DHS Emergency Services Sector and U.S. Environmental Protection Agency:

Connecting Emergency Management Agencies and Water Utilities

October 18, 2018 1-2 pm ET
Agenda

• Introduction
• Overview of the NISC
• U.S. Environmental Protection Agency: *Connecting Emergency Management Agencies and Water Utilities*
• Q&A
• Quiz for those seeking Continuing Education Units (CEUs)
Today’s Speakers

- **Sean McSpaden**, NISC Executive Director
- **Lauren Wisniewski**, Environmental Engineer, U.S. Environmental Protection Agency
- **Nushat Dyson**, Team Leader, U.S. Environmental Protection Agency
Continuing Education Units (CEUs)

• CEUs will be awarded to participants that watch the webinar and complete the quiz following the webinar

• 0.1 CEUs for this hour-long event
Learning Objectives

1. Understand the goals and objectives of the U.S. EPA Water Sector coordination workshops.

2. Identify best practices for coordination between emergency management agencies and water utilities.

3. Identify resources available to communities to support better coordination between emergency management agencies and water utilities.

If you have questions during the webinar, please submit using the question feature in GoToWebinar.
NISC Mission-Focused Job Aids Webinar Series

• In-depth discussion of tools, techniques, and standard operating procedures used for information sharing

• Webinar content applicable to multiple fields, including:
  • Homeland security,
  • Emergency management,
  • Public safety,
  • First responder, and
  • Healthcare preparedness.
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The NISC is a non-profit organization devoted to improving information sharing at all levels of government and for all homeland security, emergency management, first responder, healthcare, and public safety stakeholders.
NISC Members Span Multiple Domains & Disciplines

Public Sector – Private Sector – Non-profits

- Communications
- Critical Infrastructure
- Emergency Management
- EMS
- Fire
- GIS
- Information Technology
- Law Enforcement
- Military
- Private Industry
- Public Health
- Homeland Security
Member Benefits & Application

• Guidance and technical assistance
• Knowledge exchange and networking opportunities
• Access to the NISC Member Portal

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Presentation Outline

• Background
• Overview of Water Sector
• Water and Emergency Services Coordination Workshops
• Best Practices and Case Studies
Responsibilities
Water Sector Resilience

ASSESS

PLAN

RECOVER

RESPOND

TRAIN
Route to Resilience
Overview of Water Sector
Drinking Water Systems

- **153,000** Public Water Systems
  - **51,000** Community Water Systems
  - **18,000** Non-Transient Non-Community Water Systems
  - **84,000** Transient Non-Community Water System

*Number of Community Water Systems by Population Served*

Drinking Water System Physical Components

- Water Source
- Transmission
- Raw Water Storage
- Treatment
- Finished Water Storage
- Distribution System
Wastewater Systems

- 16,500 publicly owned treatment works (POTWs) serve 227 million people in the U.S.
- Major components are collection system and treatment facility

*Number of POTWs by Flow Rate*

Water Sector Challenges
Consequences of Water and Wastewater Service Loss

WATER & WASTEWATER: LOSS OF SERVICE HAS MAJOR PUBLIC HEALTH AND ECONOMIC IMPACTS

- Critical health services threatened as hospitals are forced to close.
- Limited or no water available for fire suppression.
- People are forced to evacuate homes due to loss of water for drinking and sanitation.
- Schools, offices, and government facilities are shut down resulting in limited services and decreased productivity.
- Stores, restaurants, and other businesses are forced to close, causing lost revenue that impacts local economies.
- Manufacturing and commercial operations curtailed due to loss of water for cooling and other processes.
EPA Water and Emergency Services Coordination Workshops
Workshop Goals and Objectives

• Increase communication between the water sector and emergency services sector, including roles and responsibilities during a water contamination event

• Build relationships and strengthen connections between the two sectors

• Exchange information on emergency plans, capabilities, and public communication strategies
Workshop Locations and Dates

- Lincoln, Rhode Island  April 2016
- Orlando, FL          May 2016
- Bordentown, NY       June 2016
- Richmond, VA         August 2016
- Denver, CO           January 2017
- Portland, OR         February 2017
- Robertsdale, AL      July 2017
- Wichita, KS          August 2017
- Raleigh, NC          September 2017
- Las Vegas, NV        March 2018
Best Practices and Case Studies
Best Practices

1. Build Relationships
2. Coordinate Planning
3. Share Emergency Capabilities
4. Develop Joint Messages
5. Issue Access Cards
6. Know when to Involve Law Enforcement
1. Build Relationships

• Share contact information
• Attend each other’s trainings and exercises
• Tour water utilities
• Give water utilities access to Emergency Operations Center
Case Study: Relationship Building

Portland Bureau of Emergency Management
Portland Water Bureau
– Coordinate on dam release and earthquake exercises
– Collaborate on “Public Alerts”
– Share office space
– Work together daily and during emergencies
2. Coordinate Planning

- Emergency Response Plans
- Emergency Operations Plans
- Hazard Mitigation Plans
- Local Emergency Planning Committee
Case Study: Funding through Coordinated Planning

City of Phoenix

Maricopa County Department of Emergency Management
– City’s wastewater treatment at risk of severe erosion
– Coordinated to receive funding from FEMA’s Hazard Mitigation Grant Program
Emergency Water Supply Planning

• Water utilities need to coordinate with emergency management agencies on emergency water supply plans
  – Responsibilities
  – Source, treatment, distribution
California Emergency Drinking Water Guidance

• Provides emergency drinking water procurement and distribution planning process guidance
• Assists local utilities and emergency response organizations to develop local plans for activating a Task Force for the distribution emergency drinking water
• Identifies state level programs and resources related to emergency drinking water
3. Share Emergency Capabilities

- Emergency Management Agency can share information on:
  - Emergency Operations Center
  - Resource request process

- Water Utilities can share information on:
  - Back-up power resource and needs
  - Mutual aid agreements
Water & Wastewater Agency Response Network

- Network of utilities helping utilities
  - 50 WARNs nationwide
- Utilities organized within a state to facilitate the exchange of resources after an incident
WARN Benefits

• Reduces burden on state and federal response
  – Fills the gap between disaster onset arrival of aid
• The right resources with the right skills are available
• Expedites arrival of aid
• Includes all types of water and wastewater utilities (e.g.,
  public and private, small and large)
• Enhances planning and coordination
• Provides utilities an emergency contact list
• Reduces administrative conflict
  – Signed agreement in place
  – Workman’s comp, indemnification, etc. identified
Why is Interstate Mutual Aid and Assistance (MAA) important for the Water Sector?

- Drinking water & wastewater utilities have been impacted by several hurricanes and large storm events over the past few years.

- With large scale events, Intrastate Mutual Aid and Assistance (MAA) may not work as designed when a large percentage of utilities are threatened or impacted.
What is EMAC?

• Emergency Management Assistance Compact (EMAC) is the only congressionally ratified MAA compact between all 50 states plus the D.C., the U.S.V.I., Puerto Rico and Guam.

• EMAC allows states to send personnel, equipment, and commodities to other states to help disaster relief during governor-declared states of emergency.

• Drinking water and wastewater utilities are already covered by EMAC legislation, and can benefit from this state-to-state mutual aid system.
How does EMAC Support Utilities?

• Provides the means to deploy utility assets across state lines quickly and effectively during a declared emergency.

• Provides liability and other legal protections for deployed utility staff and equipment.

• Provides reciprocity for licenses and certifications during deployment.

• However, for utilities to use EMAC to their full advantage during a statewide emergency, they need to be familiar with it and how it works!!
EPA Interstate MAA workshops

• Conducted four workshops in EPA Regions 2, 3, 4, 5, and 10.

• **Goal:** develop actionable items to help improve Interstate MAA among utilities and WARNs.
  – Exchange ideas about how to better work together on water sector emergency management issues;
  – Learn important details about how water utilities can better utilize EMAC; and
  – Work to develop plans to make the process more efficient and effective in the future.

• Attendees included the following agencies and organizations:
  – WARN Chairs and other key Water/Wastewater Utilities
  – NEMA, State, and Local EMAs
  – State Primacy Agencies
  – Water Sector Associations (e.g., AWWA, RWA, RCAP)
Workshop Lessons Learned

• Learn more about EMAC:
  o Further explore and understand the EMAC process

• Meet with local/county/state EMA to:
  o Develop relationships
  o Discuss EMAC and the water sector

• Determine how best to plan and prepare to use EMAC:
  o Expand WARN Ops Plan to include EMAC considerations
  o Accessing WebEOC or its equivalent

• Determine how best to coordinate between the water sector and emergency services sector:
  o Invite EMA personnel to water sector trainings, exercises, and conferences
Water Utility Response On-The-Go!

A Mobile App for a Mobile Response
What does the On-The-Go! App do?

• The app creates a one-stop-shop for the most important information and tools needed for utility personnel responding to a water-related incident.

• Users are able to access critical information, record and track their response actions, and email assessments to others from your mobile phone tablet or desktop.

• EPA worked with the water sector to develop the content and functionalities of this mobile App.

www.epa.gov/waterutilityresponse/water-utility-response-go-mobile-application-and-website
Forecasts for severe weather systems provided by NWS. Latest update includes local conditions, watches and warnings.

Critical incident-specific actions to take before, during and after an emergency. Checklists save to your local device.

Communicate with Incident command using the Incident Briefing Form (ICS 201) and other important ICS resources.

Database of local, state, and federal emergency contacts. Now includes lab support and customizable contact lists.

Fillable damage assessment forms and pictures that can be emailed from the field. App includes more specific fields for more detail.

Provides links to other emergency/incident planning and mutual aid resources. Includes quick tips button.
4. Develop Joint Messages

Benefits: Consistent messaging for communities, broader message distribution, less false information
Case Study: Chapel Hill, NC

• Fluoride overfeed at water treatment plant
• Utility exercised its interconnect
• 12-inch main break the following day led to EOC activation
• All key players issued “Do Not Use, Do Not Drink” notice
• Customers reduced consumption by 37 percent
5. Issue Access Credentials

Benefit: Quicker community recovery
CERRA Framework

Purpose:
• Enable state and local jurisdictions to establish their own access and re-entry programs utilizing “a common approach”

Primary audience:
• State and local incident managers, public officials, and law enforcement
• Provides other federal and state, local, tribal, and territorial, government entities, private sector organizations, and other incident affected stakeholders with a framework to work within
  • Enable law enforcement officials (LEO)/LEO Surrogates to make risk-based decisions
  • Enable Response/Recovery organizations predictable access
CERRA Framework

Framework Content:
• Think of it as a “how to guide” – but not meant to be overly prescriptive
  • Common Definition of the Problem
  • Common Definition of Stakeholders’ Roles and Responsibilities
  • Common Attributes (Characteristics) of the Solution
  • Best Practices Recommendations
  • Common Process Approach
  • Common Terminology

Inputs
• Existing documents and State Programs
• Working Group members and other Subject Matter Experts
• FEMA Planning Considerations for Access and Re-entry
Water Sector Operational Challenges

1. Public works employees often not seen as first responders
2. Water utility assets are often spread across a wide area
3. Coordination of water response is a challenge because needs are spread across multiple Emergency Response Functions (ESFs) – 3, 4, 7 and 8
4. Water utilities may require the delivery of chemicals, fuel, and generators
North Carolina Certificate of Post Disaster Re-Entry

This Certificate of Post Disaster Re-Entry is issued to NC Water and Wastewater Alert Network and identifies the bearer as a representative of an essential Life in accordance with N.C.G.S. 166A-19.70 and grants the bearer the privilege of entering a designated curfew area provided the following requirements are met:

1. There is a declaration of a state of emergency or state of disaster in effect; and, 2. There is a curfew in effect in the declared area; and, 3. The Governor has issued an executive order invoking the privileges listed in N.C.G.S. 166A-19.70.

4. Entry shall be granted for the limited purpose of delivering or assisting in the distribution of essentials or assisting in the restoration of utility services.
5. The bearer of this certificate and all associates must follow the route specified by law enforcement or other local official, if any.

Dept. of Public Safety

Director, Division of Emergency Management

Expires: April 30, 2018

ATTN: Utility Service Providers, Vendors, and Other Personnel Seeking Disaster Reentry Certification for 2015-2016

N.C.G.S. 166A-19.70 ensures the availability of emergency supplies and utility services. The statute allows utility service providers and others to enter curfew areas to restore utility services, deliver supplies, and secure property that presents a risk to health, life and safety conditions. A credentialing process, administered by NCDPS Emergency Management, certifies individuals transporting essentials in commerce and permits access into curfew areas. Stakeholders bearing security certificates agree to adhere to terms established in the Memorandum of Agreement on security standards. Security certificates may be copied and distributed, as needed, for entry into curfew areas.

Unauthorized use of North Carolina Reentry certificates is a violation of the terms established in the Memorandum of Agreement on security standards and may result in the removal of the stakeholder’s user profile information from the Vendor Access Registry, and cancellation of the current, or pending, disaster reentry certification.
6. Know when to Involve Law Enforcement

- Threat Identification
- Information Sharing
- Asset Protection
- Investigation
- Credentialing
Case Study: Vandalism Incident
Vandalism Incident

Parties involved
• Water utility
• Law enforcement
• State primacy agency

Security Improvements
• Motion cameras
• Intrusion alarms
• Improved signage
Summary: Get to Know your Water Utilities

1. Build Relationships
2. Coordinate Planning
3. Share Emergency Capabilities
4. Develop Joint Messages
5. Issue Access Cards
6. Know when to Involve Law Enforcement
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Q&A

Please submit questions using the question feature in GoToWebinar.
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Quiz

• Following the webinar you will be prompted to complete a quiz

• Complete the quiz to receive your continuing education units (CEUs) for this session