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Water/Wastewater Agency Response Network (WARN):

Tabletop Exercise Facilitator Guide

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Disclaimer

The information presented in this document provides an example of how a tabletop exercise may be developed and conducted for a Water/Wastewater Agency Response Network (WARN). This document is not intended to serve as guidance. Mention of trade names or commercial products does not constitute endorsement or recommendation for use.

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Background

The Water Sector (drinking water and wastewater utilities) has been developing intrastate mutual aid and assistance agreements, commonly referred to as Water/Wastewater Agency Response Networks (WARNs). The "Utilities Helping Utilities" concept continues to evolve as newly formed WARNs work through development of their programs. While some are well-established and have responded to emergencies, other WARN programs are in the development stages and have not practiced implementation of their agreements. As a result, WARNs have requested a tool to exercise and validate their intrastate mutual aid/assistance operational plans and agreements in preparation for an actual emergency. This tool can help WARNs exercise the intrastate activation of their agreements and mutual aid/assistance operational plans.

What is a Tabletop Exercise?

Tabletop exercises are discussion-based exercises designed to bring together key personnel to discuss hypothetical scenarios in an informal setting. Tabletop exercises often precede an orientation training and review of applicable plans and procedures. According to the U.S. Department of Homeland Security's (DHS) Homeland Security Exercise and Evaluation Program (HSEEP), this type of exercise is used to assess plans, policies, and procedures, and to evaluate the systems necessary to facilitate prevention of, response to, and recovery from an incident[1]. Tabletop exercises typically are aimed at facilitating understanding of concepts, identifying strengths and shortcomings, and effecting changes in the approach to a particular situation. Participants are encouraged to discuss issues in depth and to arrive at decisions through slow-paced problem solving, rather than the rapid, spontaneous decision making that occurs under actual or simulated emergency conditions. Please see Attachment 1 for information on other types of exercises and where the tabletop exercise fits in.

In tabletop exercises, facilitators and/or presenters usually lead the discussion, guiding participants and keeping the focus on exercise objectives. The effectiveness of a tabletop exercise depends on pre-exercise planning, a facilitator's skills, the energetic involvement of participants, and the implementation of corrective action after the exercise. The following materials assume that facilitators have little or no experience with developing or conducting exercises. Modifications to the materials are encouraged to meet the specific needs and objectives of each WARN exercise.

What is the Purpose of the WARN Tabletop Facilitator Guide?

The *WARN Tabletop Exercise Facilitator Guide* and accompanying exercise materials are meant to guide a WARN in the development and execution of a tabletop exercise to create, update and/or improve its WARN mutual aid/assistance operational plan and agreement. The following process is a suggested methodology and does not imply requirement. ***WARNs are encouraged to modify all of the exercise materials presented here to meet their individual needs.***

What is Included in the Document?

The WARN Facilitator Guide includes:
- Instruction sections describing the steps for developing and conducting a WARN tabletop exercise

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[1] For more information on the U.S. DHS HSEEP, visit https://hseep.dhs.gov/pages/1001_HSEEP7.aspx

- List and Description of Exercise Types
- Sample Exercise Agenda
- Sample List of Exercise Participants
- Sample Participant Handout
- Easily modifiable example scenarios that cover:
  - Flood event
  - Hurricane event
  - Earthquake event
- Sample discussion questions for a "Developing" and "Established" WARN
- Sample PowerPoint presentation materials (NOTE: Contained in a separate document)
- Sample Exercise Evaluator Form
- Sample Participant Evaluation Form
- Sample Debrief Comment Capture Form
- Sample Debrief/Hot Wash Questions
- Sample After Action Activities Form
- "*Facilitator Note*" boxes throughout the attachments that provide hints and suggestions to assist in developing, conducting, and evaluating the exercise. WARNs are free to adopt or adapt all of the exercise materials presented here.
  - Facilitator notes are for instructional purposes only, to help guide development of an exercise involving a novice facilitator. More experienced facilitators may adjust the information as needed.
  - Facilitators that use any of the sample materials for an exercise should first remove all *"Facilitator Note"* boxes.

What are the Benefits of Conducting a WARN Tabletop Exercise?

Practicing and exercising the WARN Mutual Aid/Assistance Operational Plan (MAAOP) and agreement, or other procedures helps member utilities better understand how the agreement may be implemented. By practicing the functionality of activating the agreement and operational plan, a WARN can respond more effectively and efficiently during an actual incident. Additionally, tabletop exercises facilitate opportunities to:

- Build relationships between WARN members (large and small utilities; urban and rural utilities)
- Define participants' roles and responsibilities in the WARN process, including the involvement of utilities, the state drinking water primacy agency, state wastewater permitting authority, state and local emergency management and response agencies, the U.S. Environmental Protection Agency (EPA) (as appropriate) and supporting professional organizations
- Provide an opportunity to practice the Mutual Aid/Assistance Operational Plan and identify any gaps in its implementation
- Discuss how resources can be mobilized and demobilized
- Test the activation of the agreement
- Test the mechanism for requesting and matching resources
- Test the ability of participants to follow the WARN agreement and Mutual Aid/Assistance Operational Plan prior to an emergency
- Refine components of the WARN agreement, the Mutual Aid/Assistance Operational Plan, and administration to manage the WARN, as well as modify each as needed

How to Plan for a WARN Tabletop Exercise

Support from policy level personnel is critical to set the tone and direction of an exercise. As such, the WARN Steering Committees identifies when, where, and how the Tabletop Exercise is designed. The Steering Committee may follow the recommended steps presented in this Facilitator Guide to develop, organize, and conduct a tabletop exercise. They may follow all or some of the steps presented here. The steps include activities in preparation of the exercise, activities to complete during the exercise, and activities following the exercises. Table 1 describes the sequence of steps for developing, organizing and conducting a WARN tabletop exercise. The remaining sections of this document describe the sequence of steps in more detail and provide suggestions on how to carry out the 10 steps.

Table 1. Steps for developing and conducting a WARN tabletop exercise

Steps for developing and conducting a WARN tabletop exercise:	Completed
1. Identify Roles and Responsibilities	
2. Create WARN Tabletop Exercise Materials for a Participant Handout	
a. Establish Objectives	
b. Identify Assumptions	
c. Develop Exercise Rules	
d. Review Scenarios and General Discussion Topics	
3. Create Multimedia Presentation	
4. Create Invitations, Sign-in Sheets, Badges and Complete Room Logistics	
5. Conduct the Exercise – Schedule of Events	
6. Conduct Verbal Exercise Evaluation	
7. Conduct Debrief Meeting with Facilitators/Evaluators/Exercise Design Team	
8. Analyze Evaluator Forms, Participant Evaluation Forms, Verbal Exercise Evaluation, and Debrief Notes	
9. Draft an After Action Report	
10. Implement After Action Activities	

Note: See Attachment 2 for a single-page duplicate of Table 1.

Who Should Take the Lead in Organizing the Exercise?

The WARN Steering Committee may appoint a Facilitator to manage the 10-step process. To assist the Facilitator, an Exercise Design Team (EDT) may be established to help complete the following steps:
- decide on the length of the exercise (see Attachment 3 for a sample agenda for the day of the exercise),
- assist in creating and producing the exercise materials (see Attachment 5 for sample materials),

- monitor progress on the development of the exercise, and
- ensure that the exercise is focused on the selected goal and objectives.

<u>**How Long Does it Take to Plan and Conduct an Exercise?**</u>

An EDT may meet on a regular basis to prepare for the exercise. The frequency of the meetings may vary based on the WARN's experience in conducting exercises, number of participants, level of detail, available resources, and size of the EDT. The level of detail and number of participants can dramatically impact the amount of time needed to plan, design, conduct, and complete the exercise. The DHS HSEEP suggests that it may take about five months from the first exercise design meeting to execute the exercise and to complete an exercise evaluation. The initial planning meeting serves to confirm exercise objectives, discussion questions, and the exercise process. The final planning meeting is for completing exercise documents, including the presentation and participant handouts. Additional time may be required to deliver invitations to participants prior to the exercise. The information and materials provided in this document are intended to aid the exercise Facilitator and EDT and perhaps shorten the effort and time it may take to organize the exercise.

For more information on HSEEP planning timelines for exercise meetings, see *HSEEP Volume II, Chapter 1: Foundation*. For additional assistance with organizing and facilitating the exercise, WARNs are encouraged to partner with exercise specialists from local emergency management.

Step 1: Identify Roles and Responsibilities

The **WARN Steering Committee** typically guides the exercise process. Its primary role is to help communicate the purpose, need, and enthusiasm for developing the exercise. The committee determines who may be involved with the design, execution, and evaluation and selects a target date for the exercise. The target date needs to be considered very early in the process. It is important to contact the desired participating agencies early in the planning process to ensure that a mutually satisfactory date is selected and that desired agencies are represented. This can be a challenge. A date may be good for the lead agencies, but may pose a major conflict for other desired participants.

The following information describes the facilitator, participant, evaluator, and observer roles.

The **Facilitator** leads the exercise design effort and may be assisted by an Exercise Design Team. More than one Facilitator may be appointed if the exercise is large. During the exercise, the Facilitator provides situation updates and moderates discussions. The Facilitator also provides additional information and resolves questions. Key Exercise Design Team members may also assist with facilitation as Subject Matter Experts (SMEs) during the discussion.

Assumptions for Facilitators include:
- Familiarity with drinking water and wastewater utilities in their state,
- Familiarity with the role of their state drinking water primacy agency and state wastewater permitting agency,
- Familiarity with the WARN concept as presented in:
  o May 2006 "Utilities Helping Utilities" white paper, authored by the American Water Works Association (AWWA), and
- Familiarity with basic concepts of emergency management, including the FEMA courses:
  o Introduction to the Incident Command System, IS-100, and

      o   IS-700: National Incident Management System (NIMS), An Introduction.

Three types of attendees (listed immediately below) may be invited to participate in the exercise. The Facilitator can identify and select which type of attendees and how many may be present at the exercise, as it can impact how the exercise is organized and presented. A Facilitator can use the following approach for exercises that include as few as 15 participants and up to as many as 200. Level of detail and number of participants can dramatically impact the amount of planning time needed to complete the exercise.

Participants respond to the exercise materials, scenario, questions, and other parts of the exercise. They are encouraged to base responses on their knowledge of response procedures, current plans and procedures, and insights derived from past training and experience. For a list of potential participants, see Attachment 4.

Evaluators monitor the exercise, track accomplishments according to objectives and may ask questions. They are not encouraged to participate in the moderated discussion period. Criteria for selecting evaluators include:
- Familiarity with emergency management concept of operations, protocols and procedures
- Familiarity with the mutual aid/assistance operational plan and/or emergency response plan that is the focus of the exercise
- Membership in a water sector association

Observers are invited specialists familiar with the local services and related emergency plans. They can offer suggestions for improving specific tasks or responses. For example, a representative from the local Emergency Operations Center may monitor exercise play to ensure local procedures are followed.

In addition to these roles, the WARN Steering Committee may find it necessary to designate other roles that can assist the Facilitator, such as a coordination or communication role.

Step 2: Create WARN Tabletop Exercise Materials for a Participant Handout

Step 2 includes four activities, which may require a series of discussions between the Facilitator, Exercise Design Team (if designated) and the WARN Steering Committee. These activities are:
- Establish Objectives
- Identify Assumptions
- Develop Exercise Rules
- Review Scenarios and General Discussion Questions

Each of these activities results in the details captured in a participant handout developed by the Facilitator and Exercise Design Team. For a sample participant handout, see Attachment 5 which includes:
- Exercise Agenda
- Introduction to the exercise
- Exercise Objective
- Assumptions
- Exercise Rules
- Scenario
- Discussion Questions

- Evaluation

Step 2.1 Establish Objectives

Objectives are established at the outset of organizing the tabletop exercise to help direct the activities and outcome of the exercise. The actual objectives should be tailored to the needs of your WARN program.

To initiate the process, the Facilitator may draft a list of tabletop exercise objectives based on the goal set by the WARN Steering Committee. The following lists provide samples that the Facilitator may use as a starting point. In reviewing the list, the Facilitator should determine whether the WARN is a "developing" or "established" WARN. New WARNs are encouraged to not skip over the "developing" WARN objectives in order to use the "established" WARN objectives, as the participants may miss out on reviewing essential topics that are more relevant to a "developing" WARN. The objectives are presented to the participants at the start of the exercise using either written or audiovisual methods. The objectives set the stage for "why the participants are here." Rather than presenting all of the objectives during one exercise, additional WARN tabletop exercises can be conducted as needed to address remaining objectives.

Below are two lists of sample objectives:
- The first set of objectives is for a new or "developing" WARN. Although a WARN is in place, members may not have yet responded to an event. In this case, the exercise can help the WARN develop a Mutual Aid/Assistance Operational Plan for response to an event.
- The second set of objectives is for a more "established" WARN. These WARN members have responded to an event, or developed and practiced some portions of a Mutual Aid/Assistance Operational Plan. In this case, the exercise can help the WARN improve its existing Mutual Aid/Assistance Operational Plan.

"Developing" WARN Example Objectives

At the conclusion of this exercise, participants from a "developing" WARN should be able to:

- Refine participants' roles and responsibilities in the WARN process, including specifying the involvement of utilities, state drinking water primacy agency, state wastewater permitting authority, state and local emergency management agencies, and EPA (as appropriate),
- Refine components of the WARN agreement and administration to manage the WARN, as well as modify each as needed,
- Define or refine components of the Mutual Aid/Assistance Operational Plan, including:
  - Notification and activation,
  - Coordination,
  - Mobilization,
  - Operational support, and
  - Demobilization,
- Identify potential gaps in the agreement, and
- Address expectations of growth, engagement, and membership of the WARN program, and logistics to support that growth.

"Established" WARN Example Objectives

At the conclusion of this exercise, participants from an "established" WARN should be able to:

- Validate participants' roles and responsibilities in the WARN process, including those for utilities, state drinking water primacy agency, state wastewater permitting authority, state and local emergency management agencies, and EPA (as appropriate),
- Validate the WARN agreement and other legal issues,
- Validate the WARN Mutual Aid/Assistance Operational Plan according to the different phases of response, including:
  - Notification and activation,
  - Coordination,
  - Mobilization,
  - Operational support, and
  - Demobilization
- Develop other purposes/benefits of a WARN program before, during, and after an emergency or other situations, including:
  - Security events,
  - Routine communications, and
  - Training
- Refine components of the state WARN agreement, the Mutual Aid/Assistance Operational Plan, and administration to manage the WARN, as well as modify each as needed.

Step 2.2 Identify Assumptions

In any discussion-based exercise, a number of assumptions may be necessary to complete play in the time allotted. Assumptions help guide the level and type of participation you may expect during "exercise play." Typical assumptions include:
- The scenario is plausible, and events occur as presented,
- There are no "hidden agendas" or trick questions, and
- All participants receive information at the same time.

At the outset of the exercise, the Facilitator can instruct participants to evaluate the "process" of the WARN itself – not the scenario. The Facilitator presents the assumptions to the participants at the start of the exercise using either written or audiovisual methods.

Step 2.3 Develop Exercise Rules

A tabletop exercise also depends on following rules, such as those described below, to ensure effective discussion. The Facilitator can modify the list of rules as needed.
- There is no single solution. Varying viewpoints, even disagreements, are expected and dialogue is encouraged within a safe, open, stress-free environment.
- Respond based on your knowledge of existing plans, capabilities, and insights derived from past training and experience.
- Your organization's positions or policies do not limit you. Make your best decision based on the circumstances presented.
- Decisions are not precedent-setting and may not always reflect your organization's position on a given issue. This is an opportunity to discuss and present multiple solutions.
- Focus on problem solving, suggestions, and recommended actions that could improve response and preparedness efforts.
- Assume cooperation and support from other responders and agencies.
- The basis for discussion consists of the scenario narratives, your experience, your understanding of the WARN program, your intuition, and other utility resources included as part of this material.
- All the information required to drive the discussion during the exercise is contained in the exercise material.
- Treat every scenario as if it might affect your area.

The rules of the exercise are to be presented to participants at the start of the exercise using either written or audiovisual methods. If participants indicate they are not able to make management decisions for the organization, encourage them to participate in the discussion and dialogue. The Facilitator should instruct participants to respond according to what is presented in the materials, and not what they may have learned from outside sources.

Step 2.4 Review Scenarios and General Discussion Questions

The benefit of a tabletop exercise is promoting discussion among the participants. The example scenarios are designed to help participants focus on a common "picture" or event to test the objectives designated during development of the exercise. Multiple scenarios are offered in Attachment 6. The Facilitator and Exercise Design Team can determine which of the sample scenarios may elicit the most interest and discussion from participants. The scenario alone is

insufficient to direct a tabletop exercise discussion. Therefore, the inclusion of questions that are designed to solicit dialogue on specific topics is recommended. Designing questions that promote the intended discussion is an important aspect of exercise design.

During the planning meetings, the Facilitator and Exercise Design Team should set aside time to review and evaluate the types of questions that need to be developed based on the designated objectives. The tabletop exercise could focus on a variety of issues including:

- Roles and responsibilities of WARN members
- Articles of the WARN agreement
- Process and procedures to activate and use WARN in response and recovery:
    - Notification
    - Activation
        - Communication with utilities, WARN, state drinking water primacy agency, state wastewater permitting authority, and other stakeholders, such as local and state emergency management agencies
    - Coordination
        - Communication and information management
        - Damage assessment – refinement and information sharing between utilities
        - Public information sharing and reporting
        - Transportation and access
        - Interaction with the state Emergency Management Assistance Compact (EMAC) coordinator
    - Mobilization
        - Resource request and matching process
        - Resource typing methodology
    - Operational Support
        - Resource requests – anticipating requests and pre-staging resources, developing procedures for making and fulfilling requests, tracking and reporting on resource status, and recovering resources
        - Personnel requests – qualifications, certification, training, and expertise
    - Demobilization
        - Transitioning from response to recovery and demobilization
- Facilitation Tools developed for the WARN program
    - Damage Information Collection Forms
    - Web-based systems
    - Networked and interoperable communications

Attachment 7 provides sample questions specific to both "Developing" and "Established" WARNs. The sample questions are intended to be applicable to many different scenarios. The Facilitator and Exercise Design Team should review and identify a list of discussion questions to cover during the tabletop exercise. Minor modifications may be needed if a new scenario is created by the Exercise Design Team. Rather than present all of the issues during one exercise, additional WARN tabletop exercises can be conducted as needed to address remaining issues. The Facilitator can modify the sample list of questions (in Attachment 7) to address topics that a specific WARN has encountered.

Step 3: Create Multimedia Presentation

A Facilitator can use PowerPoint or similar multi-media tools to manage the delivery of the exercise. Sample presentation materials (see Attachment 8) demonstrate what may be included in an audiovisual presentation. Maps or diagrams can be included in the presentation to enhance the designated scenario and discussion questions.

Step 4: Create Invitations, Sign-in Sheets, Badges and Complete Room Logistics

Invitations for designated participants should be planned several months in advance to ensure participants can attend. Information about the exercise needs to be sent out well in advance of the exercise and includes:
*   Date, time, and location of exercise
*   Goals and objectives
*   Materials that participants should review prior to attending the exercise (for example, review draft mutual aid/assistance operational plan or utility specific emergency plans).

Sign-in sheets at a check-in table are needed to document who attends the exercise. Using name badges for participants can satisfy the purpose of helping to build relationships between WARN members and response partners. Completing room logistics refers to ensuring that an appropriately sized room for the exercise is selected and reserved based on the number of anticipated participants and audiovisual needs of the presentation. Additionally, the room should be set up to enable optimal viewing of audiovisual materials and interaction between the Facilitator and participants.

Seating and room arrangement can depend on the exercise goals and objectives. Goals and objectives determine who may be invited, the number of invitees, the level of involvement of those invited. For example, if the goal is to establish interagency coordination, emergency management agencies, utilities, and primacy agencies may need to attend. If the goal is to improve utility-to-utility communications, then the invitee list focuses on utility representation. Likewise, goals and objectives determine seating arrangements. If the goal is interagency coordination, seating arrangements will call for mixed tables of agencies sitting together. The room size determines whether the room will be arranged in lecture style or table format. As noted above, other logistical considerations include ensuring optimal viewing of audiovisual materials.

Additional logistical preparations that a WARN may consider include location of the exercise, meals/refreshments, or optional Internet access.

Step 5: Conduct the Exercise – Schedule of Events

1. At the check-in table near the entrance of the room where the exercise is to be held, the sign-in sheet, name badges, and participant handouts should be set out for the participants.
2. The tabletop exercise begins with a brief welcome and introduction by the Facilitator. The Facilitator can review administrative details and the session purpose and objectives. This review includes the role of participants and expected outcomes of the exercise. At this point the Facilitator could distribute the participant handout as an alternative to providing it to participants upon entry. The participant handouts include a list of the

exercise objectives, a copy of the exercise scenario, an evaluation form, along with additional support materials.

3. Next, the Facilitator can introduce the exercise scenario by using an audiovisual presentation with an overhead projector or by reading from the participant handouts. The Facilitator can instruct the participants to follow along in their copy of the participant handouts.

4. Following the scenario presentation, the Facilitator can lead the facilitated discussion portion of the tabletop exercise using the scenario questions selected during the exercise design. The Facilitator can provide a hardcopy list of discussion questions to the participants or alternatively, questions may be provided verbally and supplemented with an audiovisual display, or listed on flip charts or displays on the wall. In either case, the Facilitator can introduce the discussion questions sequentially to focus the discussion and encourage participants to deliver their responses in a sequential manner. During the facilitated discussion portion, the Facilitator may introduce additional questions to spark or refocus the discussion. The Facilitator can also use the questions to keep the participants engaged. The Facilitator should be aware of time constraints to ensure participants address all vital questions.

5. During the facilitated discussion portion of the exercise, there may be participants who speak more than others. The Facilitator should be attentive to those participants who may have questions or who are less vocal or involved, to ensure a consistent comprehension of the issues and to foster dialogue among all participants.

6. The Facilitator can wrap up this portion of the exercise by encouraging participants to complete their discussion. The Facilitator can summarize main points and observations from the discussion.

Step 6: Evaluate the Exercise

Exercise evaluation can be a multi-tiered process and may include:
- Written evaluations by exercise evaluators,
- Written participant evaluations (this may be submitted anonymously), and
- A verbal debriefing (often referred to as a "Hot Wash") following the exercise

During the discussion portion of the exercise, the Facilitator may use evaluators, whose function is to monitor the exercise and track participant progress toward meeting the exercise objectives. These evaluators document their observations on an Exercise Evaluator Form (see Attachment 9). This information is included in the After Action Report and/or Improvement Plan.

Immediately following the discussion portion of the exercise, the Facilitator may ask all participants to complete the written Participant Evaluation Form to assess exercise preparations and logistics, as well as participant performance (see Attachment 10). After sufficient time has elapsed to complete the form, the Facilitator can conduct a short verbal debriefing or "Hot Wash." The "Hot Wash" allows for participants to provide prompt feedback – including their level of satisfaction with the exercise – and to identify any issues, concerns, or proposed improvements to their WARN program.

The sequence of steps for a Facilitator to complete the "Hot Wash" includes:
1. Advising the participants that they should:
   a. Provide brief (1-2 minutes), focused comments
   b. Provide constructive comments only

       c.   Identify what went well and what needs improvement
2. Ensuring that all participants have an opportunity to provide comments and that the discussion stays on point
3. Instructing participants that more detailed comments should be provided on the written Participant Evaluation Form
4. Collecting the written Participant Evaluation Forms before participants leave the exercise venue

The Facilitator may pre-designate a recorder to capture and summarize the verbal evaluation comments and recommendations identified during the "Hot Wash", including the agreed-upon plan of action, schedule, and responsibility for implementing the recommendations (see Attachment 11 for a Debrief Comment Capture Form).

For a list of debrief or "Hot Wash" questions for consideration by the Facilitator, see Attachment 12.

For additional information on exercise evaluation, see *HSEEP Volume III, Chapter 3: Improvement Planning*.

Step 7: Conduct Debrief Meeting with Facilitators/Evaluators/Exercise Design Team

Following the exercise and participant evaluation, the Facilitator, along with Exercise Design Team members, can meet to capture their observations. Referred to as a "debrief," this allows planners, facilitators, observers, and evaluators to review and provide feedback on the exercise. The EDT leader facilitates discussion and allows each person an opportunity to provide an overview of the area they observed. A pre-designated recorder may summarize the notes from this meeting including identified strengths and areas of improvement.

Step 8: Analyze Evaluator Forms, Participant Evaluation Forms, Verbal Exercise Evaluation, and Debrief Notes

An Exercise Design Team member or pre-designated evaluation team can collect and analyze data from Evaluator Forms, Participant Evaluation Forms, verbal exercise evaluation notes, and notes from the debrief. Others sources, including plans or procedures, may be analyzed as appropriate. The Exercise Design Team or evaluation team can then compare actual results of the exercise with the objectives and intended outcome.

Step 9: Draft an After Action Report

Information analyzed from the verbal exercise evaluation, the participant evaluation forms, along with the debrief notes and other sources of information (described below), can form the basis for the WARN tabletop exercise After Action Report. The After Action Report (AAR) summarizes how the exercise was developed and executed, observations about the exercise, and comments from participants, including:
1. How the exercise was designed,
2. Objectives identified as the focus,
3. Scenario narrative and questions,
4. Delivery of exercise,

5.   Best practices or strengths,
6.   Areas for improvement that need to be addressed,
7.   Designation of priority areas for improvement, and
8.   Recommendations for resolving areas for improvement following the exercise.

The AAR may be prepared by the Exercise Design Team or evaluation team and reviewed by the WARN Steering Committee. Whether it is the EDT or evaluation team, the authors should consist of personnel from the sponsoring agency and each organization participating in the exercise. This provides for a representative evaluation in which consensus is reached, rather than each participating organization compiling and distributing a report of their observations independently.

In addition to the exercise analysis, the overall tabletop exercise objectives should form the basis of the AAR. Each AAR has three critical elements:
1.   Observed successes or problems for each objective. This includes (a) positive statements about something that was done exceptionally well or about procedures used that should be advertised or shared; or (b) areas that need improvement (something that happened that was not supposed to occur or something that did not, but should have occurred).
2.   A lesson learned for each observation. This can include (a) a statement of the positive action, if any, taken to generate success, or (b) a statement of the action that should have been taken to avoid or alleviate the problem.
3.   A recommended action for each lesson learned. This should describe how to duplicate the success or permanently correct the problem, and who is responsible for implementation. The recommendation could result in a requirement for new or modified plans or procedures, procuring of new equipment, etc.

Step 10: Implement After Action Activities

In addition to development of the After Action Report, other post-exercise activities can include documentation of the exercise preparation, results of the exercise, suggested improvements, and ongoing communication with participants to update them on progress of identified improvements and status of other preparedness activities. Corrective actions taken to remedy issues observed during evaluation of the exercise can be assigned to a designated person or organization using an Improvement Plan that specifies incremental benchmarks and deadlines for completion. The Improvement Plan can be used to track progress on all resulting corrective actions identified in the AAR.

The Improvement Plan can consist of a simple matrix (Table 2) including the following six areas:
1.   An identified action, task, or follow-up,
2.   Designated responsible person or organization,
3.   Designated people that should be involved,
4.   Resources and possible sources,
5.   Timeline: short term goal, and
6.   Timeline: long term goal.

See Attachment 13 for a single–page, blank duplicate of Table 2.

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Table 2. Six areas for implementing after action activities

Six areas for implementing after action activities					
Action/Task/ Follow-Up	**Individual or Agency Responsibility**	**People Who Should Be Involved**	**Resources and Possible Sources**	**Timeline** Short Term	**Timeline** Long Term
e.g., Address how to capture requested data and identify mechanism to transmit the form	e.g., Utility X, Y, Z	e.g., WARN Representatives and communications technicians	e.g., Funding for interoperable radios from FEMA Interoperable Emergency Communications Grant Program	e.g., Establish one-page request form and table of utility frequencies	e.g., Establish independent radio network

Attachment 1: Seven Types of Exercises

A WARN may periodically exercise its mutual aid/assistance operational plan to validate its ability to execute and evaluate the plan. A WARN may use a multi-year exercise plan to initiate a "building-block" approach in which training and exercise activities focus on specific capabilities in a cycle of escalating complexity. This section describes seven exercise types. There are four discussion-based exercises (seminars, workshops, tabletop exercises, and games) and three operations-based exercises (drills, functional exercises, and full-scale exercises).

Discussion-based exercises are normally used as a starting point in what is known as the HSEEP "building-block" approach to developing exercises that include multiple activities and organizations. The WARN Tabletop Exercise Facilitator Guide and exercise materials focus on tabletop exercises.

Seminars
Seminars are informal discussions, unconstrained by real-time portrayal or enactment of events. Led by a presenter, seminars are generally employed to orient participants to--or provide an overview of--authorities, strategies, plans, policies, procedures, protocols, response resources, and/or concepts and ideas. Seminars provide a good starting point for entities that are developing or making major changes to their plans and procedures.

Workshops
Workshops represent the second tier of exercises in the HSEEP building-block approach. They differ from seminars in two important respects: there is more participant interaction, and the focus is on achieving or building a product (such as a draft plan or policy). Organizations often use workshops in conjunction with exercise development to determine objectives, develop scenarios, and define evaluation criteria. A workshop may also be used to produce new standard operating procedures (SOPs), emergency operations plans (EOPs), Mutual Aid and Assistance Agreements (MAAs), multi-year plans, or improvement plans. To be effective, workshops must focus on a specific issue, and have clearly defined desired outcomes or goals.

Tabletop Exercises
Tabletop Exercises bring together key personnel to discuss hypothetical scenarios in an informal setting. WARN Members can use this type of exercise to assess plans, policies, and procedures or to evaluate the systems needed to guide the prevention of, response to, and recovery from a defined incident. Tabletops are typically aimed at facilitating understanding of concepts, identifying strengths and shortcomings, and achieving changes in the approach to a particular situation. An exercise facilitator encourages participants to discuss issues in depth and develop decisions through slow-paced problem solving, rather than the rapid, spontaneous decision making that occurs under actual or simulated emergency conditions. The effectiveness of a tabletop is derived from the energetic involvement of participants and their consideration of recommended revisions to current policies, procedures, and plans. A WARN may participate in independent, state, or local tabletop exercises.

Games
A game is a simulation of operations that often involves two or more teams and uses rules, data, and procedures to depict an actual or hypothetical situation. The goal of a game is to explore decision-making processes and the consequences of those decisions. A game does not require use of actual resources. The sequence of events affects, and is in turn affected by, decisions made by players. With the evolving complexity and sophistication of current simulations, opportunities to inject greater realism have increased. Computer-generated scenarios and simulations can provide a method of introducing highly realistic situations and making conditions change on the fly. Planner decisions can be input into realistic

models to show the effects of decisions made during a game. An additional benefit of Internet-based, multi-player games is that they depict a collaborative environment that reflects realistic occurrences.

Operations-based exercises represent the next level of the exercise cycle. They are used to validate the plans, policies, agreements, and procedures solidified in discussion-based exercises. Operations-based exercises include drills, functional exercises (FEs), and full-scale exercises (FSEs).

Drills

A drill is a coordinated, supervised activity used to validate a single, specific operation or function in a single agency or organizational entity. Drills are commonly used to provide training on new equipment, develop or validate new policies or procedures, or practice and maintain current skills. Typical attributes of drills include:

- a narrow focus, measured against established standards;
- the generation of immediate feedback;
- a realistic environment; and
- a way to test performance in isolation.

Functional Exercises

A Functional Exercise is designed to evaluate and validate individual capabilities, multiple functions, activities within a function, or interdependent groups of functions. Functional exercises focus on an exercise scenario with dynamic events that drive activity at the management level. A functional exercise simulates everyday operations in a functional area by presenting complex and realistic problems that require rapid and effective responses by trained personnel operating in a highly stressful, time-constrained environment. A WARN may participate in independent, state, or local functional exercises.

Full-Scale Exercises

Full-Scale Exercises are multi-agency, multi-jurisdictional, multi-organizational exercises that validate many facets of preparedness. They include many players operating under cooperative systems, such as an Incident Command System (ICS), to effectively and efficiently prevent, respond to, or initiate recovery from an incident. Full-scale exercises focus on implementing and analyzing the plans, policies, procedures, and cooperative agreements developed in discussion-based exercises and honed in previous, smaller, operations-based exercises. In full-scale exercises, a highly realistic depiction of operations in multiple functional areas presents complex and realistic problems that require critical thinking, rapid problem solving, and effective responses by trained personnel. During full-scale exercises, facilitators project events through a scripted exercise scenario with built-in flexibility to allow updates that drive activity. The exercises play out in real time, creating a stressful, time-constrained environment that closely mirrors real-life events.

A WARN can plan for at least one tabletop exercise annually. Functional and full-scale exercises may occur periodically. In planning and conducting either type of exercise, the WARN can engage the state emergency management agency, state drinking water primacy agency, and state wastewater permitting authority. Additionally, the WARN may participate in independent, state, or local full-scale exercises.

Attachment 2: Steps for Developing and Conducting a WARN Tabletop Exercise

Steps for developing and conducting a WARN tabletop exercise:	Due Date	Completed
1. Identify Roles and Responsibilities		
2. Create WARN Tabletop Exercise Materials for a Participant Handout		
a. Establish Objectives		
b. Identify Assumptions		
c. Develop Exercise Rules		
d. Review Scenarios and General Discussion Topics		
3. Create Multimedia Presentation		
4. Create Invitations, Sign-in Sheets, Badges and Complete Room Logistics		
5. Conduct the Exercise – Schedule of Events		
6. Conduct Verbal Exercise Evaluation		
7. Conduct Debrief Meeting with Facilitators/Evaluators/Exercise Design Team		
8. Analyze Evaluator Forms, Participant Evaluation Forms, Verbal Exercise Evaluation, and Debrief Notes		
9. Draft an After Action Report		
10. Implement Corrective Actions		

Attachment 3: Sample WARN Tabletop Exercise Agenda

10:00   Welcome and Introduction of participants and the program

10:15   Overview of the day's events and the objectives

10:30   Participant Handout review

10:45   Scenario 1: Flood

11:15   Break

11:30   Facilitated Discussion

12:30   Lunch

1:15   Facilitated Discussion (cont.)

1:45   Debrief

        Key Lessons

        Next Steps

2:45   Evaluations

3:00   Conclusion

Facilitator Note 1:   A Facilitator and Exercise Design Team may adjust the agenda and corresponding timeframe for the facilitated discussion according to the need to address objectives and questions selected for the exercise. For example, rather than the five hour sample agenda shown above, a WARN may schedule a full day (8 am to 5 pm) or two-day exercise to allow for extra time to accomplish all objectives. Additionally, time may be included for networking between participants.

Attachment 4: List of Potential Participants

WARN Member utilities
- Authorized Representatives
- Legal Counsel

Non-Member utilities
- Neighboring utilities
  - o Large and small systems
  - o Small, rural systems
- Utility Management, and
- Legal Counsel

WARN Associate Members
- Water sector associations,
- Local (City) government,
- County (Parish) government,
- State government, and
  - o Drinking water primacy agency
  - o Wastewater permitting authority
  - o Emergency management agencies
- Federal agencies

Others

Facilitator Note 2: Participants can still attend without the presence of legal counsel.

Attachment 5: Sample Participant Handouts

Facilitator Note 3: The Facilitator and Exercise Design Team can modify the sample Participant Handouts to address the objectives and discussion questions selected earlier in the planning process. The Participant Handouts may be provided to participants for their review in preparation of the exercise or they may be printed and distributed at the start of the exercise. A WARN may adopt and adapt the sample participant handouts. The Sample Participant Handouts are typically bound together by staple or binding.

WARN Tabletop Exercise: Agenda

10:00	Welcome and Introduction of participants and the program
10:15	Overview of the day's events and the objectives
10:30	Participant Handout review
10:45	Scenario 1: Flood
11:15	Break
11:30	Facilitated Discussion
12:30	Lunch
1:15	Facilitated Discussion (cont.)
1:45	Debrief
	Key Lessons
	Next Steps
2:45	Evaluations
3:00	Conclusion

Introduction

A Tabletop Exercise is intended to stimulate discussion of various issues and actions regarding a hypothetical situation. The focus of the exercise is on process and decision-making. The emphasis is on identifying points of coordination, cooperating agency response, identifying problems, analysis of gaps in plans and procedures, and identifying possible resolutions. The exercise environment is a structured, low-stress program, and is controlled using simulated situations.

The exercise is facilitated based on a prescribed scenario. Players will have an opportunity to discuss the issues relevant to them in response to a set of general questions. Rules for participation will be presented.

"Developing" WARN Example Objectives

At the conclusion of this exercise, participants from a "developing" WARN should be able to:
- Refine participants' roles and responsibilities in the WARN process, including specifying the involvement of utilities, state drinking water primacy agency, state wastewater permitting authority, state and local emergency management agencies, and EPA (as appropriate),
- Refine components of the WARN agreement and administration to manage the WARN, as well as modify each as needed,
- Define components of a Mutual Aid/Assistance Operational Plan, if not already initiated,
- Refine the processes and procedures identified in the WARN agreement according to the different phases of response, including:
    o Notification and activation,
    o Coordination,
    o Mobilization,
    o Operational support, and
    o Demobilization,
- Identify potential gaps in the agreement, and
- Address expectations of growth, engagement, and membership of the WARN program, and logistics to support that growth.

Assumptions and Artificialities

In any discussion-based exercise, a number of assumptions and artificialities may be necessary to complete play in the time allotted. Assumptions help guide the level and type of participation you may expect during "exercise play." The assumptions and artificialities include for this exercise are the following:
- The scenario is plausible, and events occur as presented,
- There are no "hidden agendas" or trick questions, and
- All participants receive information at the same time.

Rules of Engagement

To ensure an effective discussion, the exercise will follow the below Rules of Engagement:
- There is no single solution. Varying viewpoints, even disagreements, are expected and dialogue is encouraged within a safe, open, stress-free environment.
- Respond based on your knowledge of existing plans and capabilities and insights derived from past training and experience.
- Your organization's positions or policies do not limit you. Make your best decision based on the circumstances presented.
- Decisions are not precedent-setting and may not always reflect your organization's position on a given issue. This is an opportunity to discuss and present multiple solutions.
- Focus on problem-solving, suggestions and recommended actions that could improve response and preparedness efforts.
- Assume there will be cooperation and support from other responders and agencies.
- The basis for discussion consists of the scenario narratives, your experience, your understanding of the WARN program, your intuition, and other utility resources included as part of this material.
- All the information required to drive the discussion during the exercise is contained in the exercise material.

- Treat every scenario as if it might affect your area.

Evaluation

The evaluation process at the end of the exercise will include a combination of written and verbal evaluations and an overall critique. Specifically, the evaluation process will include:
- Written participant evaluations,
- A verbal debriefing (referred to as a "Hot Wash"), and
- Written evaluations by exercise evaluators.

During the discussion portion of the exercise, evaluators, whose function is to monitor the exercise and track participant progress toward meeting the exercise objectives will document their observations on an Exercise Evaluator Form. This information will be included in the After Action Report and/or Improvement Plan.

Immediately following the exercise, the Facilitator will ask all participants to complete the written Participant Evaluation Form. After 10 minutes has elapsed, the Facilitator will conduct a verbal debriefing or "Hot Wash." The "Hot Wash" allows for participants to provide prompt feedback – including their level of satisfaction with the exercise – and to identify any issues, concerns, or proposed improvements to their WARN program. A pre-designated recorder will summarize the verbal evaluation, comments, and recommendations, including an agreed-upon plan of action, schedule, and responsibility for implementing the recommendations. Following the exercise, a pre-designated member of the Exercise Design Team or support staff member will prepare an After Action Report and Improvement Plan and submit it to the WARN Steering Committee.

Scenario 1: Flood Scenario

A succession of storms brought significant and widespread heavy rains. The heavy rains that occurred were the result of a number of slow-moving storms and unseasonably warm temperatures. Over several weeks, the heavy rains began saturating soils, filling local reservoirs, and clogging storm drains with debris. The impact is felt over a *(insert detail here)* region.

A strong storm system then brings heavy precipitation, as well as high temperatures, humidity, and winds producing major flooding.

The magnitude of the flooding varies, but it is a major event. Area officials report some creeks and rivers at 8 to 12 feet above flood stage – the highest levels since the 1950s. The National Weather Service extends a flood watch because major flooding is expected to continue for the next two to three days. Sandbag barriers around vulnerable areas, such as the drinking water and wastewater treatment plants and low lying pump stations, are constructed to prevent and reduce floodwater damage. Many people evacuate the area. Figure 1 shows the extent of the flood area.

Effects on drinking water systems
Drinking water utilities are experiencing significant challenges:
- 75 percent of the area is without power,
- Utilities request generators to continue operating,
- Placement of generators is challenging due to the flooding,
- Fuel shortages for generators are expected,
- Uprooted, downed trees and violent washouts rupture numerous pipes,
- System pressure is dropping,
- Fire departments are concerned that the loss of water pressure jeopardizes their firefighting capabilities,
- Utilities do not have enough field crews to fix all of the problems,
- River flooding and large amounts of debris clog water intakes,
- A possible crude oil spill into a major drinking water source has been reported,
- Utilities receive growing numbers of consumer complaints regarding cloudy, poor-tasting drinking water,
- Utility representatives admit that the amount of time required for completing damage assessment and repair is unknown at this point, and
- Government officials and the media are clamoring for information and situation updates.

Effects on wastewater systems
Wastewater utilities are also facing several challenges:
- Washouts and downed trees rupture collection and transmission lines,
- Flooding knocks out more than 50 percent of area pump stations, and many backup pumps fail,
- Power loss shuts down many lift stations, causing sewage overflows and extensive combined sewer discharges into the streets,
- Raw sewage in the streets causes cross-contamination due to broken water mains, and
- Local industry spokespersons ask utilities to speed up repairs to continue normal discharges of industrial effluent and remain on-line.
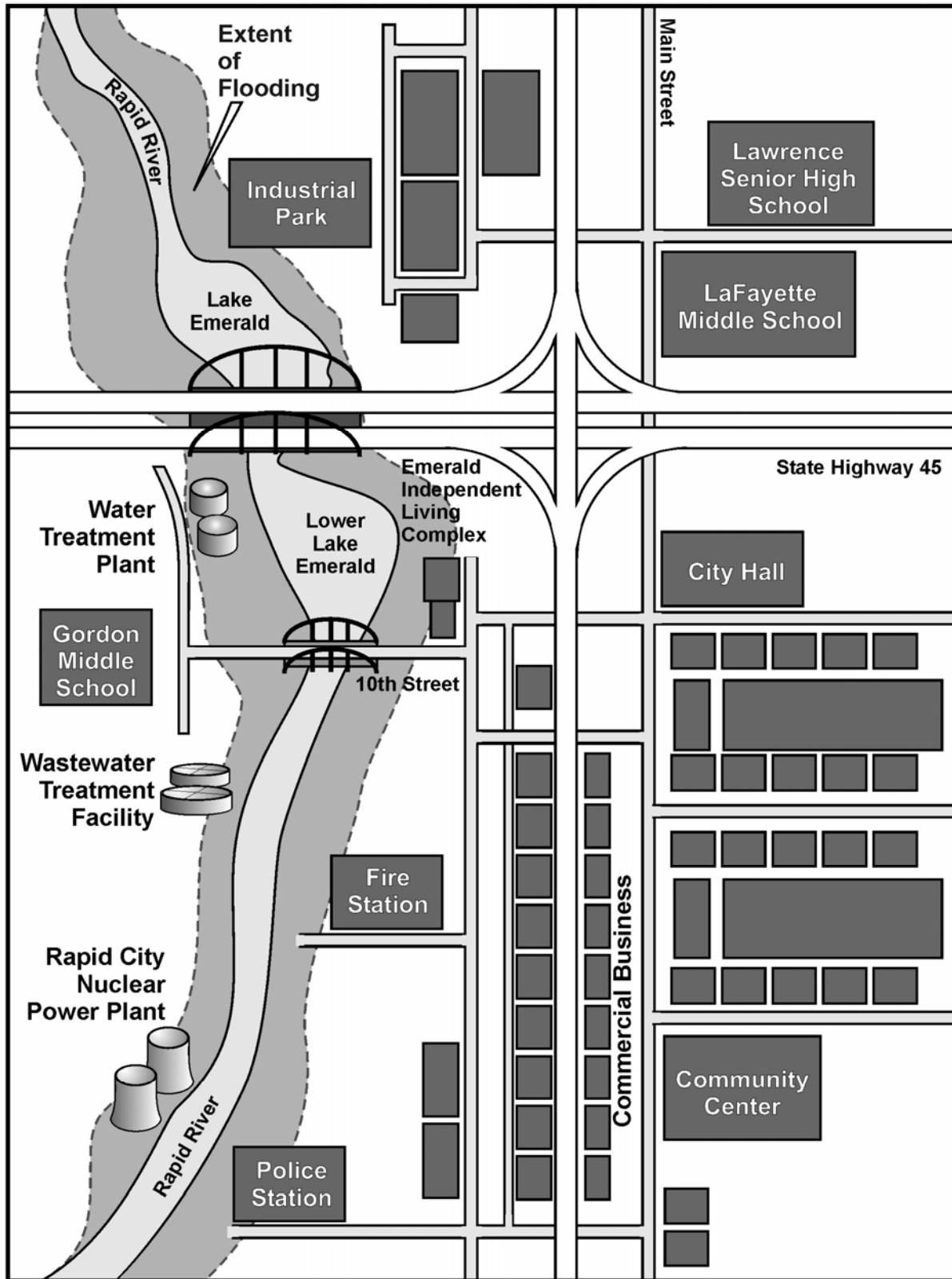
Figure 1: Extent of Flood Area

Questions

Facilitator Note 4: Based on the exercise objectives, the WARN Exercise Design Team (EDT) develops a list of discussion questions by reviewing and selecting relevant questions from each sample set shown below. The EDT should note that not all of the sample questions need to be included. Rather than present all of the questions during one exercise, additional WARN tabletop exercises can be conducted as needed to address remaining questions.

In reviewing the list, the WARN EDT can determine whether the WARN is a "developing" or "established" WARN. The EDT and Facilitator should be cautious about skipping directly to the "Established" WARN material. A Facilitator that skips to the "Established" WARN material may miss essential discussion questions that are relevant to a "Developing" WARN.

The Facilitator can compile the selected discussion questions into a "Questions" handout that includes space for participants to record their answers. The Facilitator may choose not to present all of the questions to the participants in advance. The Facilitator can present a subset of the selected questions to the participants and introduce the remaining questions verbally during the facilitated discussion.

The Facilitator should note that the "Questions" handout presented here in the Sample Participant Handouts includes only the sample discussion questions for a "Developing" WARN. Sample questions for both a "Developing" WARN and an "Established" WARN are provided in the Attachment 7.

Give each of the following questions a few moments of thought. Write down your answer and be prepared to respond. When directed by the facilitator, participate in the discussion with the other group members.

1. **Notification and Activation**:

   - How do you determine if in-house dedicated response resources (crews and equipment) are fully committed or overcommitted?

   - What options are available to you to get outside help? Would your immediate neighbors be similarly affected? Keep in mind that in this scenario and during many other events with widespread impacts, your immediate neighbors will probably be unavailable to help you, regardless of the type and quantity of resources that you need.

   - How will you activate your WARN in response to this situation and how will you notify other WARN members that you need help?

- Identify and define the processes that might need to be included in your WARN agreement:

If you are a Requesting Utility
- When will you know you will need assistance?

- How can you locate assistance?

- How will you locate other sources of support?

- How can you contact other sources of support?

- How quickly can you search and locate unique equipment?

- How will you handle the influx of offers to provide support? Who is best suited for handling all of this coordination if you are managing your disaster?

- If you are in the beginning of a disaster, how long do you anticipate for confirmation from another utility that they have resources?

- How would you handle injury, equipment failure, or resource loss when receiving aid?

If you are a Responding Utility
- What do you do if your utility wants to offer assistance?

- Who can you call?

- How do you determine how much assistance you can offer without straining the resources of your own utility?

- What tools are available to you to offer your help, capabilities, and availability?

- How would you handle injury, equipment failure, or resource loss during the response?

2. **Coordination**:

   - With whom do you coordinate at the local, state, and federal levels at the beginning of a potential disaster?

   - How will this assistance be managed within your organization?

   - How will you identify and define the processes that might need to be included in your own WARN agreement or Mutual Aid/Assistance Operational Plan that support the agreement?

   - What would go in the agreement versus the Mutual Aid/Assistance Operational Plan?

   If you are a Requesting Utility
   - How are priorities established to determine where resources are sent first, second or third, etc.?

   - How can you leverage and share resources with your neighbors? For example, imagine that you just borrowed five repair crews and equipment from the other end of the state, the crews have completed their assigned work, and your neighbor will soon need the same type of help.

   If you are a Responding Utility
   - What if you need your resources returned earlier than expected?

- What if you are unable to provide support?

Associations, and Local, State, and Federal Agencies
- Do the water sector associations and state and federal agencies have any input, support or influence on coordination issues given that this disaster is still local? Should your WARN agreement address any issues particular to this?

- How does your WARN facilitate the flow of information concerning the affected utilities and damage assessments:
    - o   From utility to utility,
    - o   To local emergency management agencies,
    - o   To primacy agencies and permitting authorities, and
    - o   To the federal government?

3.   **Mobilization and Operations:**

- How will responding utility resources be managed in the field? Identify and define the processes that might need to be included in your own WARN agreement.

- Who will be responsible for managing support crews and equipment in the field, and how will they be granted access to affected areas?

- How will the addition of support crews and equipment be communicated to other functions within your utility, such as Safety, Dispatch, etc.? Should this be addressed in your WARN agreement or should this be a part of your Mutual Aid/Assistance Operational Plan?

- Will the supporting agency be able to immediately fit into your organizational structure? Who is going to be in charge of those crews when they are out in the field? What are the lines of communication and chains of command?

- How will communications from the utility or dispatch out to the support crew occur? *(dedicated radio frequencies, interoperability concerns, etc.)*

- Considering that you may lose your generator(s) to flooding, how can you prepare in advance to identify potential sources and alert them of your needs?

- Do the utility associations and state and federal agencies have any input, support or influence regarding mobilization and operations given that this disaster is still local? Should your WARN agreement address any issues particular to this?

4. **Logistics:**

   - How will logistical support to these resources be managed?

   - Who will handle logistics for the support?

5. **Communications:**

   - Who will establish and communicate procedures for support teams?

6. **Finance:**

   - How will expenses be handled and should this be addressed in your WARN agreement?

   - How will expenses be negotiated?

   - How will records be maintained?

7. **Demobilization:**

   - When will you know that the demands from the disaster have lessened to the point that you no longer need support?

   - How will you know when you can return the resources?

- Are there any special procedures to be followed (e.g., mandated rest periods) before resources can be released? Should this be addressed in your WARN agreement?

8. **Recovery:**

- How are you going to manage the demands for long-term recovery and should these needs be addressed in your WARN agreement?

Attachment 6: Example Scenarios

Facilitator Note 5: The following scenarios may be modified to help focus the discussion on the topics previously noted. The scenarios require attention from the Facilitator or Exercise Design Team to make the scenario more specific to the locations, counties, and cities that could be affected by the events. Research into similar events (either in recent or past history) can make the event more realistic to the participants. Additionally, water system or community details can enhance realism. The Facilitator or Exercise Design Team should modify the scenario to fit the specific WARN involved in the exercise. Following the introduction of a scenario, the Facilitator can lead the facilitated discussion (see Step 5) using a set of discussion questions (see Attachment 7 for sample discussion questions).

Scenario 1: Flood Scenario

A succession of storms brought significant and widespread heavy rains. The heavy rains that occurred were the result of a number of slow-moving storms and unseasonably warm temperatures. Over several weeks, the heavy rains began saturating soils, filling local reservoirs, and clogging storm drains with debris. The impact is felt over a [see Facilitator Note 6] region.

A strong storm system then brings heavy precipitation as well as high temperatures, humidity, and winds producing major flooding.

The magnitude of the flooding varies, but it is a major event. Area officials report some creeks and rivers at 8 to 12 feet above flood stage – the highest levels since the 1950s. The National Weather Service extends a flood watch because major flooding is expected to continue for the next two to three days. Sandbag barriers around vulnerable areas, such as the drinking water and wastewater treatment plants and low lying pump stations, are constructed to prevent and reduce floodwater damage. Many people evacuate the area.

Drinking water utilities are experiencing significant challenges:
- 75 percent of the area is without power,
- Utilities request generators to continue operating,
- Placement of generators is challenging due to the flooding,
- Fuel shortages for generators are expected,
- Uprooted, downed trees and violent washouts rupture numerous pipes,
- System pressure is dropping,
- Fire departments are concerned that the loss of water pressure jeopardizes their firefighting capabilities,
- Utilities do not have enough field crews to fix all of the problems,
- River flooding and large amounts of debris clog water intakes,
- A possible crude oil spill into a major drinking water source has been reported,
- Utilities receive a growing number of consumer complaints regarding cloudy, poor-tasting drinking water,
- Utility representatives admit that the amount of time required for completing damage assessment and repair is unknown at this point, and
- Government officials and the media are clamoring for information and situation updates."

Wastewater utilities are also facing several challenges:
- Washouts and downed trees rupture collection and transmission lines,
- Flooding knocks out more than 50 percent of area pump stations, and many backup pumps fail,
- Power loss shuts down many lift stations, causing sewage overflows and extensive combined sewer discharges into the streets,
- Raw sewage in the streets causes cross-contamination due to broken water mains, and
- Local industry spokespersons ask utilities to speed up repairs to continue normal discharges of industrial effluent and remain on-line.

Facilitator Note 6: The Facilitator can modify the size of the disaster area to include details from your local area and can insert maps (as appropriate) indicating the disaster area. Including maps enhances the realism of the scenario. The following is an example of a map that shows the extent of local flooding.
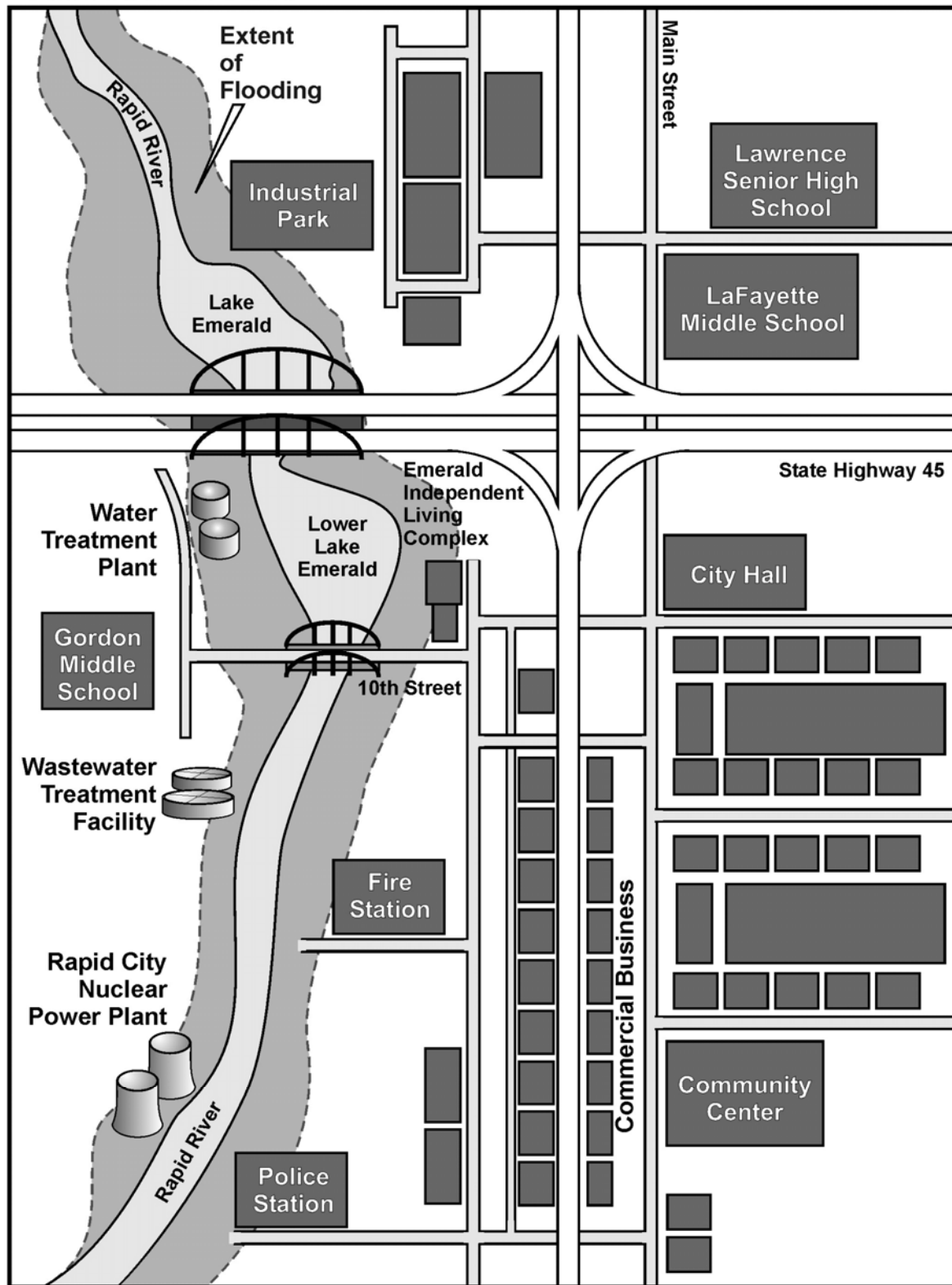
Figure 1: Sample Map Showing Extent of Flood Area

Scenario 2: Hurricane Scenario

Over the last two weeks in August, the National Oceanic and Atmospheric Administration (NOAA) and the National Weather Service (NWS) have been monitoring a storm system. NOAA and NWS predict that the storm will develop into a Category 3 hurricane and will make landfall at *(insert detail here)* over Labor Day weekend.

> *Facilitator Note 7:* The Facilitator can adjust size of the disaster area in order to include details from the local area. The Facilitator can provide a name for the hurricane.

The hurricane gathers strength in the warm waters of the ocean and approaches the region as a Category 3 storm. This storm will have winds of 111-130 mph with a 9-12 ft. storm surge. This will cause flooding of coastal areas and moderate-to-severe structural damage to poorly constructed homes. Flying debris and falling trees can knock out power lines and there could be flooding 8 miles inland from the coast. The storm is expected to make landfall on the evening of Labor Day.

Several member utilities of the WARN will be affected by the flooding of coastal areas and power loss. These water and wastewater utilities are short-staffed due to the holiday weekend work schedule. Water utilities begin calling in staff who have scheduled vacation for the holiday weekend. However, many staff have left the area and will not be able to return before the storm makes landfall in the evening.

The Governor requests the voluntary evacuation of citizens within 15 miles of the coast and asks that tourists visiting the region for the holiday weekend evacuate. Hotels and local businesses begin boarding up their windows and placing sandbags around their properties.

As predicted, the hurricane hits the area in the early evening and because of the high rate of forward speed, moves through the area in just 3 hours. It then begins to lose strength as it hits surrounding states and travels offshore around midnight.

Shortly after landfall, the Governor declares a state of emergency and requests a federal declaration. Four hours later, the President issues a disaster declaration. The hurricane affects the surrounding areas, *(insert detail here)*.

There is significant damage from the storm surge and wind, including flooding, downed power lines, and scattering of debris. Debris blocks roads and inhibits emergency work and delivery of supplies. Emergency responders focus on rescuing survivors from flooded areas and collapsed housing. Many of the hospitals are flooded with water and overwhelmed by injured survivors. There is no electricity, and the power companies expect electricity to be out for at least 72 hours.

Drinking water utilities face significant challenges:
- A shortage of personnel due to displaced staff and employees on holiday,
- Damaged infrastructure,
- Cross contamination of the water supply (compromising 60 percent of the drinking water), and
- Electrical outages.

Utilities contact the state drinking water primacy agency to help find qualified professionals to aid in the assessment of water damage and begin cleanup and restoration of the water supply. A wastewater treatment plant's backup generators worked for 10 hours, but then failed. A service crew working on the

generator determines that the rotor has seized and needs replacement. They are currently contacting their supplier but, due to the blocked roads, it may take several days for the parts to arrive. In the meantime, the equalization tanks are starting to fill and the plant may need to divert and discharge the untreated sewage into the river.

The police report that water is pouring out of a pipe underneath a major roadway near the local Medical Center. The Medical Center is at capacity for patients and is losing water pressure at a rapid rate. The storm surge washes many contaminants into the source water. Virtually all of City _____'s *(insert detail here)* drinking water comes from this single source. The water treatment plant's chlorine is running low and the next shipment was supposed to arrive the day after Labor Day. However, due to the storm, suppliers are unable to deliver the chemicals."

> *Facilitator Note 8*: The Facilitator can insert details about damage to specific treatment plants or other water and wastewater infrastructure facilities.
>
> *Facilitator Note 9:* The Facilitator can insert maps (as appropriate) indicating the extent of the disaster area. Including maps enhances the realism of the scenario. The map below (Figure 2) is an example showing the extent of hurricane wind and storm surge damage to area hospitals.
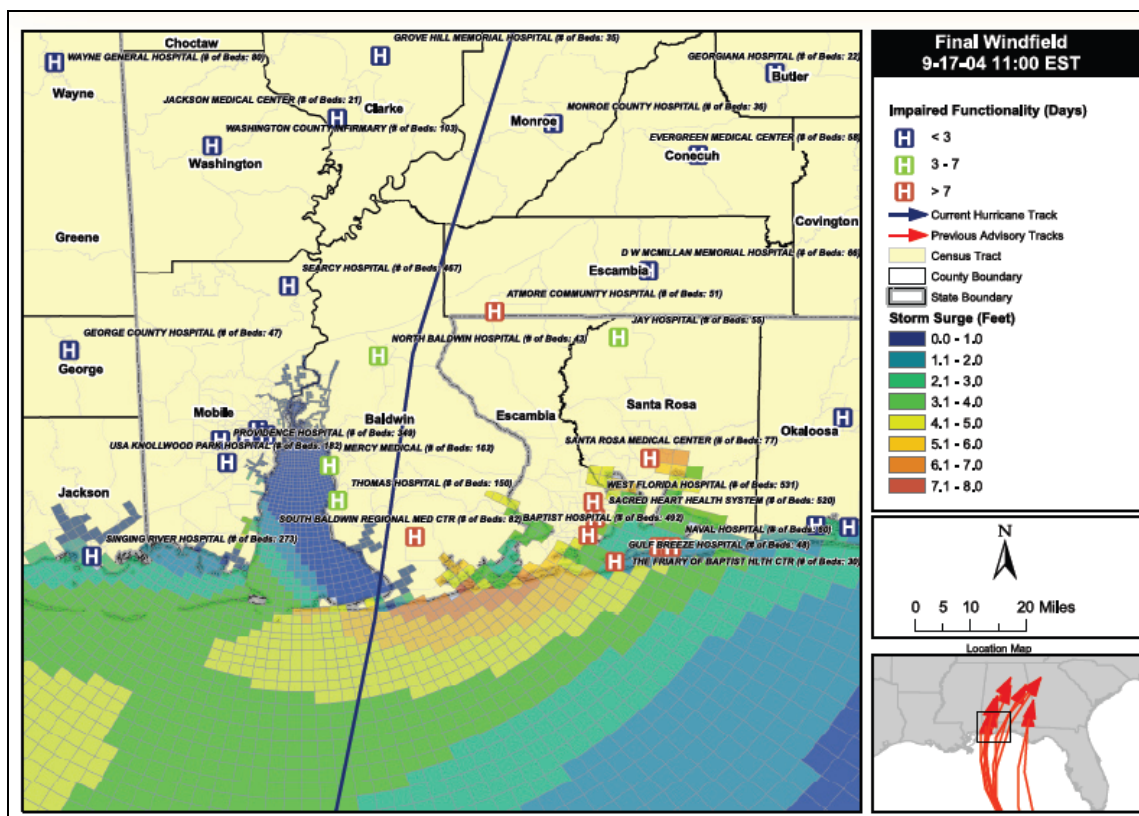
Source: Federal Emergency Management Agency. HAZUS-MH Application: Hurricane Winds, Estimated Loss of Functionality of Hospitals in Hurricane Ivan.

Figure 2: Sample Map Showing Extent of Storm Surge Damage to Local Hospitals

Scenario 3: Earthquake Scenario

An earthquake brings the *(insert detail here)* area to a shaking stop. Local seismologists measure the earthquake at *(insert detail here)* on the Richter scale for a duration of 30 seconds. Within the first hour after the initial earthquake, two sizeable aftershocks measuring *(insert detail here)* and *(insert detail here)* take place. Over the next 24-48 hours, more aftershocks are expected to continue, but with lessening severity. The U.S. Geological Survey (USGS) located the epicenter along the _____ Fault Zone, near (or in) the City of _____.

> *Facilitator Note 10:* The Facilitator can adjust the size of the disaster area in order to include details from the local area. The Facilitator may also adjust the Richter scale reading for the local major fault zone. When adjusting the Richter scale reading for local conditions, the Facilitator may consider including a measurement appropriate to focus on intrastate activation.

Emergency sirens can be heard all over the area. The media begins streaming breaking news broadcasts across radio, TV, and the Internet nationwide. Initial reports indicate that the earthquake has done serious damage to the _____ area and the fear is that there will be numerous human casualties.

There is severe structural damage along portions of the interstates and highways. Interstates and highways, which are major transportation routes in and out of the area, sustain major damage, including collapsed overpasses *(add details of familiar local highways and roadway impacts)*. Emergency vehicles coming from within or outside the area will have to use alternate routes. Many power and phone lines are down, so 60 percent of the area is without electricity and phone service, including cell coverage. There are numerous gas leaks and some have caused explosions and fires at locations across the area.

City residents gather at churches, schools, and parking lots seeking food and shelter for the evening. They are waiting for instruction on where to go and how to seek help. There are reports of looting and police are struggling to keep people out of stores with broken windows and doors. People are concerned about drinking tap water and there are complaints about discoloration and floating particles. Residents are exhausted, stressed, and worried about where they will find the information they need to ensure their safety.

The Governor declares a State emergency, and contacts Washington, DC to request a Presidential Disaster Declaration, including Stafford Act resources. The Governor calls up National Guard resources to provide emergency helicopters for the transport of emergency supplies and to take aerial film footage of the disaster area.

Drinking water utilities experience significant challenges:
- At least 20 drinking water and wastewater utilities have been impacted by the earthquake.
- Many utilities have broken mains causing localized flooding, especially in basements and the lower levels of structures.
- Broken mains also are leading to reduced pressure in the system, limiting fire-fighting capabilities.
- Most utilities had full storage tanks with finished water, but are losing water quickly due to tank failures and main breaks. Water pressure will be low in serviceable areas and many areas will be without normal drinking water service.
- Communications and transportation is limited, causing problems for utility personnel responding

to the event.
- A number of utilities have been able to access the WARN Web site or directly contact WARN members. Affected utilities that are able to contact unaffected WARN members are requesting every available resource offered.
- Raw sewage is flowing in many streets and creates the potential for cross contamination due to broken water mains.

Facilitator Note 11: The Facilitator can insert details about damage to specific treatment plants or other water and wastewater infrastructure facilities.
Facilitator Note 12: The Facilitator can insert maps (as appropriate) indicating the disaster area. Including maps enhances the realism of the scenario. The map below (Figure 3) is an example showing the potential extent of earthquake damage.
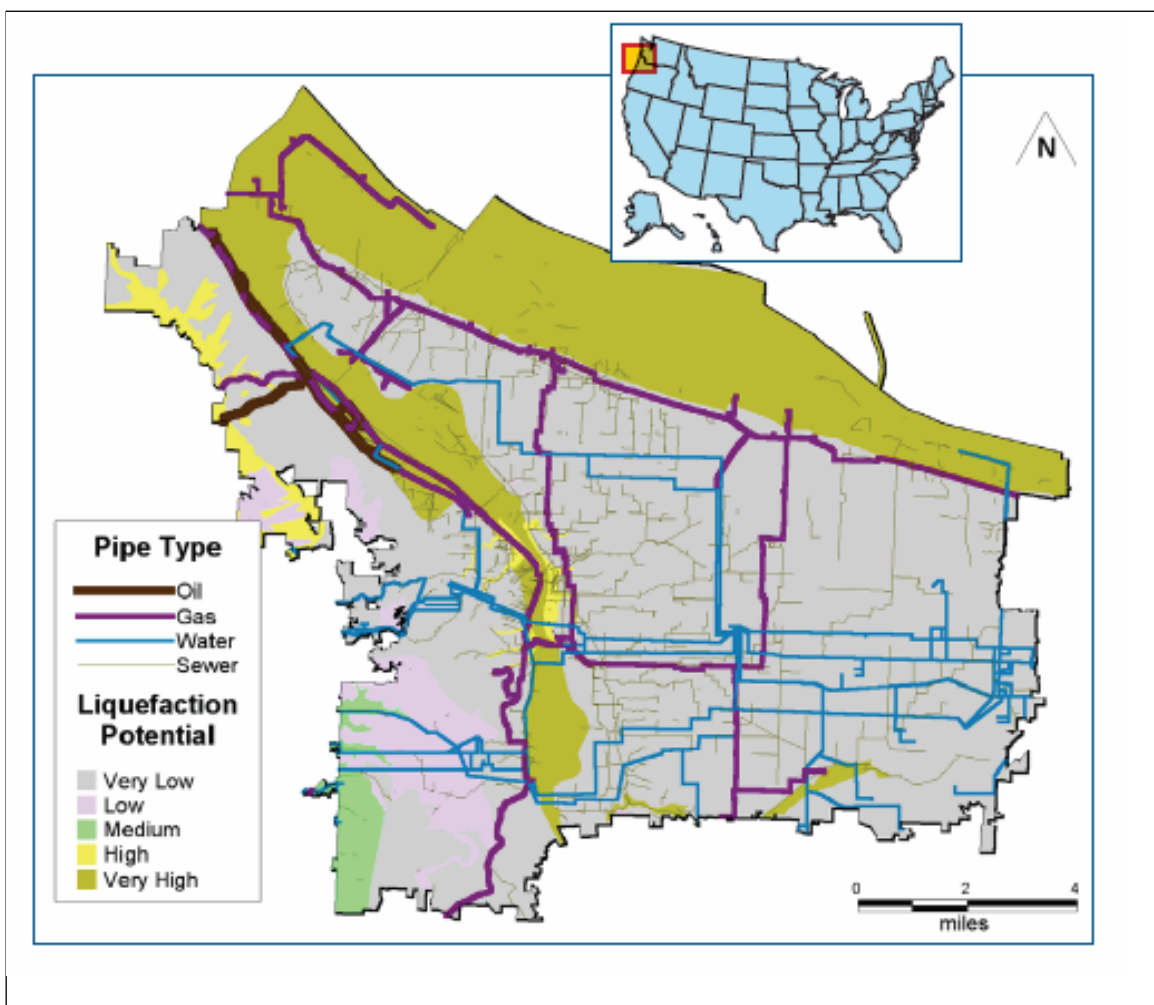
Source: Federal Emergency Management Agency. HAZUS-MH Application: Earthquake, Distribution of Utility Lifelines in Relation to Earthquake Hazard in Portland, Oregon.

Figure 3: Sample Map Showing Extent of Earthquake Damage to Utilities due to Liquefaction Potential

Attachment 7: Sample Questions

Discussion Questions 1: For "Developing" WARN

Facilitator Note 13: The following list of questions is neither comprehensive <u>nor intended to be given to exercise participants all at one time</u>. Rather than present all of the questions during one exercise, additional WARN tabletop exercises can be conducted as needed to address remaining questions. Each WARN may adapt or adopt the list of questions. The questions are divided among seven categories. Due to their broad focus, some questions can fit into several categories simultaneously.

Based on the exercise objectives, the WARN Exercise Design Team (EDT) can identify and select questions that are appropriate for their WARN or modify the questions to address the issues their WARN has faced. The discussion questions are intended to exercise the mutual aid/assistance operational plan. The EDT and Facilitator develop a list of discussion questions by identifying and selecting relevant questions from each sample set of discussion questions. The EDT and Facilitator should note that not all of the sample questions need to be included. As the questions can fit into several categories, the Facilitator can make adjustments to the placement across the categories as needed.

In reviewing the list, the EDT and Facilitator should determine whether the WARN is a "developing" or "established" WARN. The EDT and Facilitator should be cautious about skipping directly to the "Established" WARN material. A Facilitator that skips to the "Established" WARN material may miss essential discussion questions that are relevant to a "Developing" WARN.

The Facilitator can compile the selected discussion questions into a "Questions" handout that includes space for participants to record their answers. The Facilitator should note that not all of the questions need to be presented to the participants in advance. The Facilitator can present a subset of the selected questions to the participants in advance and introduce the remaining questions verbally throughout the facilitated discussion.

The sample discussion questions are based on the following assumptions:

- A WARN has just started,
- Exercise Participants may not be WARN members,
- A Steering Committee is being formed, and
- An agreement is under development or has been recently signed by utilities.

1. **Notification and Activation**: *(Notification refers to important information distributed to relevant personnel regarding an actual or potential hazard and the response status of the organization. Activation refers to a notification category that provides urgent information about an unusual occurrence or threat of occurrence, and orders or recommends that the notified entity activate its emergency response [usually via its emergency operations plan]. It usually includes actionable information directing the notified entity on initial actions for mobilization, deployment, and/or response.)*

   - How do you determine if in-house dedicated response resources (crews and equipment) are fully committed or overcommitted? [see Facilitator Note 14]

- What options are available to you to get outside help? [see Facilitator Note 15] Would your immediate neighbors be similarly affected? Keep in mind that in this scenario and other events with widespread impacts, your immediate neighbors may be unavailable to help you, regardless of the type and quantity of resources that you need.
- How will you activate your WARN in response to this situation and how will you notify other WARN members that you need help?
- How will you notify WARN members that the WARN has been activated?
- Identify and define the processes that might need to be included in your WARN agreement:

If you are a Requesting Utility
- When will you know you will need assistance?
- How can you locate assistance?
- How will you contact sources of assistance?
- How can you locate other sources of support?
- How quickly can you search for and locate unique equipment?
- How will you handle an influx of offers to provide support? [see Facilitator Note 16] Who is best suited for handling all of this coordination if you are managing your disaster?
- If you are in the beginning of a disaster, how long will it take to receive confirmation from another utility that they have resources?
- How would you handle injury, equipment failure, or resource loss when receiving aid?

If you are a Responding Utility
- What if your utility wants to offer assistance?
- Who can you call?
- How do you determine how much assistance you can offer without straining the resources of your own utility?
- What tools are available to you to offer your help, capabilities, and availability?
- How would you handle injury, equipment failure, or resource loss during the response?

Facilitator Note 14: For most utilities (drinking water and wastewater), the extent of system outages described in the scenario may quickly overwhelm response resources. Allowing the group to discuss when these resources may become inadequate to meet operational needs can reinforce the activation and notification discussion.

Facilitator Note 15: In this circumstance, the primary options include WARN, the local Emergency Operations Center (EOC), and support from state agencies. A discussion of these options allows the group to examine the normal operational context associated with disasters and the progression from local, to State-declared, to federally declared disasters and allows for some management of expectations. This should drive the group to conclude that WARN is the best option.

Facilitator Note 16: Discuss the options associated with identifying external and special resources, as well as managing offers of support. In addition to self identification, there are at least three options for outside support:
   o   Unaffected Utilities,
   o   WARN Steering Committee, and
   o   State drinking water primacy agency or state wastewater permitting authority.

2. **Coordination**: *(Coordination refers to advancing systematically through an analysis and exchange of information among personnel who have or may have a need to know certain information to carry out specific incident management responsibilities.)*

   - With whom do you coordinate at the local, state, and federal levels at the beginning of a potential disaster?
   - How will this assistance be managed within your organization?
   - How will you identify and define the processes that might need to be included in your own WARN agreement or Mutual Aid/Assistance Operational Plan that supports the agreement?
   - What would go in the agreement versus the Mutual Aid/Assistance Operational Plan?

   If you are a Requesting Utility
   - How are priorities established to determine where resources are sent first, second or third, etc.?
   - How can you leverage and share resources with your neighbors? For example, imagine that you just borrowed five repair crews and equipment from the other end of the state, the crews have completed their assigned work, and your neighbor will soon need the same type of help.

   If you are a Responding Utility
   - What if you need your resources returned earlier than you expected; how do you get them back? [see Facilitator Note 17]
   - What if you are unable to provide support?

   Associations, and Local, State, and Federal Agencies
   - Do the utility associations and state and federal agencies have any input, support or influence on coordination issues given that this disaster is still local? Should your WARN agreement address any issues particular to this?
   - How does your WARN facilitate the flow of information concerning the affected utilities and damage assessments:
     o From utility to utility,
     o To local emergency management agencies,
     o To state agencies, and
     o To the federal government?
   - How do you evaluate the need to notify federal resources; how do you notify them; what are your expectations of federal resources?

   Facilitator Note 17: Discuss how a utility transitions assigned work to other responding utilities when one of them has to leave prematurely.

3. **Mobilization and Operations:** *("Mobilization" refers to the process and procedures used by all organizations — federal, state, local, and tribal — for activating, assembling, and transporting all resources that have been requested to respond to or support an incident. "Operations" refers to all tactical incident operations.)*

   - How will responding utility resources be managed in the field? Identify and define the processes that might need to be included in your own WARN agreement.
   - Who will be responsible for managing support crews and equipment in the field, and how will they be granted access to affected areas?

- How will the addition of support crews and equipment be communicated to other functions within your utility, such as Safety, Dispatch, etc.? Should this be addressed in your WARN agreement or should it be a part of your Mutual Aid/Assistance Operational Plan?
- Will the supporting agency be able to immediately fit into your organizational structure? Who is going to be in charge of those crews when they are out in the field? What are the lines of communication and chains of command?
- How will communications from the utility or dispatch out to the support crew occur? *(e.g., dedicated radio frequencies, interoperability concerns, etc.)*
- Considering that you may lose your electric generator to flooding, how can you prepare in advance to identify potential sources of generators and alert utilities of your needs?
- Do the utility associations and state and federal agencies have any input, support, or influence regarding mobilization and operations given that this disaster is still local? Should your WARN agreement address any issues particular to this?

4. **Logistics:** *(Logistics refers to providing resources, facilities, services and material support to support incident management. Activities include establishing lodging and making travel arrangements, etc.)*

- How will logistical support to these resources be managed?
- Who will handle logistics for the support?

5. **Communications:** *(Communications refers only to the method(s) of conveying information; it is a narrow, but vital component of Information Management. Communication procedures include briefings to teams and crews, explanations of safety procedures, etc.)*

- Who will establish communication procedures for support teams?

6. **Finance:** *(Finance refers to the financial, administrative, and legal/regulatory issues for the incident. Expenses include overtime, travel, equipment, repairs, injuries, insurance, per diem, etc.)*

- How will expenses be handled and should this be addressed in your WARN agreement?
- How will expenses be negotiated?
- How will records be maintained?

7. **Demobilization:** *(Demobilization refers to the phase that begins with the transition of Management, Operations, and Support functions and elements from the incident activities back to normal operations or to their baseline standby state, as their operational objectives are attained.)*

- When will you know that the demands from the disaster have lessened to the point that you no longer need support?
- How will you know when you can return the resources?
- Are there any special procedures to be followed (e.g., mandated rest periods) before resources can be released? Should this be addressed in your WARN agreement?

8. **Recovery:** *(Recovery refers to the development, coordination, and execution of service- and site-restoration plans; additional measures for restoration; evaluation of the incident to identify lessons learned; post-incident reporting; and development of initiatives to mitigate the effects of future incidents.)*

- How are you going to manage the demands for long-term recovery and should these needs be addressed in your WARN agreement?

Discussion Questions 2: For "Established" WARN

Facilitator Note 18: **The following list of questions is neither comprehensive <u>nor intended to be given to exercise participants all at one time</u>**. Rather than present all of the questions during one exercise, additional WARN tabletop exercises can be conducted as needed to address remaining questions. Each WARN may adapt or adopt the list of questions. The questions are divided among seven categories. Due to their broad focus, some questions can fit into several categories simultaneously.

Based on the exercise objectives, the WARN Exercise Design Team can identify and select questions that are appropriate for their WARN or modify the questions to address the issues their WARN has faced. The discussion questions are intended to exercise the mutual aid/assistance operational plan. The EDT and Facilitator develop a list of discussion questions by identifying and selecting relevant questions from each sample set of discussion questions. The EDT and Facilitator should note that not all of the samples questions need to be included. As the questions can fit into several categories, the Facilitator can make adjustments to the placement across the categories as needed.

As noted earlier, the EDT and Facilitator planning an exercise for a new WARN should not skip to the "Established" WARN material because they may miss essential discussion questions that are relevant to a "Developing" WARN.

The Facilitator can compile the selected discussion questions into a "Questions" handout that includes space for participants to record their answers (See Attachment 5). The Facilitator should note that not all of the questions need to be presented to the participants in advance. The Facilitator can present a subset of the selected questions to the participants in advance and introduce the remaining questions verbally throughout the facilitated discussion.

These questions are based on the following assumptions:

- The WARN is established,
- All participants include members by signature to the agreement and associate members who participate in the WARN without signing the agreement,
- A Steering Committee is formed, an agreement is developed, and
- Procedures describing how members may implement the agreement are under development, whether written or not written. These procedures may serve as the content for the WARN's Mutual Aid/Assistance Operational Plan.

1. **Notification and Activation**: *(Notification refers to information distributed to relevant personnel regarding an actual or potential hazard impact and the response status of the organization. Activation refers to a notification category that provides urgent information about an unusual occurrence or threat of occurrence, and orders or recommends that the notified entity activate its emergency response [usually via its emergency operations plan]. It usually includes actionable information directing the notified entity on initial actions for mobilization, deployment, and/or response.)*

- How will your WARN activate in response to this situation?
- How will your WARN notify other members they need help?
- How will your WARN notify members that the WARN has been activated?
- What are the protocols for requesting assistance through your WARN?

- What are the protocols for contacting your WARN representatives?
- How does your WARN quickly search and locate unique equipment?
- What tools can your WARN adopt to help locate, request, and track assistance? [see Facilitator Note 19]
- What redundancy measures are in place in the event that your tools become overwhelmed or inoperable? *(Redundancy refers to the capacity to ensure continuity of service through backup equipment when there is a malfunction in primary service.)*
- How does your WARN manage offers for support if your local authorities already have a plan in place?
- What potential conflicts may arise between your state's mutual aid and assistance agreement and your WARN agreement?

Facilitator Note 19: WARN offers Web-based tools, protocols, linkages, and communication systems. Allow the group to discuss and further define the types of tools they may need.

2. **Coordination**: *(Coordination refers to advancing systematically an analysis and exchange of information among personnel who have or may have a need to know certain information to carry out specific incident management responsibilities.)*

- With whom does your WARN coordinate at the local, state, and federal levels at the earliest stages of a potential disaster?
- What protocols are in place to coordinate across the various levels of government and industry?
- How does your WARN facilitate prioritization of resources? How does it:
  - Determine the order in which members will receive support (via priorities, e.g., utility A first, utility B second, etc.)?
  - Determine what level of support each member will receive?
  - Help requesting utilities transition assigned work between responding utilities when one of them has to leave prematurely?
- How does your WARN coordinate with other partners – such as utility associations, state drinking water primacy agency, wastewater permitting authority, and federal agencies – that can offer additional resources?
- How does your WARN evaluate the need to notify federal resources; how do you notify them; what are your expectations of federal resources?

3. **Mobilization and Operations:** *("Mobilization" refers to the process and procedures used by all organizations – federal, state, local, and tribal – for activating, assembling, and transporting all resources that have been requested to respond to or support an incident. "Operations" refers to all tactical incident operations.)*

- How will the WARN "system" manage resource information? [see Facilitator Note 20]
- How does your WARN help the responding utilities get to where they need to be?
- Who ensures that support crews and equipment in the field are adequately supported?
- How does your WARN help utilities facilitate access to the affected area?
- How does your WARN facilitate the integration of the responding utility resources into the operational structure of the requesting utility?
- How does your WARN manage resources with the help of other partners that can offer additional resources, such as utility associations, state drinking water primacy agency, wastewater permitting authority, and federal agencies?

- How does your WARN manage indemnification?

Facilitator Note 20: Resource management is defined as the careful managing of resources to meet incident needs, including those of scheduled events, by using standardized concepts such as resource typing, inventorying, and tracking to facilitate the dispatch, deployment, and recovery of resources before, during, and after an emergency.

4. **Logistics:** *(Logistics refers to providing resources, facilities, services and material support to support incident management.)*

   - How will your WARN support the logistical (i.e., procurement, maintenance, distribution, and replacement of personnel and equipment) needs of members?
   - How does your WARN support the advance identification of potential sources of replacement equipment?

5. **Communication:** *(Communications refers only to the method(s) of conveying information; it is a narrow, but vital component of Information Management.)*

   - How does your WARN facilitate communications between responding utilities within the requesting utilities' operations?
   - What protocols for communication does your WARN have in place?
   - How does your WARN manage crisis communication with the public and media?
   - How does your WARN facilitate the flow of information concerning the affected utilities and damage assessments:
     - o From utility to utility,
     - o To local emergency management agencies,
     - o To state drinking water primacy agencies,
     - o To state wastewater permitting authority, and
     - o To federal government?

6. **Finance:** *(Finance refers to the financial, administrative, and legal/regulatory issues for the incident.)*

   - How will your WARN help utilities negotiate expenses?
   - How will your WARN help utilities maintain records?
   - How will your WARN help utilities complete appropriate documentation for reimbursement?
   - What is the role of WARN in the reimbursement process?

7. **Demobilization:** *(Demobilization refers to the phase that begins with the transition of Management, Operations, and Support functions and elements from the incident activities back to normal operations or to their baseline standby state as their operational objectives are attained.)*

   - How will your WARN facilitate the demobilization of resources?
   - How does your WARN help utilities identify and communicate any special procedures to be followed?

Facilitator Note 21: Special procedures could include procedures for handling sensitive information such as facility maps, schematics, continuity plans, vulnerability assessment information, and other sensitive or proprietary data.

8. **Recovery:** *(Recovery refers to the development, coordination, and execution of service- and site-restoration plans; additional measures for restoration; evaluation of the incident to identify lessons learned; post-incident reporting; and development of initiatives to mitigate the effects of future incidents.)*

   - How will your WARN help manage the demands for long-term recovery?

Attachment 8: Sample PowerPoint Presentation Materials

Facilitator Note 22: The Facilitator can modify the sample presentation file contained in a separate PowerPoint presentation document to match the direction selected by the WARN Exercise Design Team.

Specifically, the Facilitator can modify the following slides in the PowerPoint presentation in preparation for the exercise:

- Exercise Objectives – Facilitator can replace bullets with the selected exercise objectives.
- Scenario – Facilitator can add slides from the selected scenario. As noted throughout the document, the Facilitator can modify slides to fit local circumstances, historical events, and the specific WARN involved in the exercise.
- Facilitated Discussion – Facilitator can replace bullets with the selected discussion questions to be presented in advance to the participants.

Attachment 9: Sample Exercise Evaluator Form

Evaluator Role
Evaluators monitor the actions and decisions of the participants to determine and observe the extent to which the exercise objectives have been met.

Evaluator Actions
- Review objectives of the exercise.
- Identify operational procedures to assess, respond to, and recover from a simulated emergency event.
- Monitor play of the exercise with objectives in mind.
- Make notes of ideas and player actions on a separate sheet of paper.
- Record suggestions for updates to plans and procedures based on players' responses.
- Complete the Evaluator Form.
- Identify one leader to present constructive comments at the end of the exercise.

Limitations
- Do not coach players. Observe.

Facilitator Note 23: This page and the evaluator form are not shared with the participants. To help the evaluators understand what they are to evaluate, the Facilitator may hold a separate orientation session with the designated Evaluators prior to the exercise.

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Sample Exercise Evaluator Form

Please print your responses.

Evaluator: _____   Agency: _____

Contact Number: _____   e-mail: _____

Objective 1:   Refine participants' roles and responsibilities in the WARN process, including specifying the involvement of utilities, state drinking water and wastewater agencies, state and local emergency management agencies, and EPA (as appropriate).

1.   Evaluation Question 1: Refine utilities' roles and responsibilities.

Strongly Disagree		Agree		Strongly Agree	Enter Score
1	2	3	4	5	

Comment: _____
_____
_____

2.   Evaluation Question 2: Refine state drinking water and wastewater agencies' roles and responsibilities.

Strongly Disagree		Agree		Strongly Agree	Enter Score
1	2	3	4	5	

Comment: _____
_____
_____

3.   Evaluation Question 3: Refine local and state emergency management agencies' roles and responsibilities.

Strongly Disagree		Agree		Strongly Agree	Enter Score
1	2	3	4	5	

Comment: _____
_____
_____

4.   Additional comments related to discussion observed regarding Objective 1.

_____
_____
_____

Sample Exercise Evaluator Form

Please print your responses.

Evaluator: _____ Agency: _____

Contact Number: _____ e-mail: _____

Objective 2:   Define components of a Mutual Aid/Assistance Operational Plan.

1. Evaluation Question 1: Define how WARN activation will occur.

Strongly Disagree		Agree		Strongly Agree		Enter Score
1	2	3	4	5		

   Comment: _____
   _____
   _____

2. Evaluation Question 2: Define how WARN member mobilization will occur.

Strongly Disagree		Agree		Strongly Agree		Enter Score
1	2	3	4	5		

   Comment: _____
   _____
   _____

3. Evaluation Question 3: Define how WARN coordination will occur.

Strongly Disagree		Agree		Strongly Agree		Enter Score
1	2	3	4	5		

   Comment: _____
   _____
   _____

4. Additional comments related to discussion observed regarding Objective 2.

   _____
   _____
   _____

Sample Exercise Evaluator Form

Please print your responses.

Evaluator: _____   Agency: _____

Contact Number: _____   e-mail: _____

Objective 3:   Address expectations of the WARN program.

1. Evaluation Question 1: Refine expectations of growth of the WARN program.

Strongly Disagree		Agree		Strongly Agree	Enter Score
1	2	3	4	5	

Comment: _____
_____
_____

2. Evaluation Question 2: Refine expectations of engagement of WARN members, especially non-emergency responsibilities.

Strongly Disagree		Agree		Strongly Agree	Enter Score
1	2	3	4	5	

Comment: _____
_____
_____

3. Evaluation Question 3: Refine expectations of logistics to support growth of the WARN program, including WARN communication tools.

Strongly Disagree		Agree		Strongly Agree	Enter Score
1	2	3	4	5	

Comment: _____
_____
_____

4. Additional comments related to discussion observed regarding Objective 3.

_____
_____
_____

Attachment 10: Sample Participant Evaluation Form

Facilitator Note 24: The Facilitator can modify the Participant Evaluation Form (presented on the next page) to address the objectives noted in the participant handouts. The Participant Evaluation Form is normally printed separately from the other participant handout materials and passed out at the end of the exercise or it may be included as part of the participant handouts distributed at the start of the exercise. The Participant Evaluation Form is intended to be a tool to help the participants contribute during the verbal "Hot Wash" as part of the evaluation of the exercise and initial information to use in developing the After Action Report. The opportunity for the participant to enter a "score" allows for establishing metrics for this and future exercises.

Sample Participant Evaluation Form

1. The exercise was structured and organized well.

Strongly Disagree		Agree		Strongly Agree	Enter Score
1	2	3	4	5	

Comment: _____

_____

2. The exercise provided players with an opportunity to refine WARN member roles and responsibilities, including the involvement of utilities, state drinking water primacy agency, state wastewater permitting authority, state and local emergency management agencies, and EPA (as appropriate).

Strongly Disagree		Agree		Strongly Agree	Enter Score
1	2	3	4	5	

Comment: _____

_____

3. The exercise allowed an opportunity to refine components of the state WARN agreement, the Mutual Aid/Assistance Operational Plan, and the administration to manage the WARN, as well as modify each as needed.

Strongly Disagree		Agree		Strongly Agree	Enter Score
1	2	3	4	5	

Comment: _____

_____

4. The exercise allowed an opportunity to refine the processes and procedures for using the WARN program during different phases of response.

Strongly Disagree		Agree		Strongly Agree	Enter Score
1	2	3	4	5	

Comment: _____

_____

5. The exercise provided an opportunity to identify potential gaps in the Mutual Aid/Assistance Operational Plan and address expectations of growth, engagement, and membership of the WARN program, and logistics to support the growth.

Strongly Disagree		Agree		Strongly Agree	Enter Score
1	2	3	4	5	

    Comment:

6. Participation in the exercise was a valuable use of my time.

Strongly Disagree		Agree		Strongly Agree	Enter Score
1	2	3	4	5	

    Comment:

7. Please provide additional comments not addressed. For example, how could the exercise process or preparations be improved?

    Comment:

8. Please provide recommended corrective actions. What response capabilities are needed or should be implemented? What actions should be taken to respond more effectively? What types of trainings do your personnel need to respond more effectively?

    Comment:

Attachment 11: Debriefing Comment Capture Form

Facilitator Note 25: The Facilitator can modify the Debrief Comment Capture Form to address the objectives noted in the participant handouts. A Recorder summarizes post-evaluation verbal comments and recommendations, including the agreed-upon plan of action, schedule, and responsibility for implementing the recommendations.

Name or Number of Exercise:
Date of Exercise:
Name of Recorder:
Comments from Debriefing:
Non-Emergency Responsibilities
Concept of Emergency Operations
WARN Activation
Emergencies with Warnings
Requesting Utility Authorized Representative
Notification
Mutual Aid Coordinator
Staging Area Manager
Responding Utility Authorized Representative
WARN Member Mobilization
Pre-Deployment Activities
Deployment of Responding Utility
Daily Activity Briefing
Demobilization
Responding Utility Demobilization Activities

Coordinate Reimbursement Information
WARN Coordination
Response Team Member Roles and Responsibilities
Team Member Response
Manage Damage Assessment Data
Receive, Track and Monitor Requests
Coordinate Resource Orders
Coordinate Staging Area Information
WARN Documentation
Damage Assessment
Track Expenses
WARN Communications Tools
After Action Report and Improvement Plan
Training, Exercises and Updates
Miscellaneous (e.g., outstanding legal issues that need to be addressed by legal counsel)

Attachment 12: Debrief / Hot Wash Questions for Consideration

The following questions are examples of what may be asked as part of a hot wash and/or debrief. (The list is not all-inclusive.) In summary, ask what went well, what did not go well, what needs to be improved, or other lessons learned.

- Notification
  - What was the number and frequency of notifications?
  - Did the number and frequency provide an accurate operational understanding of the emergency?

- Activation
  - How did activation occur for utilities, WARN, and other stakeholders?
  - How quickly did "full" activation occur between stakeholders that responded?
  - How can the activation process be improved or streamlined?
  - Were the different departments (or jurisdictions and agencies) able to activate their plans and processes during this incident?

- Coordination
  - Were the Members well-coordinated and matched to assignments according to skill?
  - What can be done in the future to maximize available resources?
  - What went well? Were the goals met?
  - What went wrong and what was done to correct it?
  - What can be improved?
  - Was equipment interoperable?
  - Were the resources that were requested the same as the ones that were delivered?
  - Were databases used and are they interoperable across different workgroups and jurisdictions?

- Mobilization
  - Was the information gathered from notifications sufficient to accurately organize and prepare for mobilization?
  - How quickly did "full" mobilization occur between stakeholders that responded?

- Operational Support
  - What actually occurred at all levels of participation (timeline)?
  - What were the pre-event plans and processes for preparedness, response, recovery, and mitigation?
  - Did the plans and processes meet the need of jurisdictions and agencies responding to this event?
  - How accurately were resource requests anticipated and fulfilled?
  - How can procedures for pre-staging resources, making and fulfilling resource requests, tracking and reporting on resource status, and recovering resources be improved?
  - How accurately were personnel requests anticipated and fulfilled?
  - How can procedures for making and fulfilling resource requests be improved?
  - What were some success stories?
  - What areas need improvement to facilitate response in the future?

- Demobilization
  - Was a demobilization plan in place before the event? Was it followed?

o What worked well?
o What did not work well and were steps taken to address the situation?
o What can be improved for the future and what options are available?

- Miscellaneous
  o Are there legal issues that need to be addressed by legal counsel?
  o Identify other lessons learned not captured above.

Facilitator Note 26: Each WARN determines how it conducts a hot wash and/or debriefing. Each WARN may adopt or adapt what is presented.

Attachment 13: Six Areas for Implementing After Action Activities

Six areas for implementing after action activities					
Action/Task/ Follow-Up	Individual or Agency Responsibility	People Who Should Be Involved	Resources and Possible Sources	Short Term	Timeline