



How the WARN Program Facilitates Rapid Response and Recovery of Water Systems

Water\Wastewater Agency Response Network (WARN)

- **WARN Agreement**
 - **Voluntary**
 - **No Obligation**
 - **No cost**
 - **Liability/Workmans Comp**
 - **Reimbursement process**
 - **Element of NIMS**
 - **All-Hazards**



UTILITIES HELPING UTILITIES: AN ACTION PLAN FOR MUTUAL AID AND ASSISTANCE NETWORKS FOR WATER AND WASTEWATER UTILITIES

By Kevin Morley, American Water Works Association and Ray Riordan, California Utilities Emergency Association

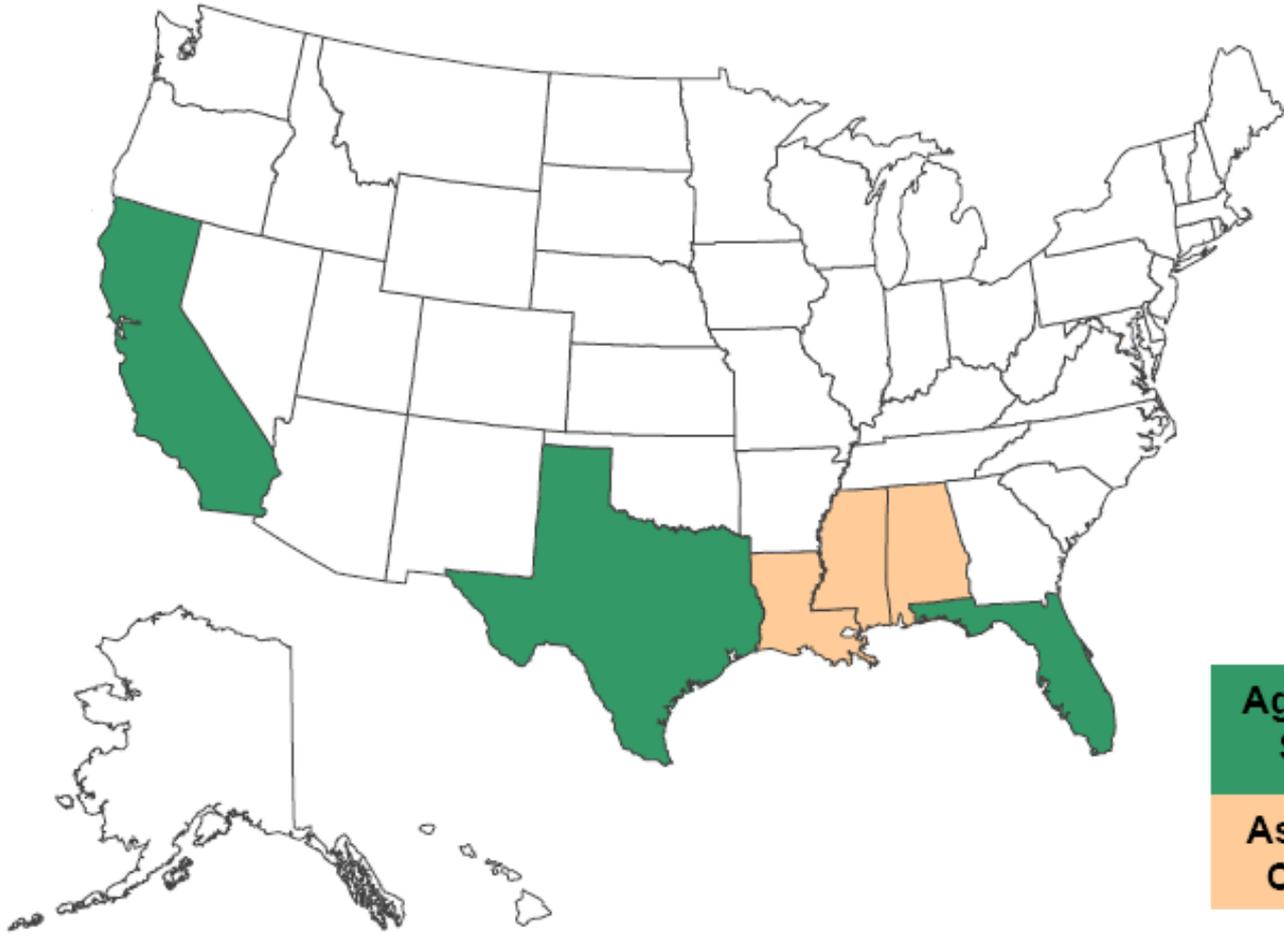
An ounce of prevention is worth a pound of cure.
- Benjamin Franklin


American Water Works
Association
The Authoritative Resource on Safe Water™

Advocacy
Communications
Conferences
Education and Training
Science and Technology
Sections

www.NationalWARN.org

April 2006 (3)

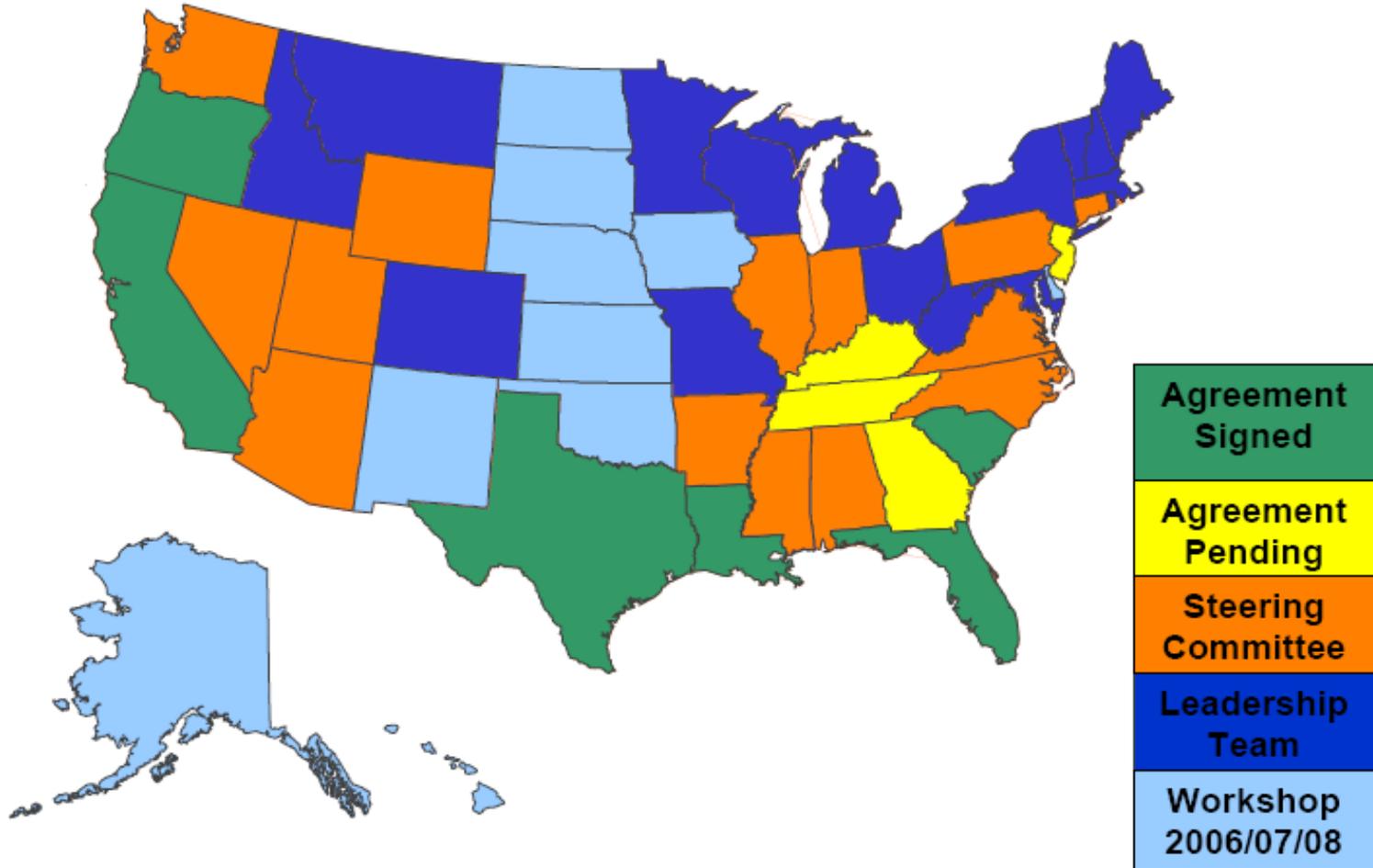


**Agreement
Signed**

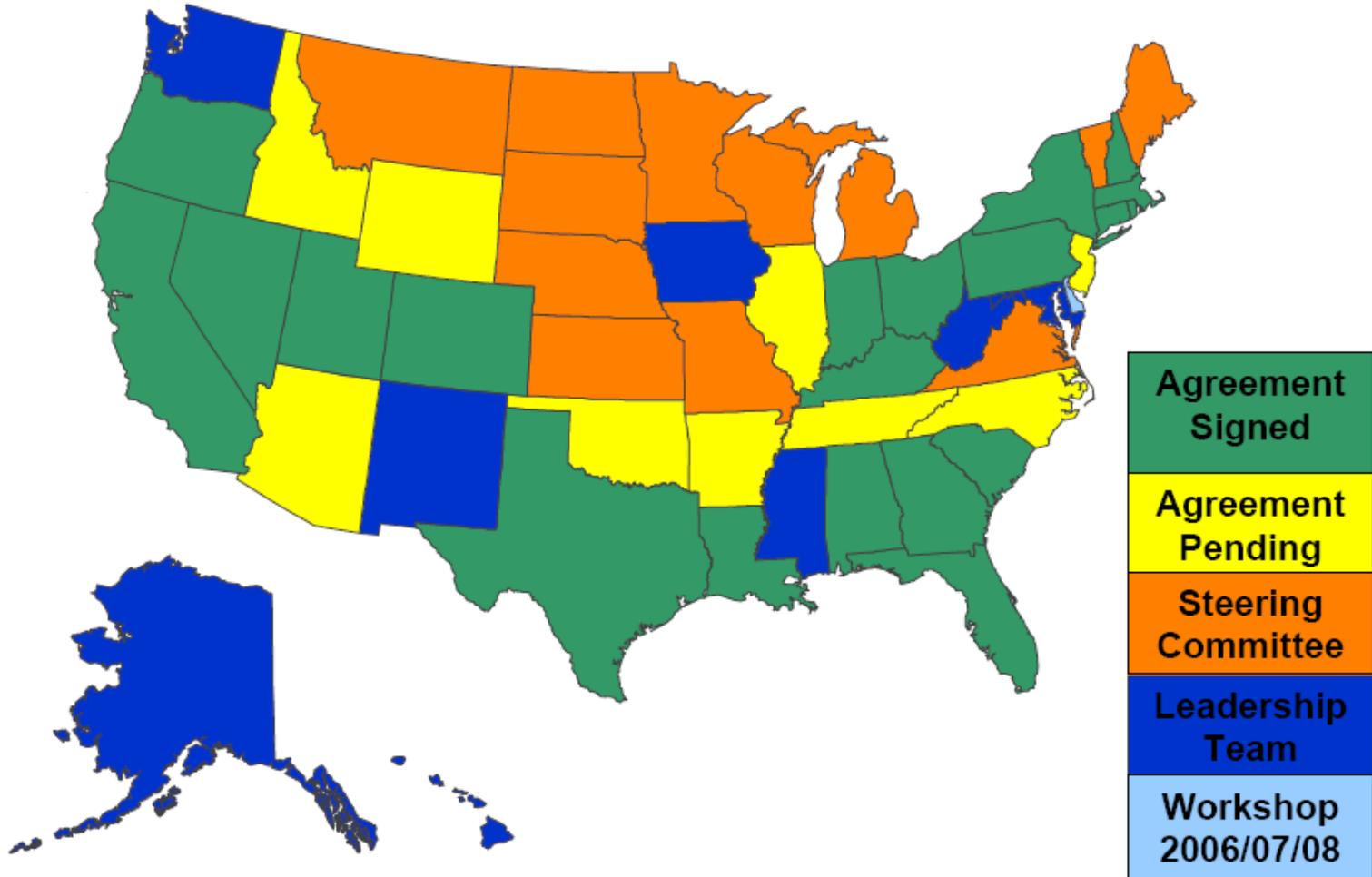
**Assessing
Concept**



May 2007 (6)



January 2008 (20)



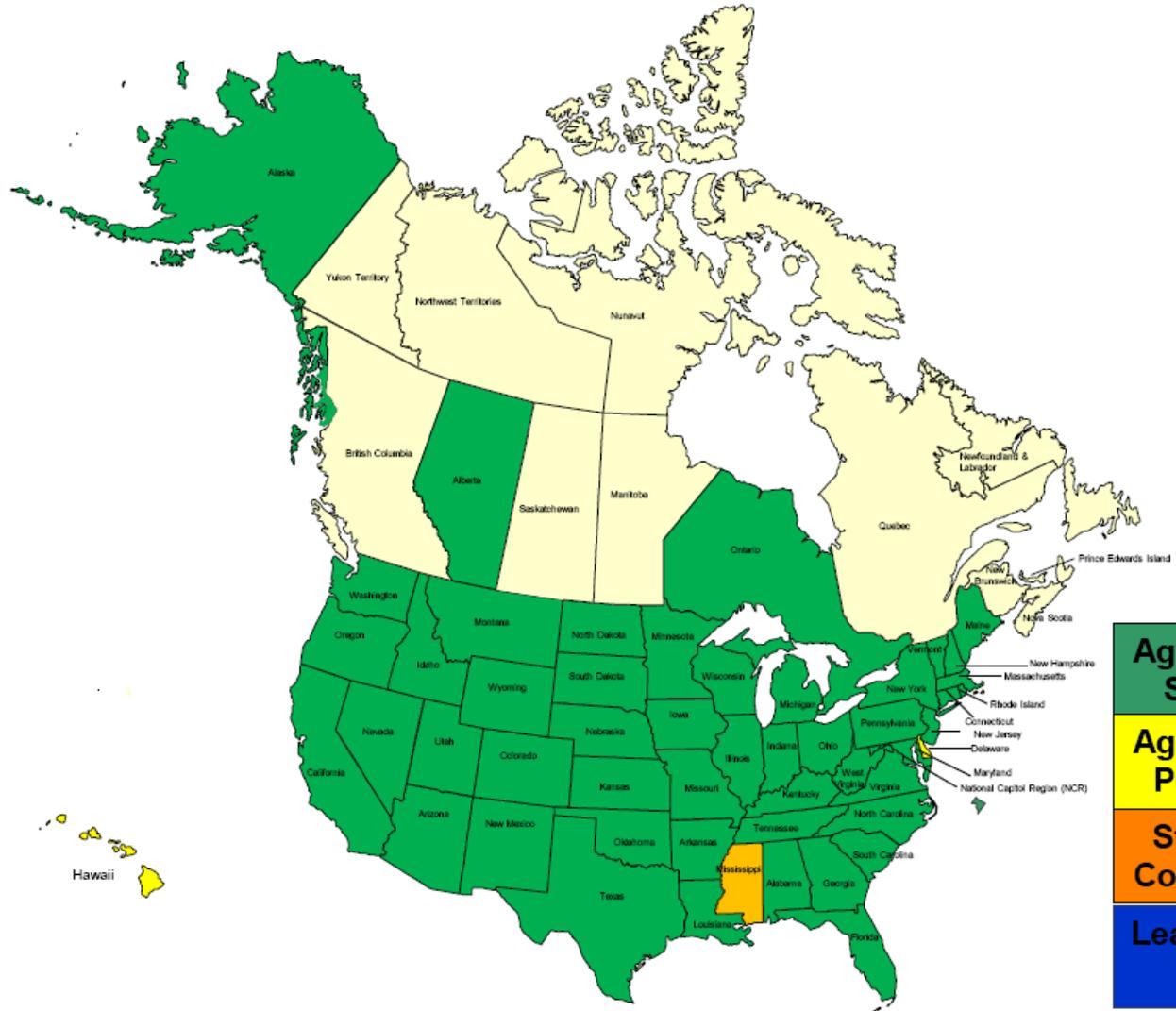
WARNSM

WATER / WASTEWATER AGENCY RESPONSE NETWORK

November 2012

USA – 48

CAN – 2



Agreement Signed
Agreement Pending
Steering Committee
Leadership Team



Cornered

by Mike Baldwin

9-25 © 2009 Mike Baldwin/Dist. by Universal Press Syndicate www.cornered.co.nr
urcornered@gmail.com

BALDWIN



Rule one: Never work without a net. Rule two: Be sure to specify the *type* of net.

Resource Typing Manual

- 24 standardized resource teams per FEMA Guidance
- Cost development spreadsheet
- Mutual Aid Accommodations Checklist



WATER & WASTEWATER MUTUAL AID & ASSISTANCE RESOURCE TYPING MANUAL

April 2008



www.NationalWARN.org



WATER /WASTEWATER AGENCY RESPONSE NETWORK

[WARN Home](#) | [WARN Regions](#) | [WARN Resources](#) | [Situation Reports](#)

WARN Resources

Background/ Agreements

- [WARN Action Plan](#)
- [Utilities Helping Utilities - Joint Policy Statement](#)
- [WARN FAQ](#)
- [Sample WARN Agreement](#)
- [Update to Sample WARN Agreement - 09/07](#)
- [The WARN Initiative - The Big Picture](#)

Outreach Materials

- [WARN in Brief \(can be used as snapshot to brief a Board or City Council\)](#)
- [WARN Progress/Status Map \(March 2011\) **Alaska becomes #48!**](#)
- [Example Table Display](#)
 - [SCWARN](#)
 - [PAWARN](#)
- [Example Brochure](#)
 - [GAWARN](#)
 - [NvWARN](#)
- [Example Utility Outreach](#)
 - [AZWARN](#)
 - [KYWARN](#)
- [Economic Benefits of Forming & Participating in WARN](#)

Operations Plan/Job Aids

- [WARN Tabletop Exercise Facilitator Guide](#)
- [WARN Operational Plan](#)
 - [Operational Plan Development Overview - **NEW!**](#)
- [AWWA Resource Typing Manual](#)
- [AWWA Resources on Security/Disasters](#)
- [AWWA Streamlines Article](#)
- [Journal AWWA Article](#)

Incident/Exercise

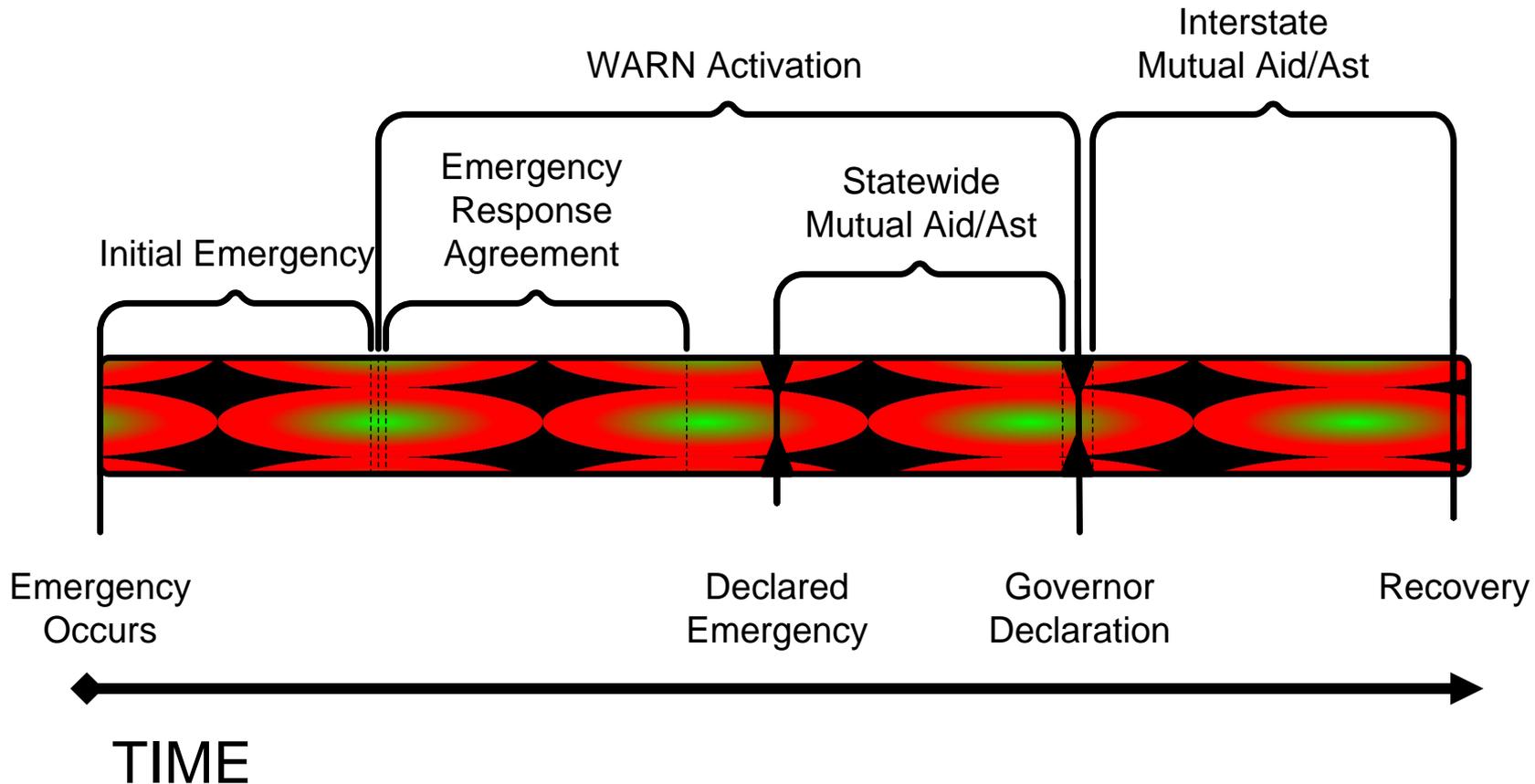
- [USEPA EMAC Tip Sheet for Water Sector](#)
- [USEPA Water Sector Mutual Aid & Assistance Fact Sheet](#)
- [USPEPA Small Water Systems & WARN](#)
- [USPEA Tribal Water Systems & WARN](#)
- [Water Sector NIMS Implementation Objectives](#)
- [NIMS Training: USEPA prepares water and wastewater utilities to respond to disasters.](#)

FEMA Resources (RSS feed area)

- <http://www.fema.gov/help/rss.shtml#list>
- http://www.fema.gov/news/recentnews_rss.fema
- http://www.fema.gov/news/recentnews_hq_rss.fema
- http://www.fema.gov/news/disasters_rss.fema
- <http://www.photolibrary.fema.gov/photolibrary/rss.do>
- <http://www.fema.gov/news/natsitup.xml>

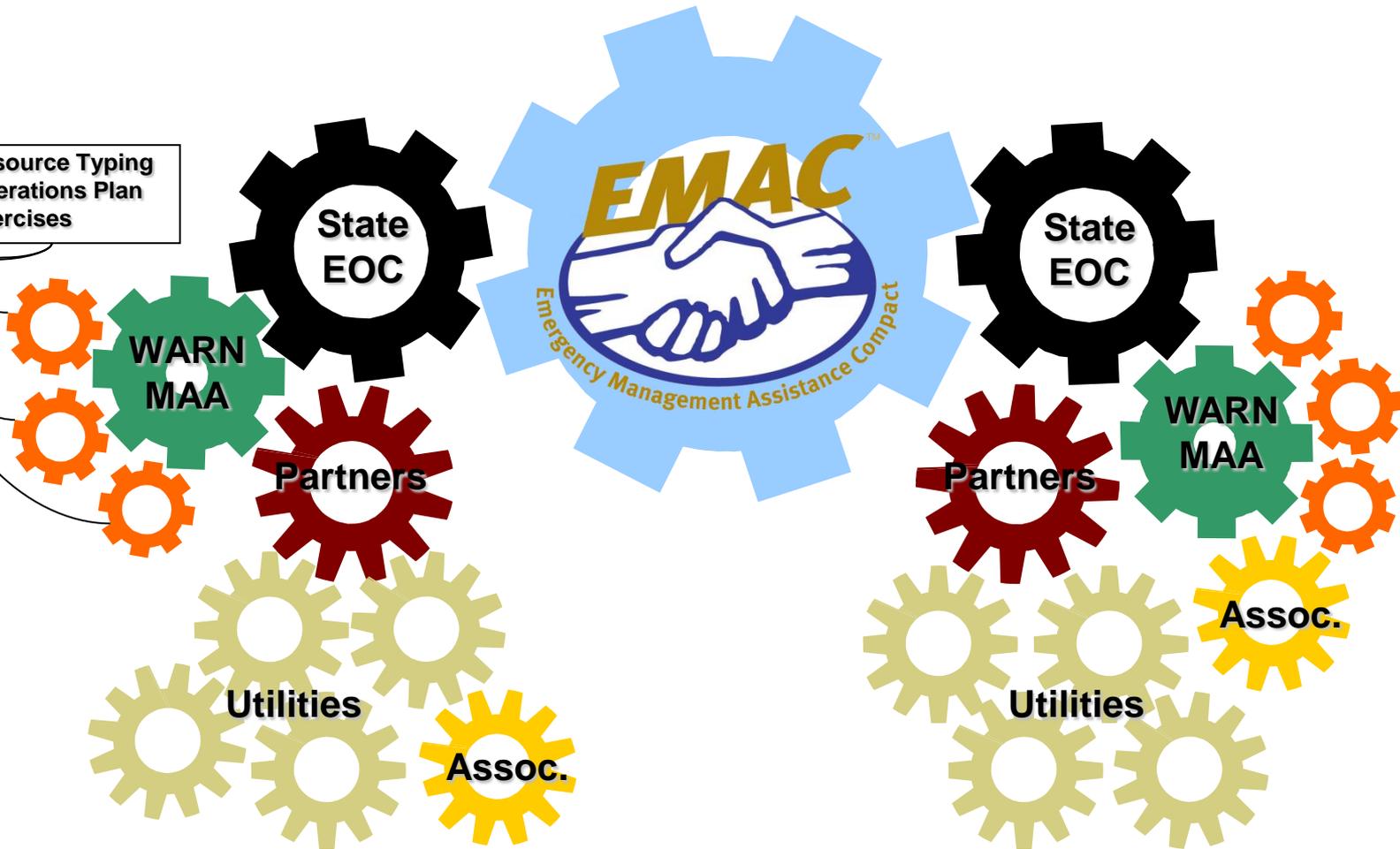
Why it Works – Bridges the Gap

WARN does not require state or federal declaration and includes private utility resources.



EMAC & WARN

- Resource Typing
- Operations Plan
- Exercises



Successful Uses of WARN

- **CaIWARN**

- Northridge Earthquake, 1994
- El Nino Storms, 1998
- Sonora Fires, 2001
- Southern California Fires, 2007
- Baja Earthquake, 2010

- **FlaWARN**

- Hurricanes Katrina, Wilma and Rita, 2005
- Tornadoes, 2007

- **OrWARN**

- Detroit, Blizzard 2008

- **TxWARN**

- Rain Storms and Hurricane Humberto, 2007
- Hurricane Dolly and Ike, 2008

- **CoWARN**

- Salmonella outbreak, 2008

- **TNWARN, INWARN, KYWARN**

- Ice Storm February 2009

- **IAWARN, MNWARN**

- Floods 2010,2011

- **ALWARN**

- Tornado, April 2011

- **NCWaterWARN, PAWARN**

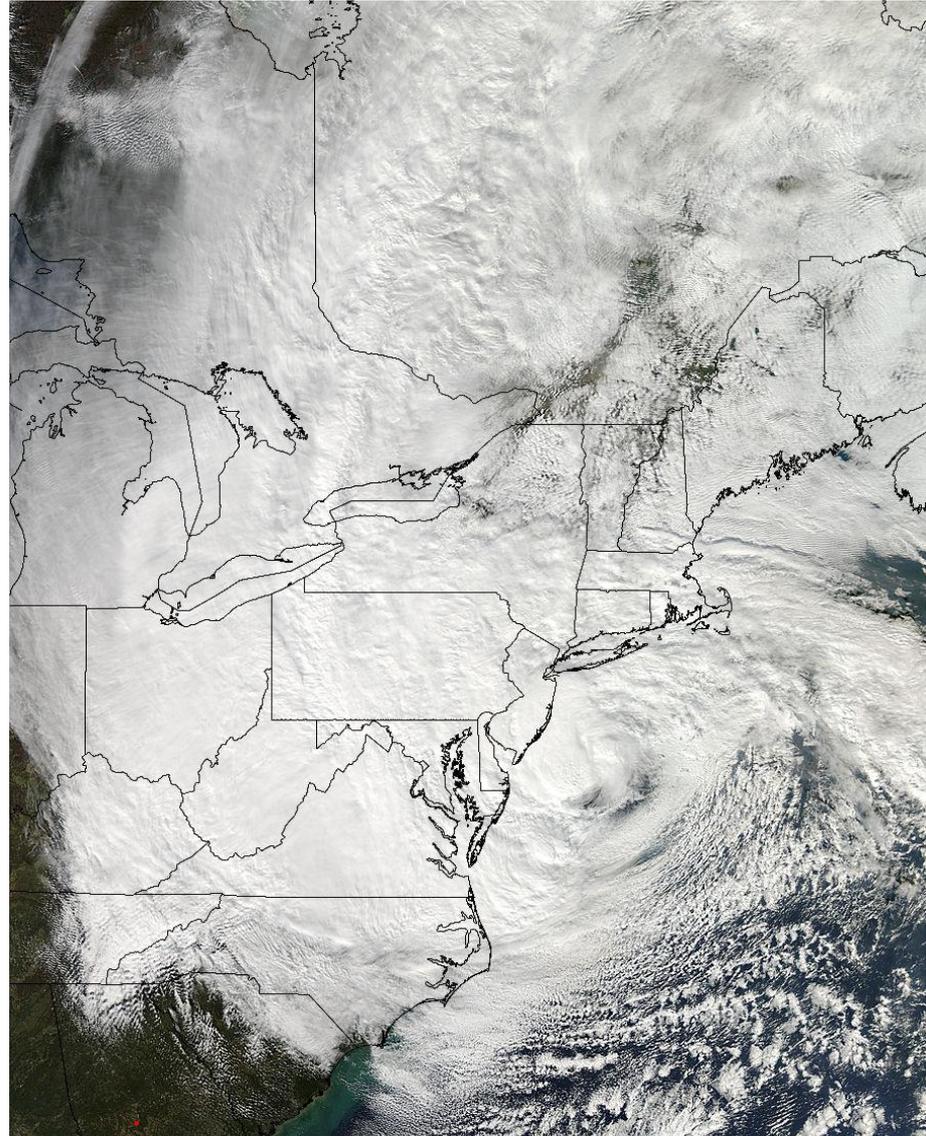
- Hurricane Irene, 2011

- **NYWARN, NJWARN, PAWARN, MAWARN**

- Hurricane Sandy, 2012

WARN & Hurricane Sandy

- **NYWARN**
 - Chlorination equipment
 - Chainsaw crews
 - Motor dryer
 - Generators
- **NJWARN**
 - EMAC deployments
 - Generators
- **PAWARN**
 - Generators
- **MAWARN**
 - Generators



Credit: NASA Goddard MODIS Rapid Response Team

How Valuable is Participation?

Benefits from reduced revenue loss

The value of public confidence in the utility providing service

Average cost of participating in WARN

High

Priceless

Low

Bottom Line:

You can't afford not to participate or be a partner!



?? Questions ??

Kevin M. Morley, PhD

Security & Preparedness Program Manager

AWWA – Government Affairs

1300 Eye Street, NW Suite 701W

Washington, DC 2005

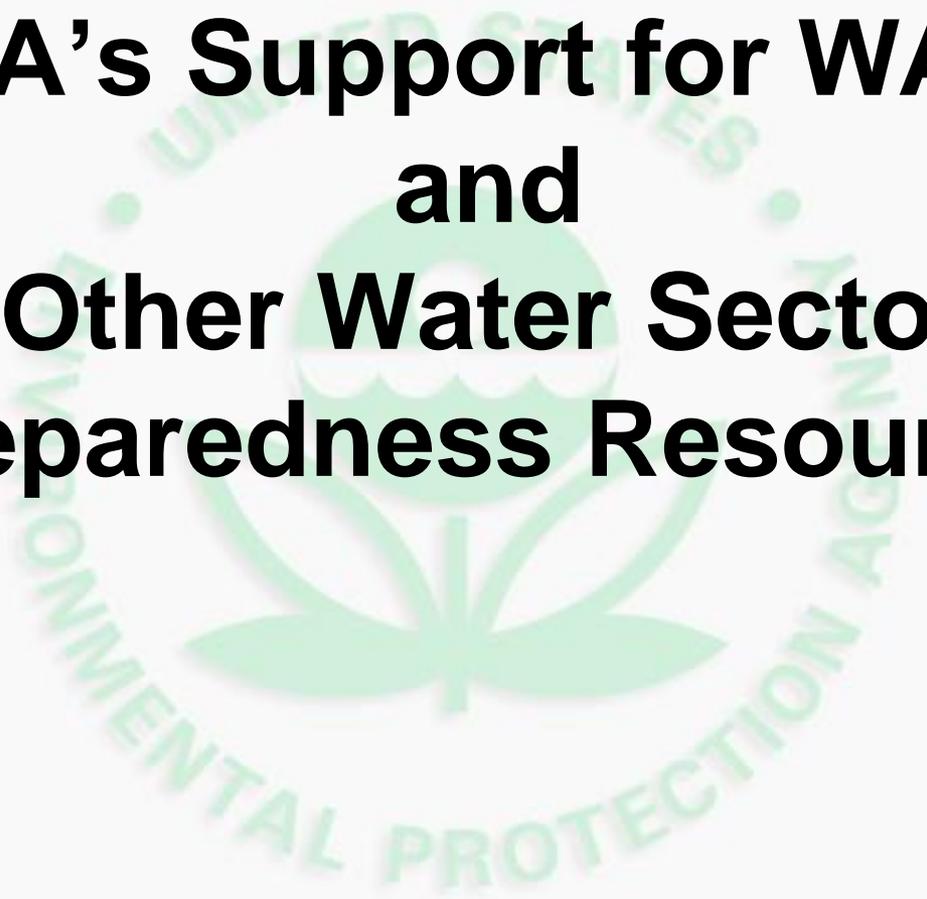
202-628-8303 or kmorley@awwa.org

WARNSM

WATER /WASTEWATER AGENCY RESPONSE NETWORK



**EPA's Support for WARN
and
Other Water Sector
Preparedness Resources**



Presentation Overview



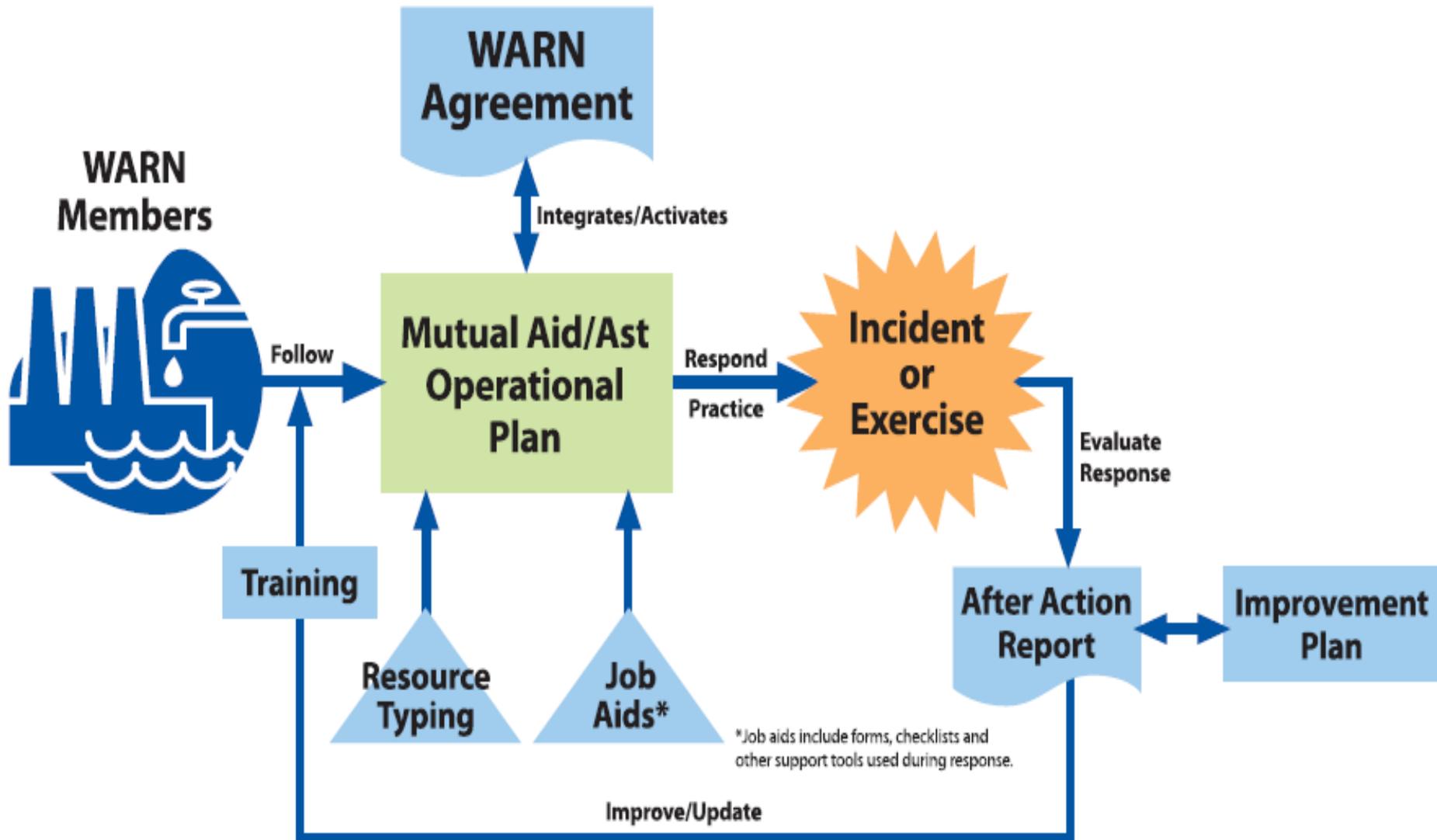
WARN

- Tabletop Exercises
- Operational Plan Guidance
- WARN Videos



Coordination between Water Utilities and Emergency Management Agencies

FedFUNDS



EPA Supported WARN TTXs



- Discussion-based exercises that bring WARN members together to address key issues and foster relationships between WARN members and other emergency responders
- Participants
 - WARN Utility owners and operators
 - Non-WARN Utility owners and operators
 - Associations
 - Emergency management
 - Local, State, and Federal Government



- **Objectives**

- To improve the readiness of WARN programs
- To develop and update Operational Plans
- To integrate WARN into State Emergency Management Agencies
- To market to non-WARN utilities including small drinking water and wastewater utilities

WARN Operational Plan



- How to activate and implement the MAA
- The Operational Plan is the operational extension of the WARN agreement
- It is based on the NIMS IS 706 course materials and recommended procedures

Operational Plan Overview



- Concept of Emergency Operations
- WARN Activation
- WARN Member Mobilization
- WARN Coordination
- WARN Documentation
- After Action Report and Improvement Plan
- Supporting Documents, Checklists, and Forms
- “**Reader Notes**” boxes provide hints and suggestions to assist in creating a MAAOP



Video 1

- Educate and promote the WARN program to the water sector

Video 2

- Promote benefits of conducting WARN TTXs

Videos 3 & 4 (Under Development)

- Highlight WARN responses
- Coordination of WARN with Emergency Management Agencies

Coordination of the Water and Emergency Services Sectors



Fact Sheet Overview

- How Does Being Better Prepared Benefit Me?
- Why Are Local Emergency Management Agencies Important?
- What Should I Talk About with My EMA?
- What Benefits Have Other Utilities Realized by Establishing Relationships with their EMA, LEPC, or other First Responders?
- How Can I Build a Partnership with My Local EMA?



Checklist of Actions to Conduct with EMA



- Exchange emergency contact information
- Provide location information for critical assets
- Sign up for EMA notifications/alerts
- Participate in local credentialing efforts
- Integrate water into EOC
- Discuss and jointly plan for Alternative Water Supplies
- Ensure water is adequately addressed in EMA plans
- Check consistency of EMA and utility plans
- Provide a tour of facilities
- Participate in LEPC

Coordination Benefits



- Funding security improvements
- Funding training
- Locating resources
- Building relationships
- Helping their community



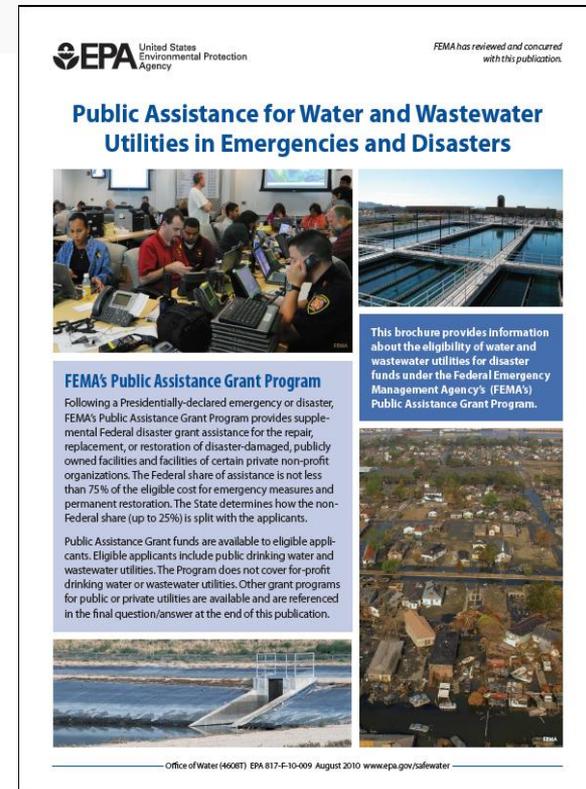
Disaster Funding And Emergency Recovery For Water/Wastewater Utilities



Public Assistance for Water and Wastewater Utilities



- Developed brochure targeted to water sector on FEMA's Public Assistance Program
- Covers eligible work, eligible reimbursements, and FAQs





Federal Funding for Utilities – Water/Wastewater- in National Disasters (Fed FUNDS)

- Guides utilities to appropriate disaster funding opportunities
- Provides example funding applications from utilities that successfully received funds
- Provides funding mentors for advice and to answer questions
- Provides forms to document damage, costs, repairs if in a disaster





FEMA Public Assistance Grant Program

[Overview of Programs](#)

[FEMA Public Assistance](#)

[FEMA Mitigation Programs](#)

[USDA Emergency Water Grants](#)

[EPA State Revolving Funds](#)

[HUD Community Grants](#)

[SBA Loans](#)

[Fed FUNDS Home](#)



Click on the accordions to expand/collapse content about different topics presented below.

[FEMA Public Assistance Grant Program – What is it?](#)

[Categories of Eligible Work](#)

[Application Process, Forms, Checklist of Activities](#)

[Identifying and Assessing Damage](#)

[Planning for Repairs – Project Formulation](#)

[Mitigation Funding](#)

[Keys to Participating and Getting Funding Faster](#)



Lessons Learned from Water/Wastewater Utilities that Participated in FEMA's Public Assistance Grant Program

Many drinking water and wastewater utilities have received funding for repair and replacement work through the Federal Emergency Management Agency (FEMA) Public Assistance (PA) Grant Program. The PA Program provides grants to eligible applicants after Presidentially-declared disasters. In this brochure, water and wastewater utilities provide lessons learned from working with FEMA and participating in the PA Program.

For more detailed information about the FEMA PA program, see <http://www.fema.gov/government/grant/pa/index.shtm> and the EPA publication: *Public Assistance for Water and Wastewater Utilities in Emergencies and Disasters* – available at <http://water.epa.gov/infrastructure/watersecurity/emergencyplan/upload/Public-Assistance-for-Water-and-Wastewater-Utilities-in-Emergencies-and-Disasters.pdf>.

DISCLAIMER: These lessons learned are provided to help water and wastewater utilities better understand use of the FEMA PA Program, but do not assure or guarantee any funding from FEMA.

Learn about the PA Program prior to a disaster so the process goes more smoothly – To help maximize your potential for reimbursement, learn about the PA process and key deadlines for applying for funds and reach out to state officials who administer the grant program with





Utility Examples, Training, & Assistance

- Dozens of successful utility applications for disaster and mitigation funding
 - Portland Water Bureau FEMA Pre-Disaster Mitigation for Conduit
 - Metro Water Services (Nashville), FEMA Public Assistance Project Worksheets and Mitigation Proposal from 2010 Flooding
 - East Valley Water District: FEMA Public Assistance Worksheets and Mitigation Applications for Flood Damage in 2010
- Training from FEMA and EPA on federal disaster funding
- Funding mentors including utilities and federal officials

Additional EPA Preparedness and Response Planning Resources



- Tabletop Exercise Tool for Water Systems: Emergency Preparedness, Response, and Climate Resiliency
- Water Specific ICS and NIMS Training
- Water Laboratory Alliance
- Water Contaminant Information Tool (WCIT)
- Water Health and Economic Analysis Tool (WHEAT)



- All emergencies are local and require a local response capability
- A signed mutual aid agreement will enhance your utility's preparedness and overall resiliency against any disaster
- Low or no-cost action
- Helps ensure the continuity of operations
- Water infrastructure is vital to the wellbeing of every community

Contact



<http://water.epa.gov/infrastructure/watersecurity/>

John Whitler

Whitler.John@epa.gov

(202) 564-1929