

Tabletop Exercises (TTX): How Do you do them?

AWWA MI Section, Water Security Summit

6/9/10

Eagle Eye Golf Course

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- Kudos: AWWA MI Section
 - Water System Security and Emergency Management Committee (WSSEM Cte): Bill Maier, Chair
- conference attendees
- all those who keep the water safe

Water ISAC

- EPA sponsored memberships to WaterISAC Pro



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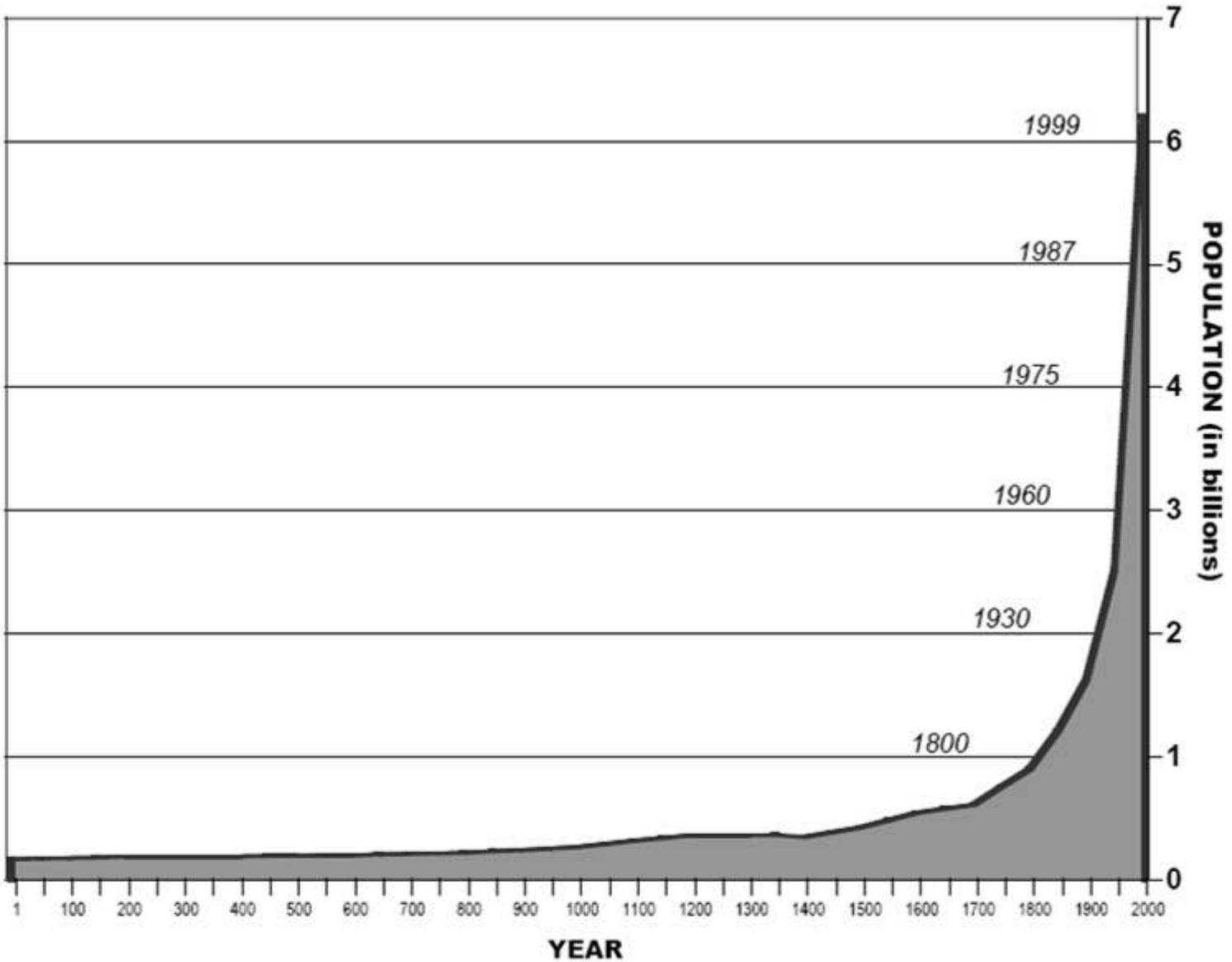
For information on other free-access offers and restrictions, see the [FAQs](#).

US EPA TTX beta version

- Web site:
<http://alscorp9.securesites.net/ttx/prepare.htm>



Human Population Growth Since 1 A.D.



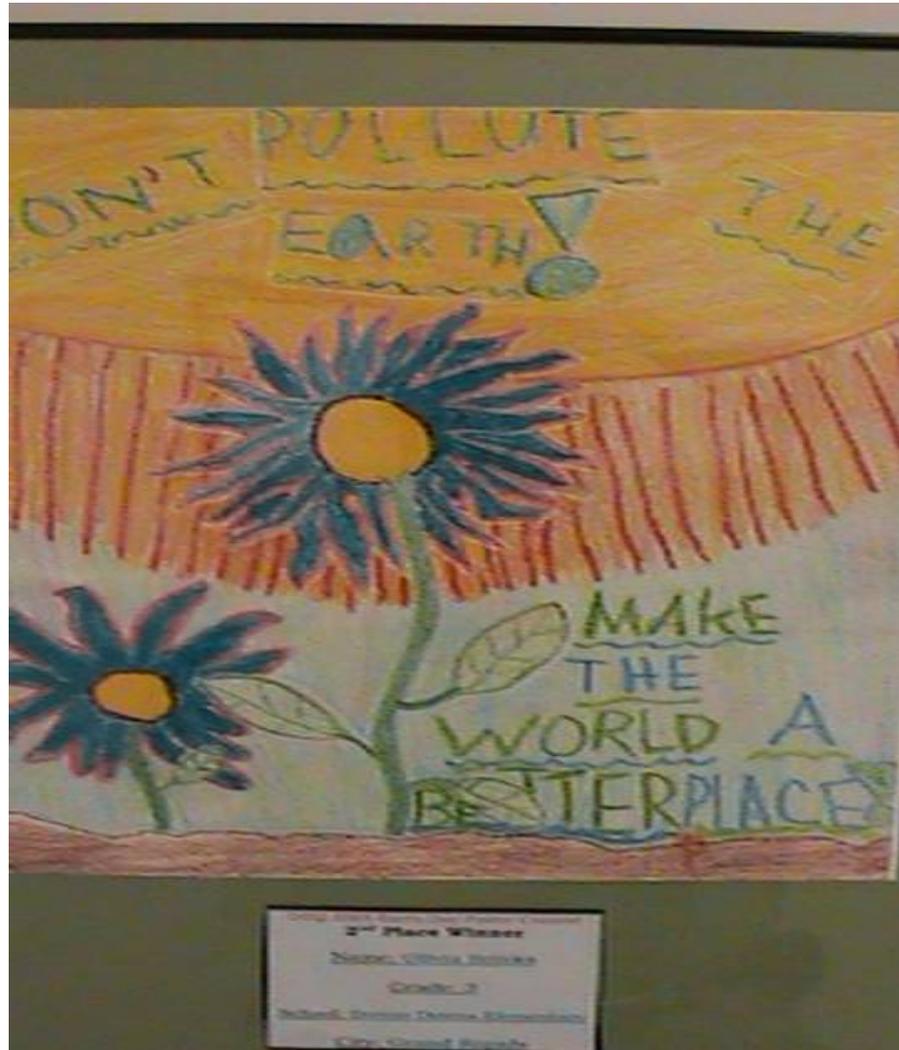
TTX Objective

- The objective of a tabletop exercise is to improve the water systems' preparedness to a water system emergency by knowing and applying the capabilities of their partners.



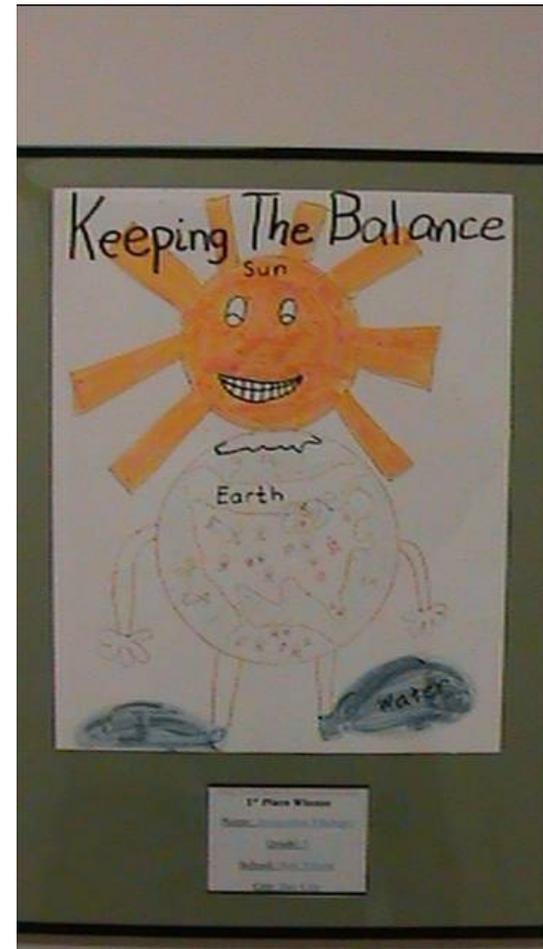
TTX: How to do one? Summary

- Who
- What
- Why
- When
- Where
- How



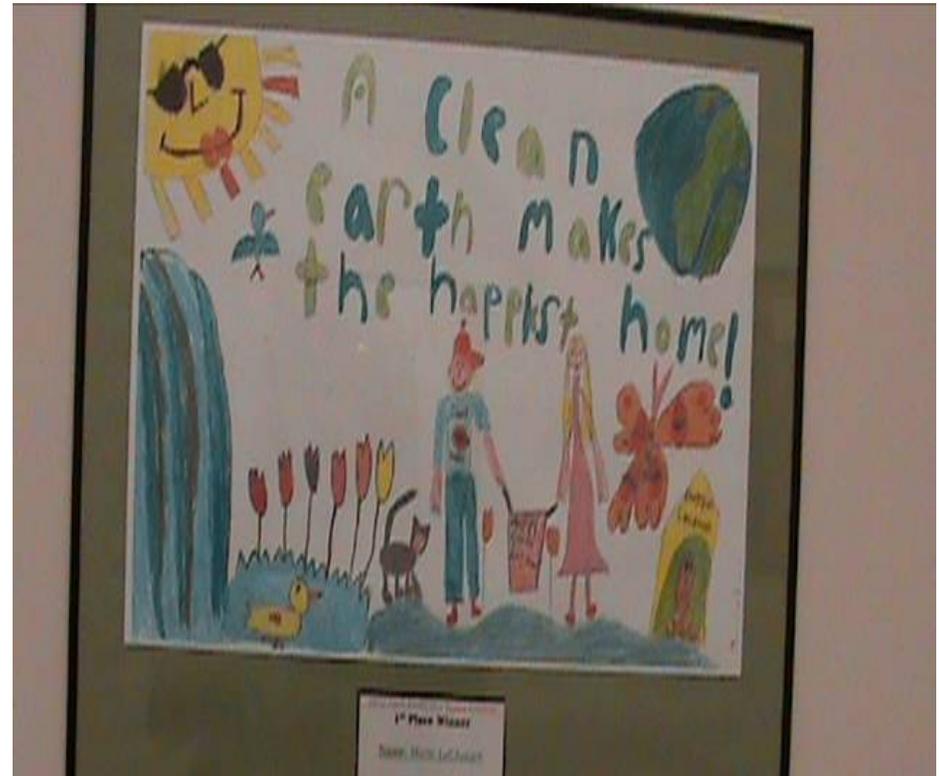
Why

- If not now, when?...If not you, who?



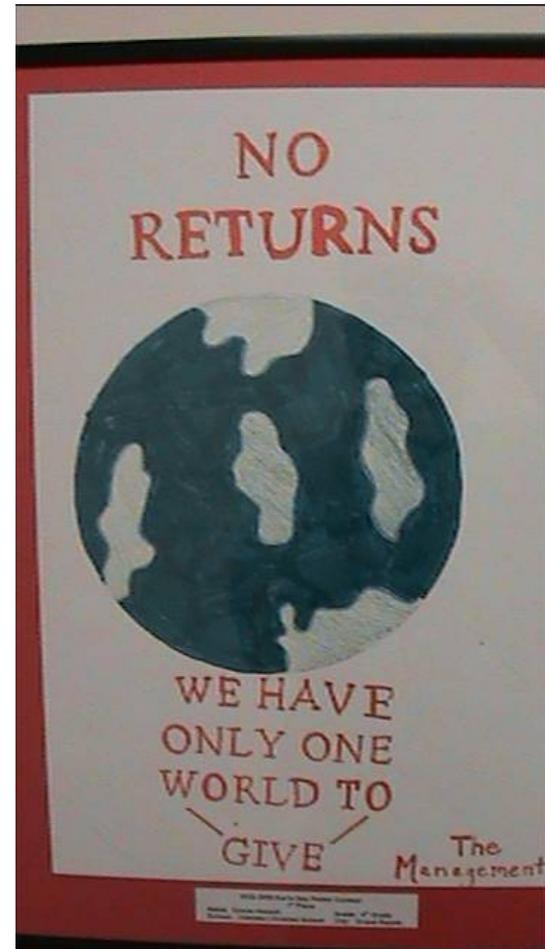
Water Sector Issues

- **Water Sector Issues @ MSP
MICC MSU 3/1/10 conf:**
- Understanding Functionality and Interdependencies
- Weather Related Incidents/
Climate Change
- Planning/Plans/Exercising
- Public/Private Relationships
- Real Time Monitoring to
Protect People, flora & fauna
- Budgetary Restraints and
Prioritization – Aging
Infrastructure
- Loss of Mission



Why

- Because you have the trust of the public...and you don't want to lose it...and, once lost, trust is hard to regain.



Water's Presence

- People, flora, and fauna follow the availability of water



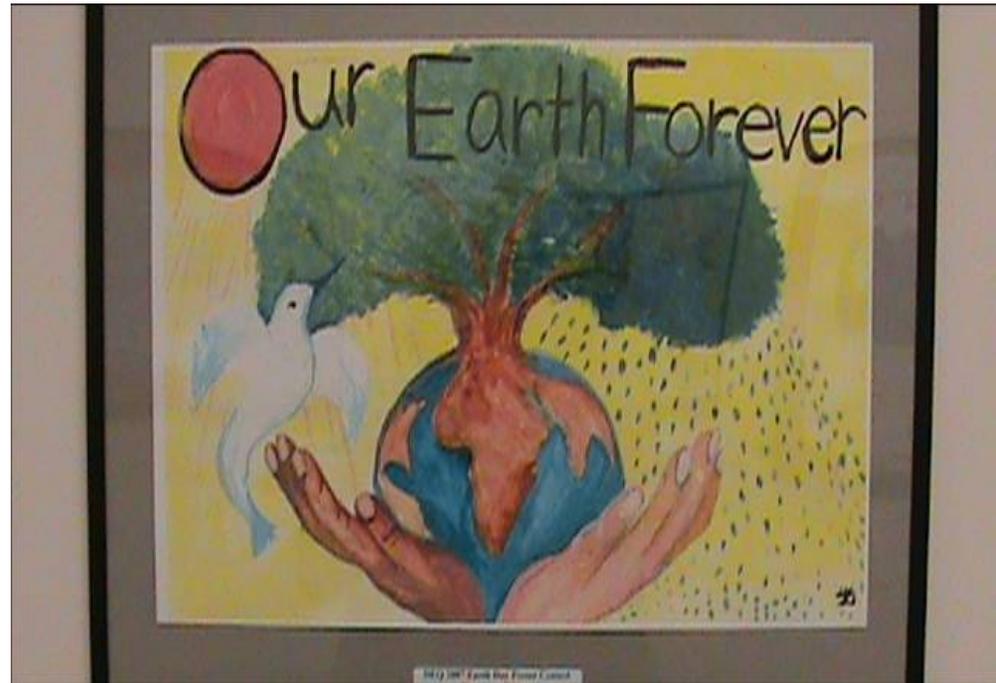
Climate Change

- Flood, drought, sea level rise, fire, freeze-thaw



Climate Change

- Climate change changes water resources



Climate Change

- Climate change is a water security issue



All Hazards

- Natural: flood, hurricane, earthquake, tornado, ice storm, pandemic flu
- unnatural: vandalism, CBRNE and cyber



NIMS/ICS

- FLOPI:
 - Finance
 - Logistics
 - Operations
 - Planning
 - Intelligence



TTX Phases

- Before
- During
- After



Who

- Your partners
 - Fire department
 - Police department
 - Hospital
 - Big users
 - Health department
 - Elected officials
 - Wastewater dept



Exercise Personnel

- Personnel involved in tabletop exercises include:
 1. Facilitator(s)
 2. Players / Participants
 3. Evaluator(s)*
 4. Observer(s)*

*Optional



Facilitator Responsibilities

- Facilitate discussion and coordinate issues between groups
- Focus the group's discussions on specific areas and questions
- Elicit resolutions to issues
- Monitor the record and prepare notes on the group's discussions



Players / Participants

- Agency personnel who discuss their roles and responses to the scenario during the exercise
- Roles and Characteristics:
 - Prepared to discuss issues or respond appropriately
 - Drawn from participating agencies to accomplish exercise objectives
 - Offer solutions and insight into corrective actions and opportunities for improvement
- Training:
 - Familiar with SOPs and EOPs being tested

Evaluators

- Observe and record player discussions.
- Roles and Characteristics:
 - Do not interfere with exercise discussions
 - Chosen for their knowledge of a particular functional area
 - Should be familiar with the appropriate Standard Operating Procedures and Emergency Operation Plans
 - Provide input to the After Action Report

Observers

- Do not have an active role in exercise discussions
- Should be allowed to see or hear appropriate aspects of the exercise
- May be senior and/or elected officials, neighboring jurisdictions, or media representatives
- Roles and Characteristics:
 - Observe exercise from designated area

Design and Development

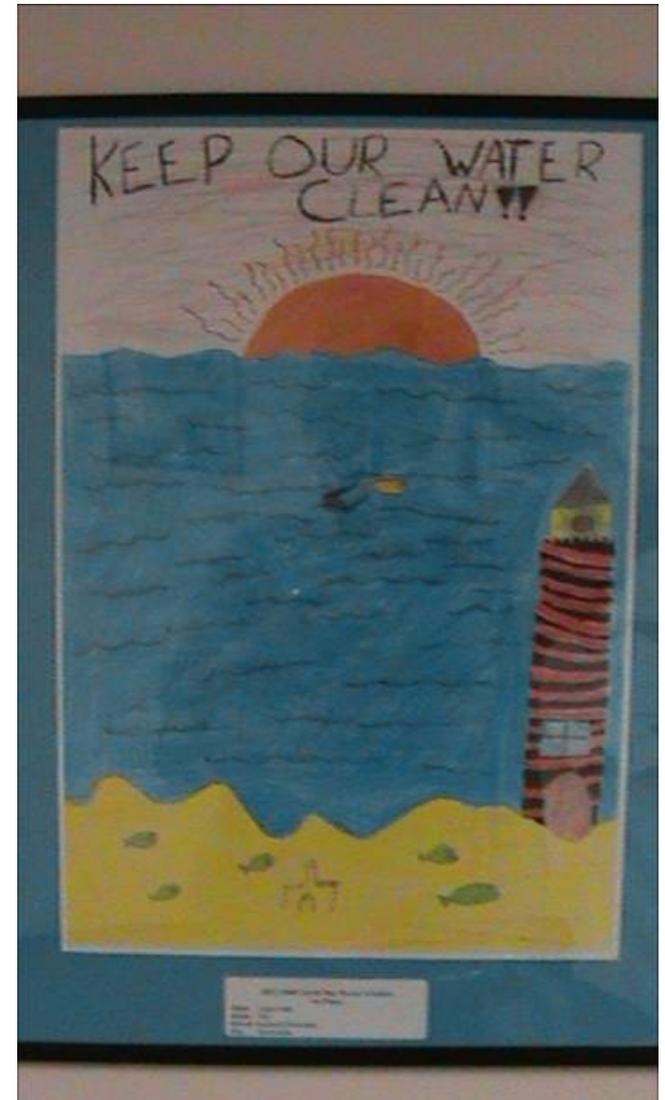
Identify objectives

- Design the scenario
- Create documentation
- Coordinate logistics
- Plan the exercise conduct
- Set focus of evaluation and improvement planning



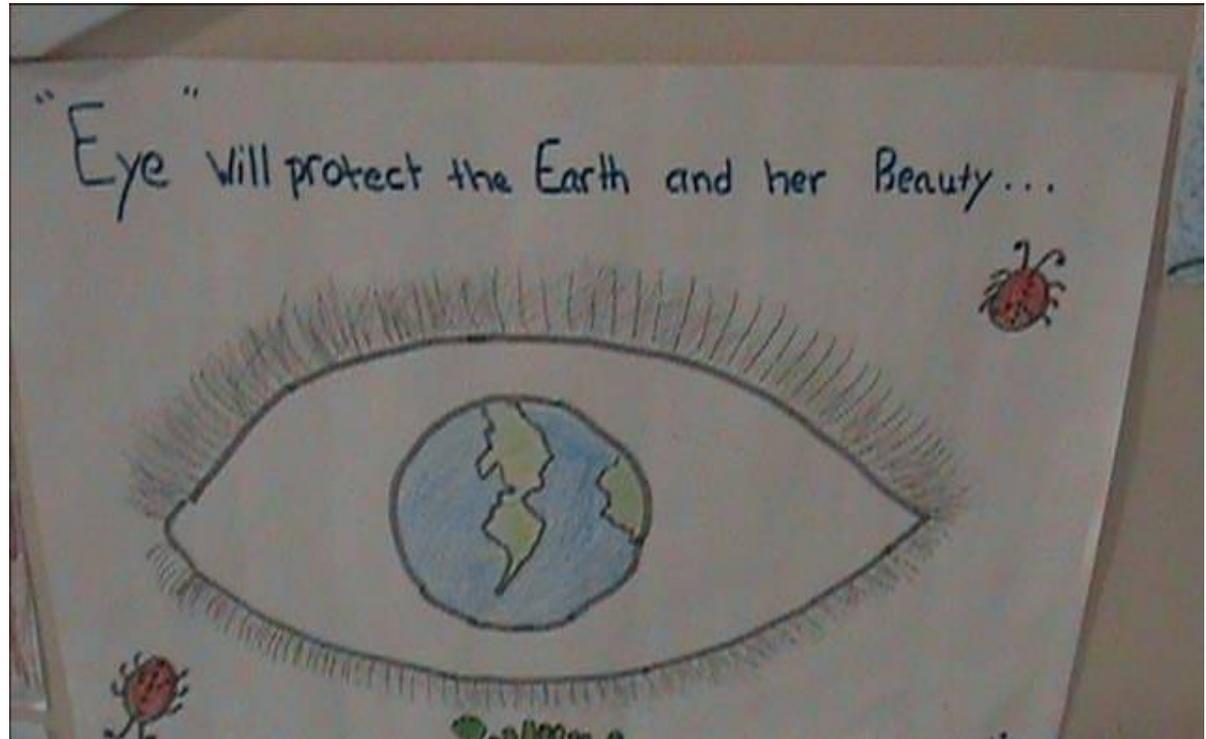
What

- A water system emergency exercise
 - Personnel damage
 - Physical damage
 - Short term needs
 - Long term needs



What

- Natural
- Unnatural
 - CBRNE
 - Cyber



Scenario's

Water Contamination Scenario

A community experiences an increasing number of ill citizens. Public health officials scramble to determine the cause and initial reports point to the community's drinking water system. Water utility sampling returns no evidence for a confirmed contamination event and the utility must continue to investigate the cause. This scenario will require participants to address response, remediation, coordination and communication activities.

Communication plans will be tested as the entire community urgently needs information. While this scenario focuses on a contamination event within a **drinking water system**, **wastewater participants** must focus on maintaining communication with appropriate parties to determine whether the contaminants could enter their systems and if so, how they should respond.

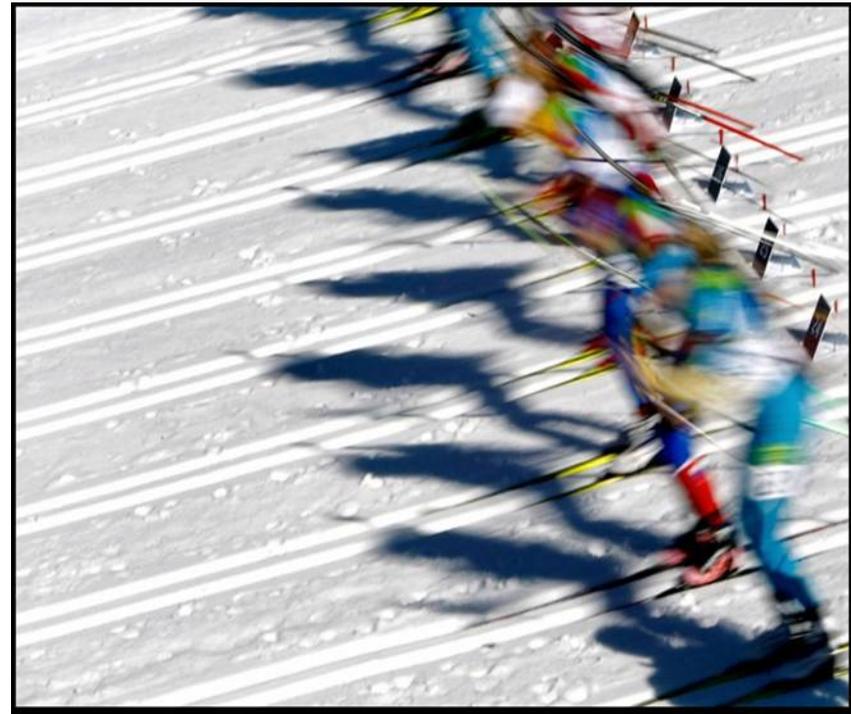
Scenario's

Ice Storm Scenario

It is the day before Christmas and local weather forecasters predict heavy rains throughout the day. Precipitation begins as a light rain in the morning, but quickly turns to freezing rain as the temperature plummets. Within hours, ice covers all major roadways. As the precipitation continues, large branches begin to snap under the weight of the ice, falling on power lines and blocking already impaired transportation routes. For **drinking water and wastewater utilities**, this scenario will raise issues such as continuity of operations, response issues (coordination, communications, public notification and education), logistics, resource management, and recovery.

Reception

- Friendly Face handshakes
- New Face Introductions
- Name Cards for the table
- Name badges
- Business Card Exchange
- Sign-In Sheet
- Parking Lot Sheet



Where

- At your water system or at a conference room in the area



Room Set-up



- Plenary format: participants seated together at large conference table
- Another table may be needed for evaluators and observers

When

- Times:
 - Planning: 4 weeks
 - Invitation: 4 weeks
 - Morning or afternoon
 - 4 hours: morning: 8am – noon
 - Afternoon: 12:30pm – 4:30pm



TTX Schedule: morning

- 8:30am reception
- 9:00am moderator intro
- 9:15am MDNRE introduction
- 9:30am facilitator scenario
- 9:45am group scenario discussion
- 11am break
- 11:15 regroup together/report outs
- 11:30am hotwash
- 12 noon tabletop exercise concludes



Afternoon TTX Schedule

- 12:30pm reception
- 1:00pm moderator intro
- 1:15pm MDRE intro
- 1:30pm facilitator scenario
- 1:45pm group scenario discussion
- 3:00pm break
- 3:15pm regroup / report out
- 3:30pm hotwash
- 4:00pm TTX conclude



How

- Planning and coordinating
- Meeting agenda
- Mission Importance Communicated



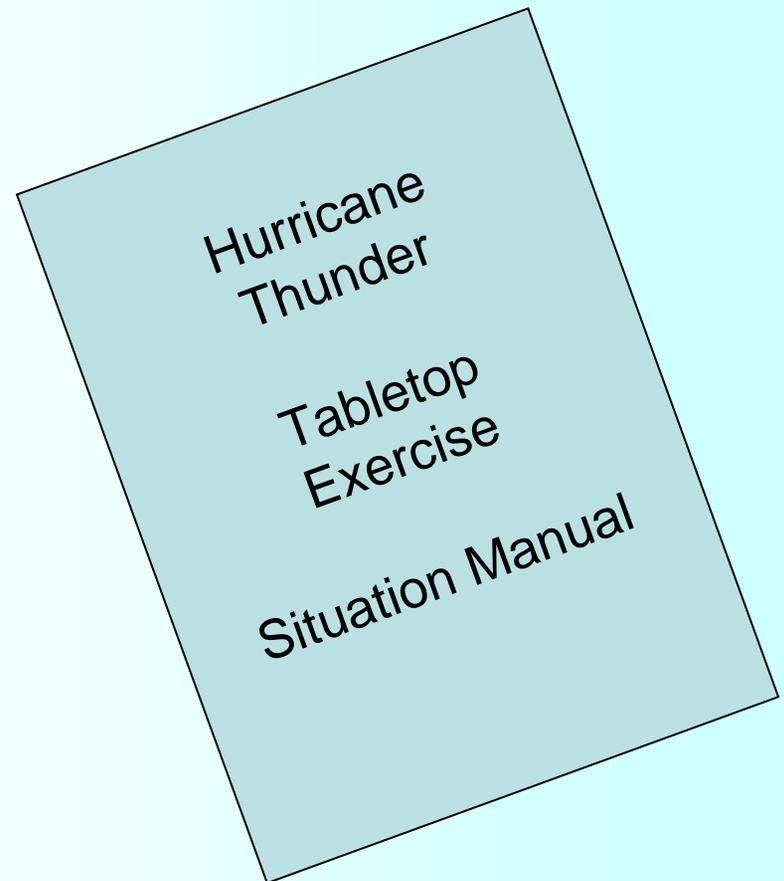
Refreshments

- Up to the host
- Typical for a meeting
- Coffee, donuts, fruit, water



Situation Manual

- Situation Manuals (SitMans) are provided to participants, evaluators, and observers
- They include the schedule, objectives, scenario description, discussion questions, and other relevant materials



Set-up Tips

- Training room
- Sign-in sheet to document group
- Remind participants to bring ID if required by the host facility
- Have additional copies of exercise materials on hand
- Take a moment to let participants introduce themselves to each other



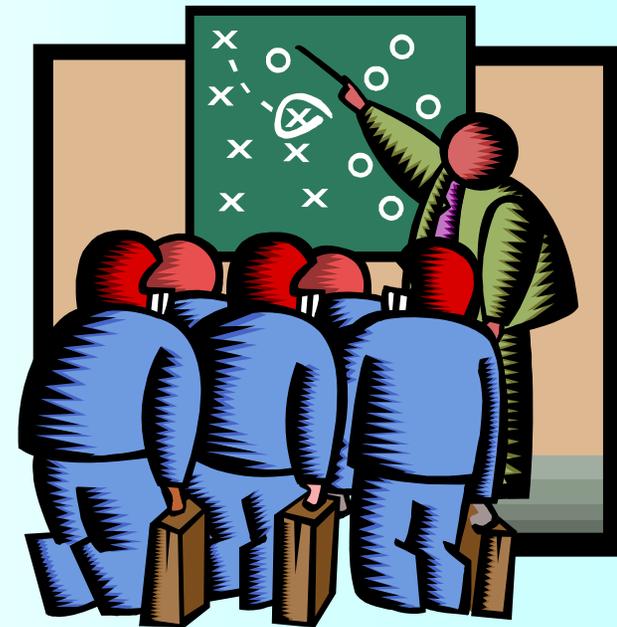
Plan the Exercise

- The exercise planning group should meet to determine the objectives and goals of the exercise.
- The exercise planning group can consist of facilitators and evaluators (if they are used) but should not include participants.



Plan the Exercise

- Define the layout and timeline of the exercise.
- Determine whether to use evaluators or whether the participants will determine opportunities for improvement.
- Determine whether participants will be present or participate via teleconferencing.



Logistics

Discussion-based exercises require attention to logistical details, such as

- Comfortable meeting and briefing rooms
- Food and refreshments
- Audiovisual equipment
- Facilitation/notetaking supplies
- Badges and name table tents
- Registration assistance
- Directions and parking signs.



Documentation

Typical documentation that may be developed and presented with the exercise includes the following:

- Invitations
- Situation Manual (SitMan)
- Scenario Presentation
- Participant Evaluation Form
- Exercise Evaluator Form



Facilitation Tips

- Allow discussions to evolve naturally
- Allow participants to falter and address faults in the After Action Review
- Always remain neutral, objective and fair
- Involve the participants whenever possible
- Do not be afraid to interrupt people who are rambling
- Honor break, lunch, and quitting times
- Know when to be quiet; do not answer too many questions

Moderator Intro

- Starts the TTX
- Announces the TTX groundrules and housekeeping items
- Goes around the room and asks all to identify themselves and describe their organization and their responsibilities
- Thanks all for coming and participating



MDRNE Intro

- MDNRE explains the purposes of TTX's and FTX's
- TTX operated on a 'No Fault Basis'
- 6 P's : proper prior planning prevents poor performance
- US EPA and US DHS supports TTX's and FTX's...why?...because we're better prepared



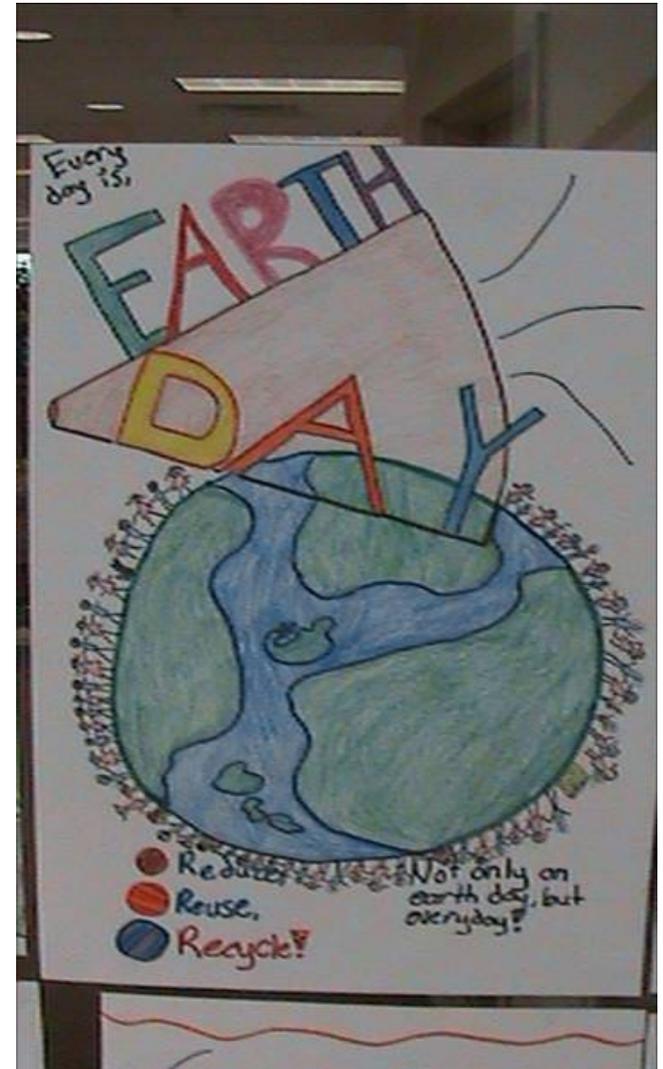
MDNRE intro

- Hopes and fears
- Bootstraps
- Hearts and minds
- Relationships
- Partnerships
- Uniforms
- Know



Facilitator Scenario

- Facilitator gives the scenario to the group
- May break into groups depending on size
- Determine capabilities of participants
- Goal: reduce negative impact as much as possible
- Assist discussions



Group Scenario Discussion

- All participants input sought
- Note changes mentioned
- Kaizen or constant improvement is a goal
- The 'deltas' are the key
- Water system may want LEPC to assist in any capital improvements via US DHS funding



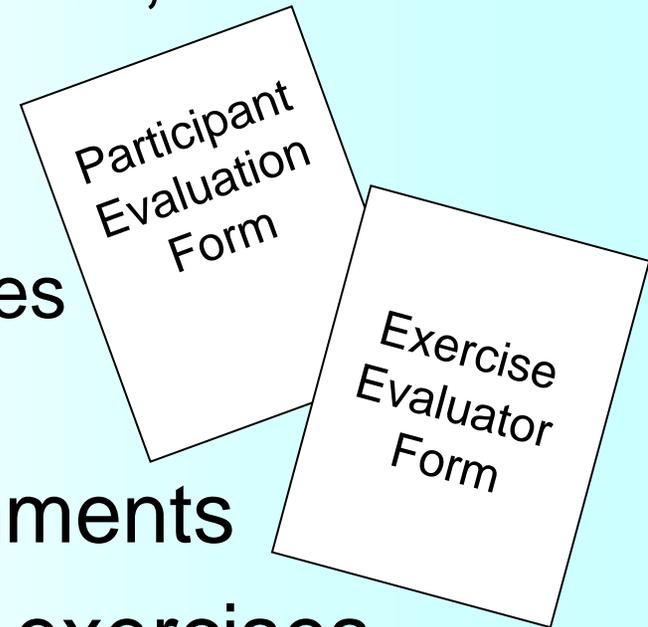
Regroup/Report

- Select a person to summarize the scenario discussion
- Note capabilities and needs
- Note limitations and concerns



Wrap-Up Activities

- Participants and Observers fill out feedback forms that should solicit, at a minimum:
 - Impressions about logistics
 - Improvements to future exercises
 - Level of satisfaction
- Planners should address comments from feedback forms in future exercises
- Conducting a “Hotwash” or debriefing





Hotwash

- Verbal discussion
- Go around the room and ask all what positives and needs occurred
- Determine if the TTX was useful
- Determine if TTX should be done again



Plan for the Evaluation

The evaluation documents strengths and areas for improvement and includes the process of

- Drafting After Action Report and Improvement Plan

Formal exercise evaluation

- Integrated analysis
- “cold wash”



Plan for After the Exercise

- After Action Report (AAR)* captures the findings of the exercise and provides feedback to the participants
- Improvement Plan (IP)* lists correction actions including timelines for when they need to be addressed or corrected, and who they have been assigned to
- *optional



Plan for After the Exercise

- Improvement Plan converts lessons learned from the exercise into concrete, measurable steps that result in improved response capabilities.
- Improvement Tracking and Planning: the exercising entity ensures that each corrective action is tracked to completion.

