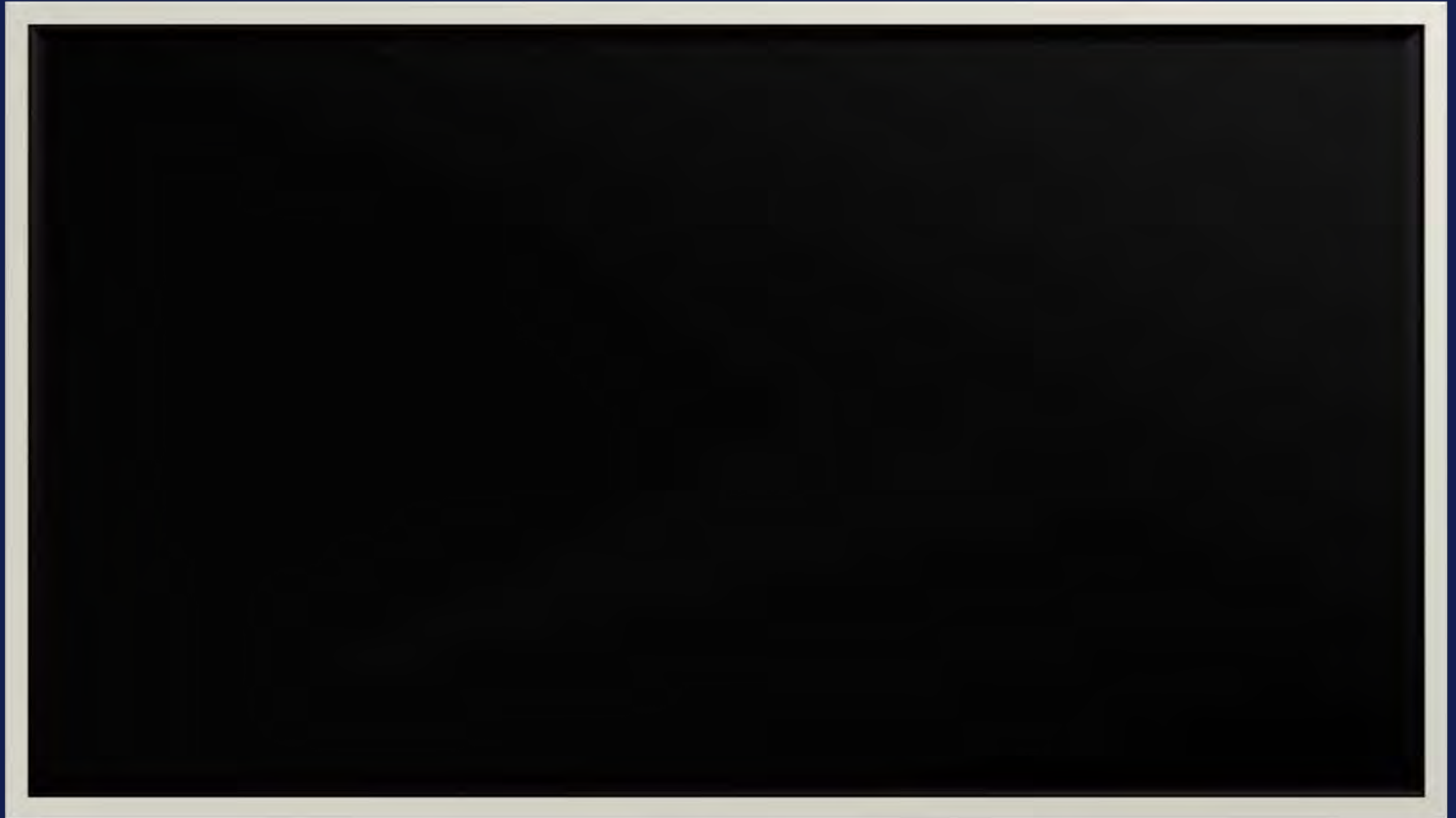


Community-Based Water Resiliency



Helping Water Utilities Build Stronger Communities

What is Community-Based Water Resiliency



CBWR Provides Resources to Help Increase Preparedness & Resiliency

CBWR can help:

- Brings utilities together with:
 - *Emergency Planners and First Responders*
 - *Business Community and Members of the Public*
 - *City/County Managers*
 - *Public Health Officials*
- Increases preparedness **at the community level** by:
 - *Increase understanding of critical interdependencies*
 - *Highlighting multiple benefits of preparedness*
 - *Improving integration of Water Sector into community emergency preparedness and response efforts*



Why Involve the Entire Community?

Water service interruptions can have serious economic, environmental, psychological, and public health consequences. Resilient communities can significantly reduce these risks at negligible cost.

- All emergencies & responses are local, all threats & vulnerabilities unique
- Utilities play a critical role during water emergencies
- Utilities need to:
 - *Collaborate with interdependent sectors*
 - *Coordinate with law enforcement, community leaders, business leaders, and the general public*
- Communities need to:
 - *Understand interdependencies & how a water emergency will affect them*
 - *Access tools and resources that speak to their roles and responsibilities in advance of a crisis*



Benefits to a Community

In a day without water, how would you meet the needs of:

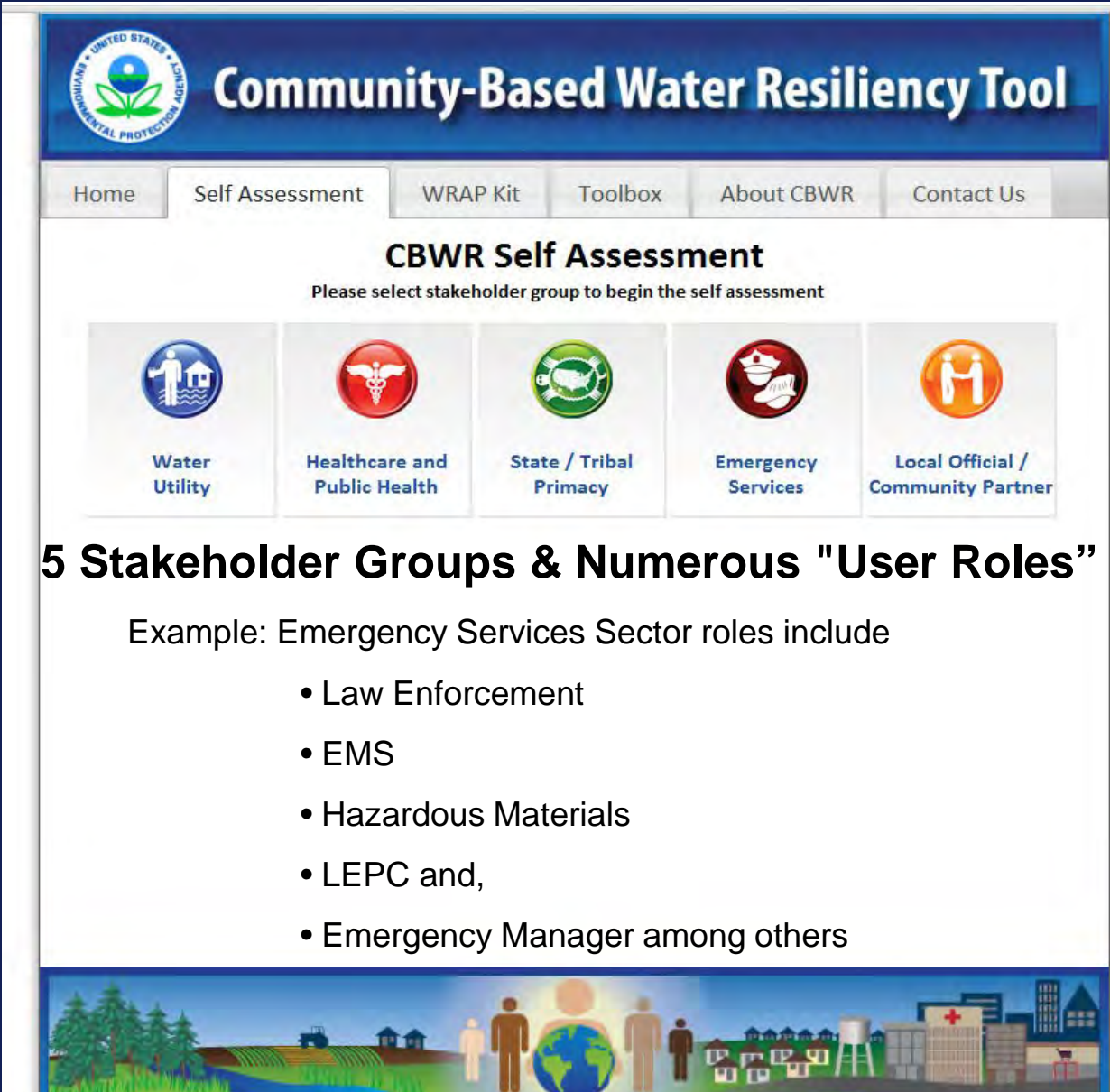
Sanitation, Business Interests, Environmental Protection, and Hospitals/Dialysis Services

CBWR helps communities to:

- Recognize importance of water and organizational reliance on water
- Forge partnerships between water utilities and their community
- Clarify organizational roles and responsibilities during a disaster
- Increase community preparedness for water emergencies
- Reduce impacts of water service interruptions



Self Assessment




The screenshot shows the 'Community-Based Water Resiliency Tool' interface. At the top left is the EPA logo. The main title is 'Community-Based Water Resiliency Tool'. Below the title is a navigation menu with 'Home', 'Self Assessment', 'WRAP Kit', 'Toolbox', 'About CBWR', and 'Contact Us'. The 'Self Assessment' section is active, displaying 'CBWR Self Assessment' and the instruction 'Please select stakeholder group to begin the self assessment'. Five stakeholder groups are listed with icons: Water Utility (blue house and person), Healthcare and Public Health (red caduceus), State / Tribal Primacy (green map of the US), Emergency Services (red fire truck), and Local Official / Community Partner (orange person icon).

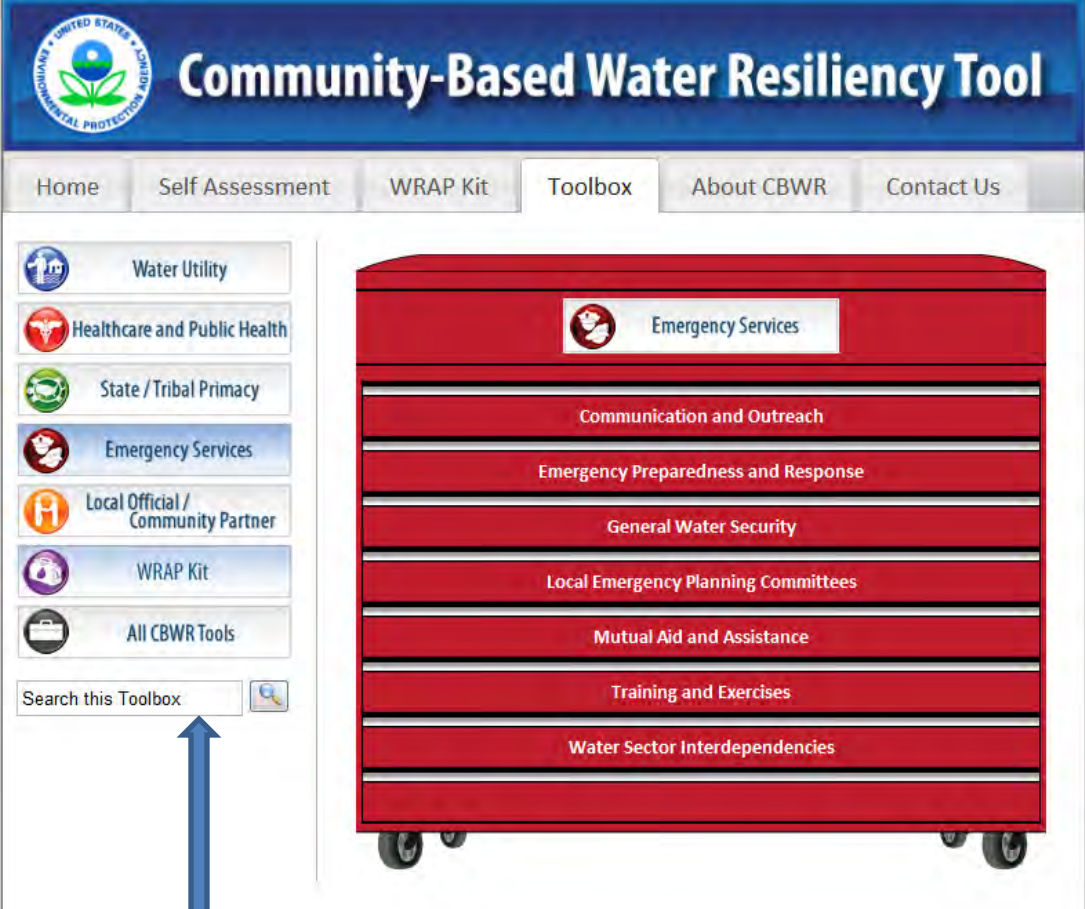
5 Stakeholder Groups & Numerous "User Roles"

Example: Emergency Services Sector roles include

- Law Enforcement
- EMS
- Hazardous Materials
- LEPC and,
- Emergency Manager among others




Resource Toolbox



Home Self Assessment WRAP Kit **Toolbox** About CBWR Contact Us

Water Utility
Healthcare and Public Health
State / Tribal Primacy
Emergency Services
Local Official / Community Partner
WRAP Kit
All CBWR Tools

Search this Toolbox 

Emergency Services
Communication and Outreach
Emergency Preparedness and Response
General Water Security
Local Emergency Planning Committees
Mutual Aid and Assistance
Training and Exercises
Water Sector Interdependencies

The Toolbox contains stakeholder specific resources to help them prepare. Available resources include webinars, presentations, case studies, professional training courses (ICS/NIMS) and many others.

Water Resiliency Action Planner (WRAP) Kit

- Provides users with step-by-step process for planning a water emergency discussion, and covers:
 - Expectations
 - Roles and responsibilities
 - Capabilities and limitations
 - Planning, hosting and follow-up actions
- Includes sample:
 - Agendas
 - Invitations
 - Suggested participants
 - Logistical templates and scripts for recruitment



CBWR Pilot: St. Clair County, Michigan



- **Participants:**

Water Utility, Neighboring County Emergency Managers, Police and Fire, Public Health Department (Local and Canadian), Schools, Hospital, State Primacy Agency, EPA Regional Water Contact

- **Outcomes:** Multi-Phase work plan including training, vulnerability assessments and continued tabletop exercises

- **Lessons Learned:**

- ***Water Utilities:***

- Determine flow capabilities and exercise interconnections
- Set priorities for water provision

- **Emergency Management**

- Post County Hazard Mitigation Plans & Strengthen public/private sector COOP
- Conduct water audits

- **First Responders**

- Include details of alternate water supplies in emergency response plans
- Implement long-range planning

- **Full Summary Review Available Online**

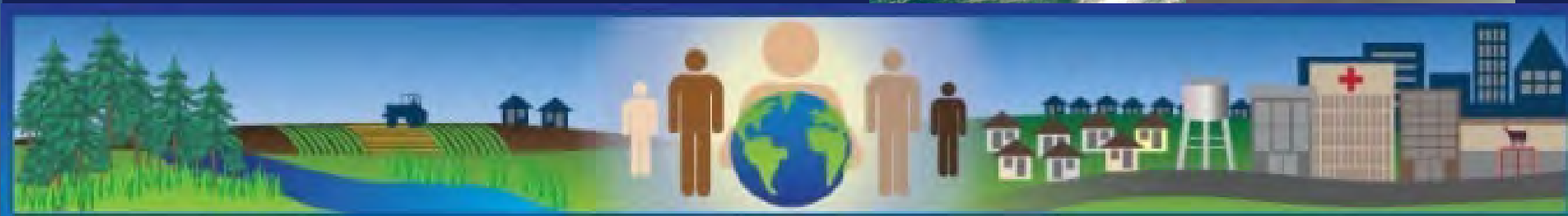
All-Hazards Disaster Resiliency

Infrastructure failures are not a matter of “if” they are a matter of “when”...we all need to be prepared and plan ahead.

Water Sector faces numerous threats:

- Infrastructure Failure
- Natural Disasters
 - *Hurricanes, Tornadoes etc.*
- Contamination
 - *Accidental, Intentional or Terrorist*

CBWR can help you prepare!



Using CBWR to Achieve All-Hazard Disaster Preparedness

CBWR can help you:

- Coordinate with emergency planners
- Strengthen emergency response plans
- Increase citizen understanding of potential impacts from a service interruption
- Support business and community services to factor water service interruptions into emergency plans and,
- Ensure hospitals and critical facilities have alternate water supply



Don't Forget About Other EPA Resources to Improve Resiliency

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

Federal Disaster Funding for Water/Wastewater Utilities



**Which Funding Is
Right for You?**

Currently In a Disaster?



**Here are forms to document
the damage, costs, and repairs.**




**Federal Disaster
Funding Programs**



**Be Prepared to Tap
into Funding**



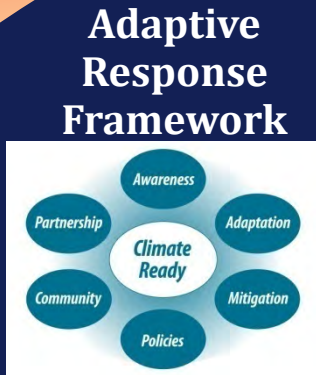
**Utility Examples,
Training, & Assistance**



Click here if you are currently experiencing a disaster or a large-scale service interruption. This page contains recommendations including printable forms on how to document damage, emergency response, and temporary repair actions for water and/or wastewater utilities.

Climate Ready Water Utilities Initiative

Climate Ready Process



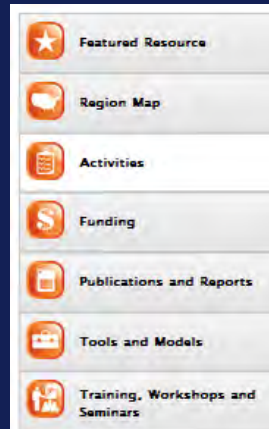
Explore Elements of Climate Readiness

Adaptation Strategies Guide



Learn Climate and Adaptation Basics

Toolbox



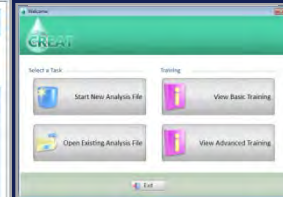
Research and Gather Information

Extreme Events Workshop Planner



Collaborate with Partners

Climate Resilience Evaluation and Awareness Tool



Assess Risks and Evaluate Opportunities

Download The Community-Based Water Resiliency Tool Today!

Please visit:

<http://www.epa.gov/communitywaterresiliency>

Community-Based Water Resiliency Project Lead:

Nushat Thomas

202-564-4674

Thomas.nushat@epa.gov

