?



## What Should Utility Leaders Do?

- To support preparation/prevention?
- In the moment of response?
- To meet expectations of recovery?

Your Questions?



## Adventures in AWIA – Part 2



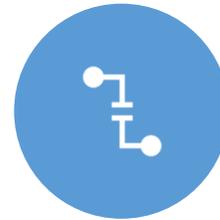
Password writing on a white board you could see from the street



Hidden WIFI router so staff could have wireless access to the internet – No firewall



“Segmented” Networks



Others?



## How Can We Work Together as a Sector and Community?

- Do you work with others now?
- Who has been most helpful to you?
- Are you part of a regional network or sharing with other utilities now?



What do you think is coming next?  
How can we be ready?



## Wrap Up

- What is one piece of advice you would share with everyone in this room today?
- What else?



# Table Discussions