



# How to Develop a Multi-Year Training & Exercise (T&E) Plan

A Tool for the Water Sector



# How to Develop a Multi-Year Training and Exercise (T&E) Plan A Tool for the Water Sector



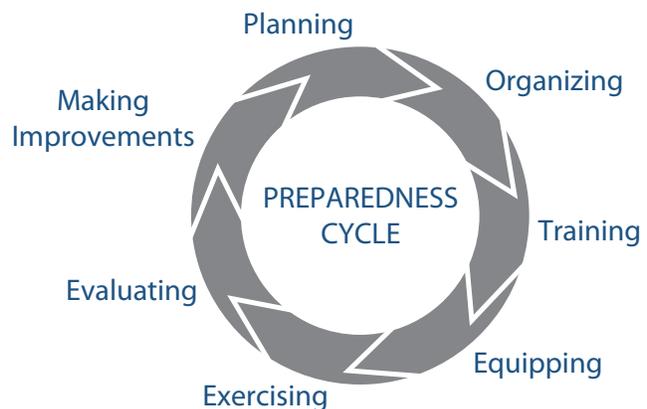
Planning is the cornerstone of preparedness. Preparedness is a shared responsibility beginning with you and extending to the federal government. Training and exercises are critical to the preparedness process. A multi-year training and exercise (T&E) plan is a tool that can be used to help your utility attain preparedness goals. This document will assist utilities to create multi-year T&E plans that can lead to increased emergency preparedness. The material in this document is based on the Homeland Security Exercise and Evaluation Program (HSEEP) guidance found at [https://hseep.dhs.gov/pages/1001\\_HSEEP7.aspx](https://hseep.dhs.gov/pages/1001_HSEEP7.aspx).

This document is organized into three main sections. The first section provides background on the different types of training and exercises. The second section describes the importance of a T&E plan and walks the reader through a water and wastewater utility multi-year T&E plan template. The final section of this document consists of attachments. The attachments provide example T&E plan documents, exercise resources, an improvement planning matrix, and a capabilities-based planning flow diagram. For example, Attachment 1 provides templates for a multi-year T&E plan schedule for a small, medium, and large utility. Those new to training and exercise planning are strongly encouraged to take FEMA's free online class, An Introduction to Exercises (IS-120.a). The course can be found at <http://training.fema.gov/EMIWeb/IS/IS120A.asp>. The multi-year T&E plan described in this document is not intended to cover standard training (e.g., sampling procedures, workplace safety) conducted as a part of routine utility operations, although it may be advantageous to combine standard training and emergency preparedness training as part of the utility multi-year T&E plan schedule.



## Why is emergency preparedness (e.g., training and exercises) important for the water sector?

Utilities must prepare to maintain their critical services under all-hazard conditions. Preparedness is essential for effective incident and emergency management and recovery. The water sector should be engaged in a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective actions to achieve and maintain readiness to respond to, and reduce impacts from, emergencies. Preparedness also leads to increased resiliency, which is a key component of a utility's ability to provide critical services under adverse conditions.



Presidential Policy Directive 8 (PPD-8) is aimed at strengthening the security and resilience of the United States through systematic preparation for the threats that pose the greatest risk to the security of the nation, including acts of terrorism, cyber attacks, pandemics, and catastrophic natural disasters. PPD-8 recognizes the role the water sector plays in providing basic human needs during a response. Additionally, HSPD-7 named drinking water and water treatment systems as critical infrastructure and key resources that must be maintained for the health and stability of the nation.

## What are the different types of training?

Training is one of the first steps to ensuring your utility is properly prepared to respond to an emergency. An effective response depends in large part on the successful execution of a utility's plans and procedures. Utility personnel should be trained to execute new plans and procedures before implementation. Training may come in many forms including self-directed (e.g., online courses), or instructor-led (e.g., staff training on new security procedures). Self-directed training is very convenient for people to schedule, but typically does not allow a student to interact with an instructor or other students. Instructor-led trainings resolve this problem, but are not always scheduled such that everyone can attend.

### Training Example:

After the Director of Water Treatment at the South Bend Water Works (SBWW) in Indiana took on the role of Emergency Planner at his utility, he began to attend his county's Local Emergency Planning Committee (LEPC) meetings. After a couple of unsuccessful attempts, the SBWW was able to secure a \$10,000 education grant from the LEPC to host two instructor-led water sector Incident Command System (ICS) trainings at SBWW. The trainings were open to all first responders in the county, but the majority of attendees were from SBWW.

## What are the different types of exercises?

There are seven types of exercises defined within HSEEP, each of which is either discussion-based or operations-based.

Discussion-based exercises are used to develop or familiarize participants with plans, policies, agreements, and procedures. Types of discussion-based exercises include:

- **Seminar:** A seminar is an informal discussion, designed to orient participants to new or updated plans, policies, or

procedures (e.g., a seminar to review a new or updated Emergency Response Plan [ERP]).

- **Workshop:** A workshop resembles a seminar, but is employed to build specific products, such as a draft plan or policy (e.g., a workshop to develop a utility's continuity of operations plan or COOP).
- **Tabletop Exercise (TTX):** A TTX involves key personnel discussing simulated scenarios in an informal setting. TTXs can be used to assess plans, policies, and procedures (e.g., a TTX to assess a Water and Wastewater Agency Response Network's Operational Plan).
- **Game:** A game is a simulation of operations that often involves two or more teams, usually in a competitive environment, using rules, data, and procedures designed to depict an actual or assumed real-life situation (e.g., a scenario-driven set of questions and answers that allows teams to move pieces on a game board).

Operations-based exercises validate plans, policies, agreements and procedures, clarify roles and responsibilities, and identify resource gaps in a field environment. Types of operations-based exercises include:

- **Drill:** A drill is a coordinated, supervised activity usually employed to test a single, specific operation or function within a single entity



(e.g., collecting water samples in response to a potential intentional contamination incident).

- **Functional Exercise (FE):** A functional exercise examines and/or validates the coordination, command, and control among various agencies such as water, public health, fire, law enforcement, and emergency operations centers (e.g., utility personnel, other first responders, and emergency officials responding to an incident in real time).
- **Full-Scale Exercise (FSE):** A full-scale exercise is a multi-agency, multi-jurisdictional, multi-discipline exercise involving functional and “boots on the ground” response (e.g., utility personnel performing visual inspections of facilities or collecting samples).



It is important to select the correct exercise to ensure you are able to meet your designated training objectives. For example, if your objective is to build relationships with other first responders, a tabletop exercise maximizes “face time” with all of the participants in an interactive environment. Please see Attachment 2 for water sector examples of exercises and for a listing of resources and tools to help you plan and conduct training and exercises.

### What is a Multi-Year T&E Plan?

The multi-year T&E plan is the foundational document guiding a successful training and exercise program. The plan is intended to be a companion document to an emergency preparedness plan (e.g., ERP, Community Comprehensive Emergency Management Plan, or Emergency Operations Plan). The plan is also a

living document that should be updated and refined annually. The multi-year T&E plan provides a roadmap for your utility to follow in accomplishing the priorities described in your ERP. Each priority is linked to a corresponding need identified by your utility, agency, or jurisdiction, and, if applicable, an Improvement Plan (IP) action. An IP identifies changes/updates to plans, policies, or procedures as determined during an exercise. The IP also assigns the responsibility for completing these actions/tasks to a person or group along with an implementation timeline. Attachment 3 provides a format for organizing an IP. Remember, your training and exercises should focus on developing those capabilities that will help you to achieve your specified goals.

Included in a multi-year T&E plan is the training and exercise schedule, which provides a graphic illustration of the proposed activities scheduled for a three year period (Attachment 1 provides examples of a multi-year T&E schedule). It is representative of the natural progression of training and exercises that should take place in accordance with a building-block approach, which entails focusing on specific capabilities in a cycle of escalating complexity and improvement.

### What are the benefits of a Multi-Year T&E Plan?

A multi-year T&E plan will help to ensure that your utility performs regular training and exercises with a focus on continual improvement. Performing regular training and exercises will ensure that employees stay current in their preparedness roles, and will also facilitate new employees’ understanding of your utility’s preparedness plans and operations. Training and exercises will also allow your utility to determine where changes/updates may need to be incorporated into ERPs, as well as identify the need for additional mission critical resources.

Planning should be conducted with your response partners, such as your local fire department(s), police department(s), public health department, local emergency management agency (EMA), state primacy agency, and utilities in neighboring jurisdictions. Planning in a multi-agency, multi-jurisdictional environment helps to ensure that your plans are coordinated with response partners, reducing redundancy and building relationships. Training and exercising with response partners will

improve incident response by addressing many of the road blocks typically identified in After Action Reports:

- Poor communications;
- Poor information flow;
- The failure to establish incident command early;
- The failure to utilize unified command;
- Up-front identification of technical specialists;
- Safety concerns;
- Roles and responsibilities;
- Understanding the capabilities and limitations of response partners;
- Prioritizing incident objectives; and
- Ineffective resource management.

### What are the components of a Multi-Year T&E Plan?

The following Water and Wastewater Utility Multi-Year T&E Plan Template provides a summary of the components that could be included in your utility’s plan.

Potential plan components include the following:

- Section 1. Purpose
- Section 2. Points of Contact
- Section 3. Program Priorities/Capabilities-Based Training
- Section 4. Methodology and Improvement Tracking
- Section 5. Multi-year Training and Exercise Plan Schedule

## Water and Wastewater Utility Multi-Year T&E Plan Template

### Section 1. Purpose

The first section provides a discussion of the purpose of your utility’s multi-year T&E plan. You can use the information above to help develop an introduction.

### Section 2. Points of Contact

A primary contact list for personnel involved with training and exercises at your utility is provided in this section. In addition, you should also include your local EMA training coordinator, and other emergency management contacts in your state and local jurisdiction. It is important to keep this list and the associated contact information up-to-date. A points of contact list template is provided below, and you should feel free to add other positions to this list as necessary.

Your utility’s Training & Exercise Manager could be a superintendent, manager, or operator. It should be someone who is familiar with your utility’s ERP and who also has good organizational skills.

### Points of Contact Template

Position	Name	Phone/Email
Utility Superintendent		
Training and Exercise Manager		
Emergency Management Director		
LEPC Representative		
Fire Department Liaison		
Police Department Liaison		
Public Health Department Liaison		
Hazardous Material Handling Team		
WARN Steering Committee Members		
Contractors		
Neighboring Utility		
Other		

### Section 3. Program Priorities/Capabilities-Based Training

Program priorities are identified by first conducting a review of your utility’s vulnerability assessment, existing plans (e.g., ERP), lessons learned from recent incidents or previous years’ training and exercises, IPs, and any recent act, regulation, or initiative, taking into account how your efforts will support or complement your jurisdiction’s homeland security priorities. Conducting this assessment of your priorities helps you to identify gaps, excesses, and deficiencies in your preparedness capabilities. You can then select

Be sure to link your priorities back to your jurisdiction’s priorities. You can then use your selected priorities to write your multi-year T&E plan. Identifying and describing your specific priorities in the multi-year T&E plan will help you to focus your program on those capabilities which you would like to develop to support your priorities. See the capabilities-based planning flow diagram in Attachment 4 for an example.

A template for this section of your multi-year T&E plan is provided below. Remember, your priorities should lead to the development of response and recovery capabilities at your utility.

### Capabilities-Based Planning Template

<p>I. <b>[INSERT PRIORITY]</b> [Briefly describe the priority.] <b>Corresponding Local Priorities:</b> [Insert local priorities to which the utility’s priority most closely corresponds.] <b>Capabilities that Support this Priority:</b> [Identify capabilities and corresponding training and exercises that support this identified priority. Remember to only list those training courses and exercises that your utility will participate in over the following three years.]</p> <p>II. <i>[Continue to list priorities, capabilities, and associated training and exercises in this format.]</i></p>
--

capabilities to validate through training and exercises that support your identified priorities. Target capabilities identified by the Department of Homeland Security that apply to all agencies and organizations, as well as those specific to the water sector, are located at <http://www.fema.gov/pdf/government/training/tcl.pdf>. These can be used as a starting point when identifying capabilities to support your program’s priorities.

Capabilities-based preparedness emphasizes training and exercising specific capabilities (e.g., maintaining operations during a power outage), rather than more general threats or incidents (e.g., hurricane, tornado). This is because capabilities are applicable to a wide variety of threats and incidents. For example, a utility located in an area prone to power outages may want to develop the capability to operate using backup generators. In this example, the cause of the power outage (e.g., hurricane, tornado) is beside the point, as the capability to operate using backup generators will mitigate the consequences of power outages that may occur due to a variety of incidents.

### Section 4. Methodology and Improvement Tracking

In this section, describe how the training courses and exercises were chosen and how they will be tracked with respect to progression and improvement. Keep in mind that sequence, mix, and range of training courses and exercises ensure that your utility increases its preparedness through different and progressively challenging training courses and exercise activities. The methodology chosen should:

- Challenge participants with increasingly advanced coursework and scenarios;
- Target specific skills, knowledge, and capabilities needed to execute all facets of the ERP;



- Incorporate, reinforce, and verify lessons learned from training, exercises, and actual incidents;
- Identify demonstrated capabilities and areas in need of improvement;
- Provide a means of evaluation and improvement planning for exercises; and
- Ensure a method to share lessons learned and best practices from training courses and exercises.

To ensure that you capture all suggestions and lessons learned from exercises, you may wish to use a form such as an Improvement Planning Matrix (Attachment 3).

## Section 5. Multi-Year Training and Exercise Plan Schedule

The template and examples in Attachment 1 are provided to help you complete your respective schedules. The template can be modified to meet the requirements of your utility. The guidelines below will assist you to develop the appropriate information for the template. In addition, Attachment 5 lists utilities that have successfully implemented T&E programs.

### Steps to Develop a Multi-Year T&E Plan Schedule

Step 1: Enter the year in which the training and/or exercise will be conducted. For example, if your utility is developing the schedule for 2011 through 2013 and you are working on 2011, write "2011 (Year One)" after the colon.

Step 2: Enter all participating jurisdictions (e.g., state, regional, local, agency, facility) on the left side of the schedule.

Step 3: The schedule is broken into quarters and months. For each jurisdiction, enter the appropriate quarter and month of the training course and/or exercise. If an exact date is unknown, enter the information into the appropriate year or quarter.

Step 4: Write and color-code cells based on the priority of each training course and exercise type (e.g., TTX, FSE), so that users can easily understand what training course or exercise is being conducted to satisfy what priority.

Step 5: Remember to consider the sequence, mix, and range of training and exercises, as well as the building block approach.

## **Attachment 1**

### ***Multi-Year Training & Exercise Plan Schedule***

---

This attachment contains a template to develop a multi-year T&E plan schedule. It also includes examples of multi-year T&E plan schedules for small, medium, and large utilities. You are encouraged to review the example that coincides with your respective utility size and resource levels. Use the corresponding template to develop your own multi-year T&E plan schedule as part of your overall multi-year T&E plan.

Do not forget to check with your usual training and assistance providers (e.g., rural water affiliate or local water works section). These organizations may also offer training or exercise opportunities that satisfy your program priorities.

**Purpose:** Use this form to develop your training and exercise schedule (examples follow).

**Instructions:** Fill in your utility name and the year for which you are completing this schedule. On the left hand side, list all outside agencies you expect to work with. Fill in, by quarter and month, the exercise or training you plan to conduct or attend to the right of the appropriate agency. You can list both in-house events (e.g., an ERP seminar) as well as those that involve others (e.g., a pandemic tabletop exercise). One event may satisfy multiple priorities. Remember to start small (e.g., a seminar) and then work your way up to larger events (e.g., a functional exercise).

AGENCY/ JURISDICTION	MULTI-YEAR TRAINING & EXERCISE SCHEDULE:											
	Qtr 1			Qtr 2			Qtr 3			Qtr 4		
	J	F	M	A	M	J	J	A	S	O	N	D

**Priorities Addressed:**

Priority 1

Priority 2

Priority 3

Priority 4

Priority 5

Priority 6

Example Multi-Year T&E Plan Schedule for a  
Small Utility

AGENCY/ JURISDICTION	SMALL UTILITY MULTI-YEAR TRAINING & EXERCISE SCHEDULE: [2011 (YEAR ONE)]											
	Qtr 1			Qtr 2			Qtr 3			Qtr 4		
	J	F	M	A	M	J	J	A	S	O	N	D
SMALL UTILITY		TRAINING: TELEPHONE THREATS			EXERCISE: ERP WORKSHOP			EXERCISE: EMERGENCY CONTACT & CALL-IN SEMINAR		EXERCISE: ALL-HANDS ERP SEMINAR		
[NEIGHBORING UTILITY NAME]						EXERCISE: MUTUAL AID WORKSHOP						
[COUNTY HEALTH DEPARTMENT]												
[STATE PRIMACY AGENCY]								EXERCISE: PANDEMIC INFLUENZA TABLETOP				EXERCISE: WATER SECURITY WEBINAR
[LOCAL EMA]			TRAINING: ICS-100.A							TRAINING: NIMS IS-700.A		
[LOCAL FIRE DEPARTMENT]	TRAINING: HAZMAT SAFETY			TRAINING: EVACUATION DRILL							EXERCISE: HAZMAT SPILL DRILL	

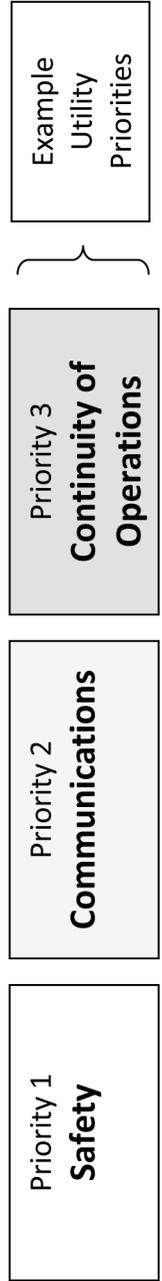
**Priorities Addressed: Utility T&E Priorities (small utilities can leverage training sponsored by their response partners)**



Example Multi-Year T&E Plan Schedule for a  
Medium Utility

AGENCY/ JURISDICTION	MEDIUM UTILITY MULTI-YEAR TRAINING & EXERCISE SCHEDULE: [2011 (YEAR ONE)]											
	Qtr 1			Qtr 2			Qtr 3			Qtr 4		
	J	F	M	A	M	J	J	A	S	O	N	D
MEDIUM UTILITY		EXERCISE: COOP WORKSHOP			EXERCISE: ERP WORKSHOP	TRAINING: TELEPHONE THREATS	EXERCISE: EMERGENCY CONTACT SEMINAR	EXERCISE: COOP TABLETOP		EXERCISE: ALL-HANDS ERP SEMINAR		
[NEIGHBORING UTILITY NAME]				EXERCISE: MUTUAL AID WORKSHOP								
[COUNTY HEALTH DEPARTMENT]							EXERCISE: PANDEMIC INFLUENZA TABLETOP					
[STATE PRIMACY AGENCY]												EXERCISE: WATER SECURITY WEBINAR
[LOCAL EMA]									TRAINING: NIMS IS-700.A			
[LOCAL FIRE DEPARTMENT]	TRAINING: HAZMAT SAFETY		TRAINING: ICS-100.A								EXERCISE: HAZMAT SPILL DRILL	

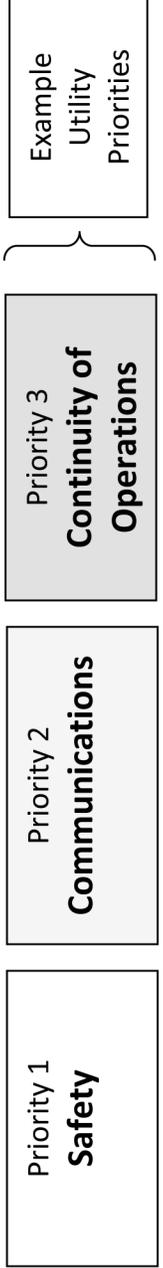
**Priorities Addressed: Utility T&E Priorities (medium utilities can conduct some exercises and training as well as participate in those sponsored by their response partners)**



**Example Multi-Year T&E Plan Schedule for a  
Large Utility**

AGENCY/ JURISDICTION	LARGE UTILITY MULTI-YEAR TRAINING & EXERCISE SCHEDULE: [2011 (YEAR ONE)]											
	Qtr 1			Qtr 2			Qtr 3			Qtr 4		
	J	F	M	A	M	J	J	A	S	O	N	D
LARGE UTILITY	EXERCISE: ERP REVIEW WORKSHOP	EXERCISE: SEMINAR FOR EMPLOYEES	EXERCISE: ERP SEMINAR FOR EMPLOYEES			EXERCISE: HURRICANE SEASON AWARENESS WORKSHOP			EXERCISE: COOP SEMINAR FOR SUPERVISORS	EXERCISE: COOP WORKSHOP	EXERCISE: IN-HOUSE COOP TABLETOP	
[NEIGHBORING UTILITY NAME]		EXERCISE: MUTUAL AID WORKSHOP										
[COUNTY HEALTH DEPARTMENT]								EXERCISE: PANDEMIC INFLUENZA TABLETOP				
[STATE PRIMACY AGENCY]				EXERCISE: WATER SECURITY WEBINAR				EXERCISE: MULTI-AGENCY HAZMAT INCIDENT TABLETOP				
[LOCAL EMA]		TRAINING: EVACUATION DRILL						TRAINING: ICS / NIMS				
[LOCAL FIRE DEPARTMENT]			TRAINING: HAZMAT HANDLING COURSE		EXERCISE: HAZMAT HANDLING DRILL EXERCISE							

**Priorities Addressed: Utility T&E Priorities (large utilities may conduct both in-house and multi-agency, multi-jurisdictional training and exercises)**



## Attachment 2

### Exercise Examples and Resources

---

#### Exercises

**Seminar:** Many utilities host seminars to familiarize staff with a variety of topics such as workplace safety, administrative policies, and ERPs. They may not always use the term “seminar” to refer to this type of informal educational session.

**Workshop:** Prior to the development of the “Resource Typing Manual for Water Sector Mutual Aid and Assistance” (AWWA, 2008), three workshops were held around the country so that individual water and wastewater utilities could provide input as to how the Manual should be developed and what resources it should contain.

**Tabletop Exercise:** The Pennsylvania Department of Environmental Protection is conducting water sector tabletop exercises from 2009-2011 in all 67 counties of Pennsylvania. The goal of the exercises is to bring together local drinking water and wastewater service providers and other emergency responders to provide response training, enhance coordination and communication between all responders, and improve understanding of each agency’s respective emergency roles and responsibilities during a water or wastewater incident. Discussions center on a hazmat incident that affects utility operations.

**Game:** To help make reviewing ICS basics more engaging, utilities attending water sector ICS-200 or higher can participate in ICS Jeopardy. Teams are formed, categories and dollar values are selected, and teams provide the question to the answer given. Facilitators serve as host and judge, and scores are kept. The game helps to keep people involved in reviewing basic concepts of ICS, and is much more interesting than reviewing ICS basics through a series of standard PowerPoint slides.

**Drill:** Some water utilities invested in rapid field testing equipment in response to 9/11. Some of this equipment tests for parameters not usually analyzed for by the utilities (e.g., ricin, anthrax), and therefore is not normally used by the utility. To ensure that staff members know how to operate this equipment, many utilities conduct drills to ensure staff familiarity with its use. In addition to training on equipment, drills can be used to assess new procedures, practice or maintain skills, or prepare for a more complex exercise.

**Functional Exercise:** Fulton County, GA conducted a functional exercise in 2003 centered on the intentional contamination of its water distribution system. Participants (who included the utility, fire, hazmat, law enforcement, emergency medical technician, and emergency operations center staff) were segregated by role. They communicated by cards which simulated phone, radio, and facsimile transmissions. Unlike a tabletop, the time-pressured participants drove the pace and actions of the exercise as they responded to pieces of scripted information given to them by exercise controllers.

**Full-Scale Exercise:** Many utilities rely on gaseous chlorine as a disinfectant. Gaseous chlorine can pose several significant health threats to a community, especially if it is released into the environment. Many utilities conduct full-scale exercises in response to simulated chlorine leaks. These exercises typically involve utility staff as well as staff from the local fire department, hazmat team, law enforcement, public health, and media outlets, and involve the dispatch and movement of resources in a field environment.

## Resources

1. In 2010, U.S. EPA developed a tool to assist utilities in conducting tabletop exercises: a mini-DVD entitled “Tabletop Exercise Tool for Water Systems: Emergency Preparedness, Response, and Climate Resiliency.” This mini-DVD is available as U.S. EPA publication 817-C-10-001 and can be obtained from [http://yosemite.epa.gov/ow/SReg.nsf/description/TTX\\_Tool](http://yosemite.epa.gov/ow/SReg.nsf/description/TTX_Tool). Other tabletop exercise scenarios developed for utilities (including those with a focus on terrorism incidents) can be found online at <http://www.epa.gov/safewater/watersecurity/tools/trainingcd/>.

2. The Federal Emergency Management Agency (FEMA) offers free, online training regarding exercises:

**Course Name:** An Introduction to Exercises  
**Course Code:** IS-120.a  
**CEUs:** 0.5  
**College Credits:** 1.0 (When combined w/ IS-130)

**Course Name:** Exercise Evaluation and Improvement Planning  
**Course Code:** IS-130  
**CEUs:** 0.5  
**College Credits:** 1.0 (When combined w/ IS-120.A)

**Course Name:** Exercise Design  
**Course Code:** IS-139  
**CEUs:** 1.5  
**College Credits:** 1.0

3. FEMA also offers a free, online training regarding exercising business continuity plans for a pandemic:  
<http://training.fema.gov/EMIWeb/IS/IS522.asp>

4. U.S. EPA conducts Water Sector Incident Command System (ICS) training throughout the United States. The training covers all levels of ICS (100, 200, 300, and 400) and is open to all water and wastewater utilities. In addition to being free to attend, most trainings qualify as contact hours or continuing education units for both water and wastewater operator licenses. To learn more about why ICS training is important and for a training location near you, please visit [www.horsleywitten.com/workshops.html](http://www.horsleywitten.com/workshops.html). If you are interested in conducting your own ICS training at your utility, you will find ready-to-go PowerPoint presentations with instructor notes at <http://water.epa.gov/infrastructure/watersecurity/emerplan/index.cfm>.

5. U.S. EPA also conducts Water Sector National Incident Management System (NIMS) and National Response Framework (NRF) training. The training describes NIMS and how water and wastewater utilities can implement NIMS. The NRF training discusses how the federal government responds to and provides support to state and local governments and agencies during major catastrophes, with an emphasis on Emergency Support Function (ESF) #3. ESF #3 defines how U.S. EPA and other agencies provide support to water and wastewater utilities during major emergencies. To learn more about NIMS and NRF training and for a training location near you, please visit [www.horsleywitten.com/workshops.html](http://www.horsleywitten.com/workshops.html).

6. U.S. EPA conducts several discussion-based exercises for the water sector around the nation. For example, the Agency has been sponsoring tabletop exercises for various state Water and Wastewater Agency Response Networks (WARNs). These exercises help the WARNs to fully develop their notification procedures during an incident and develop or refine their operating procedures. If you would like to conduct an exercise for your WARN, U.S. EPA developed a WARN Tabletop Exercise Facilitator Guide that can be found at [http://www.epa.gov/safewater/watersecurity/pubs/guide\\_warn\\_ttfacilitator.pdf](http://www.epa.gov/safewater/watersecurity/pubs/guide_warn_ttfacilitator.pdf).



## Attachment 4

### Example Water Sector Capabilities-Based Planning Flow Diagram

---



## Attachment 5

### Utility Training & Exercise (T&E) Program Examples

Utility	T & E Type	Description	Contact
Massachusetts Water Resources Authority (MWRA)	Seminars, tabletop exercises (TTXs), drills, full-scale exercises	<p>MWRA's T&amp;E program includes seminars on topics such as the utility's Continuity of Operations Plan and pandemic planning and includes monthly TTXs and drills. The TTXs are used to discuss roles, responsibilities, and procedures in the event of a dam break, and the drills cover items such as safe boating practices when staff is responding to reservoir incidents. MWRA recently completed a full scale exercise centered on a break in a water supply shaft. Approximately three fulltime equivalent employees (FTEs) manage the MWRA T&amp;E program.</p>	<p>David Gilmartin            David.gilmartin@mwra.state.ma.us            617-305-5917</p>
Pennsylvania American Water (PAAW)	Seminars, TTXs	<p>PAAW operates approximately 60 public water supplies in Pennsylvania, ranging in size from 3,000 to 135,000 customers. PAAW began its T&amp;E program by conducting Incident Command System (ICS) seminars for its employees. Currently, ICS training is refreshed at the same time annual TTXs are facilitated. TTXs are conducted in each of the five regions of the PAAW system each year, bringing together utility and outside agency staff to discuss issues associated with power outages, tornados, and contamination, to name a few.</p>	<p>John Ihli            John.ihli@amwater.com            717-531-3311</p>