

Request for Proposals Emergency Response Plan, Training and Vulnerability Assessment

The North Texas Municipal Water District is soliciting proposals from qualified firms to provide Emergency Preparedness Planning, Training, Exercises and Consultation Services to assist the district in updating our Emergency Response Plans, train senior leadership and staff in emergency management, train technical staff in response procedures and techniques, deliver exercises to prepare the North Texas Municipal Water District to better respond to various incidents that could impact operations, and link North Texas Municipal Water District to federal, state and community resources that support response activities and continuity of operations.

A. BACKGROUND

The North Texas Municipal Water District is a regional service provider for Water, Wastewater and Solid Waste. The North Texas Municipal Water District ("NTMWD" or "the District") is a conservation and reclamation district and political subdivision of the State of Texas, created and functioning under Article XVI, Section 59, of the Texas Constitution, pursuant to Chapter 62, Acts of 1951, 52nd Legislature of Texas, Regular Session, as amended (the ACT). An amendment to the NTMWD's creating ACT by the legislature in 1975, Section 27, authorizes the NTMWD to acquire, treat, and distribute potable water, and to collect, treat and dispose of wastes, both liquid and solid, in order to reduce pollution, conserve and develop the natural resources of Texas.

NTMWD currently operates three water treatment facilities. The capacity of the Wylie Water Treatment Plant is 770 million gallons per day (MGD). The Tawakoni Water Treatment Plant has a capacity of 30 MGD and the Bonham Water Treatment Plant has a capacity of 6 MGD.

NTMWD operates fourteen wastewater treatment plants that range in size from 0.25 MGD to 64 MGD.

The solid waste facilities include the 121 Regional Disposal Facility and three transfer stations. The Lookout Drive Transfer Station has an average daily waste acceptance rate of 625 tons per day averaged over 365 days, and a maximum daily waste acceptance rate of 1,500 tons. The Parkway Transfer Station has an average daily waste acceptance rate of 770 tons per day averaged over 365 days (no maximum daily acceptance rate), and the Custer Road Transfer Station has a maximum daily waste acceptance of 1,900 tons per day (no daily average). The 121 RDF has no waste acceptance restrictions.

In addition to the Emergency Response Plan, NTMWD has several stand-alone response plans that have been developed outside the scope of this project. They are available for review and may serve as a basis for content in the updated Integrated Emergency Response Plan. The stand-alone plans are as follows:

- Five facility specific Risk Management Plans developed for compliance with the Risk Management Plan Rule in 40 CFR 68;
- Spill Prevention, Control, and Countermeasure (SPCC) plans for the solid waste facilities; and
- Overflow Emergency Response Plan on how to respond to Sanitary Sewer Overflows.

Please note that there should be no conflicts between the five Risk Management Plans and the Integrated Emergency Response Plan.

B. SCOPE OF SERVICES

NTMWD is interested in obtaining the following services:

1. Conduct a thorough review of the District's existing security program to identify areas for improvement and conformation to national guidelines and best practices such as the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (H.R. 3448), the National Infrastructure Protection Plan (NIPP) – NIPP 2013: *Partnering for Critical Infrastructure Security and Resilience*, and the Water and Wastewater Systems Sector-Specific Plan. This vulnerability assessment shall be based upon the RAM-W methodology developed by Sandia National Laboratories and/or Department of Homeland Security's Vulnerability Assessments for Critical Infrastructure and Key Resources as applicable. For the wastewater facilities, the security audit shall conform to the requirements of Texas Code §217.322. *Safety and Security Audits* which requires the use of the *Asset Based Vulnerability Checklist for Wastewater Utilities* (2002) by the Association of Metropolitan Sewerage Agencies. An equivalent security audit protocol may be used, but only if approved in writing by the TCEQ executive director.
2. The consultant will conduct a detailed review of the District's current Emergency Response Plan to determine if the plan addresses the following concerns and issues.
 - a. Conformance with applicable and appropriate federal, state, and local guidelines to include the Disaster Mitigation Act of 2000 and shall be conducted in accordance with Federal Emergency Management Agency (FEMA) Mitigation Planning Guidelines as published in FEMA Publication 386.
 - b. Potential acts of terrorism or other intentional acts aimed at disrupting the distribution of potable water supply and other services provided by NTMWD.
 - c. Any risks the District may be exposed to because of a natural disaster such as:
 - i. Earthquake;

- ii. Flood;
 - iii. Severe Winter or Wind Storm;
 - iv. Tornado,
 - v. Flooding;
 - vi. Or other such natural hazards that may be identified in the review process.
 - d. Any risks the District may be exposed to because of other disasters/incidents such as:
 - i. Active Shooter;
 - ii. Loss of Communication;
 - iii. Loss of Power;
 - iv. Service Disruption,
 - v. Chemical spills, petroleum product/oil (gas, diesel, used oil, etc.) spills at non-SPCC sites, or toxic inhalation hazard gases (150 lb. cylinders of ammonia, hydrogen sulfide generated in treatment processes, etc.) at non-RMP sites.
 - vi. Or other such anthropomorphic hazards that may be identified in the review process.
- 3. Review the Emergency Response portions of the five facility-specific Risk Management Plans developed for compliance with the Risk Management Plan Rule in 40 CFR 68. Provide consistency between the risk management plans and the Integrated Emergency Response Plan. NTMWD is interested in recommendations on whether to keep a small emergency response plan as part of the risk management plan or have the risk management plan reference the integrated emergency response plan.
- 4. Provide assurance that there is adequate or appropriate interaction between the District's Emergency Response Plan with all elements of the Emergency Management Plan for the county in which the NTMWD facility is located, and all other relevant agencies that the District is likely to interface with during an emergency. The District's Emergency Response Plan (Plan) shall include all appropriate and necessary elements of any appropriate County Emergency Management or Disaster Preparedness Plan. The Plan shall also address all security issues associated with existing and potential inter-local agreements, such as site leasing of reservoirs or other facilities, granting access to and joint use of these facilities to cellular telephone companies or other utility districts or governmental agencies. If needed, consultant shall assist with negotiations of necessary local agreements, mutual aid agreements and potential participation in TXWARN.
- 5. Develop a "Model" Media-Press Release Format and crisis/public communication protocols.

6. At a minimum, consultant should address items identified in All-Hazard Consequence Management Planning for the Water Sector, CIPAC Workgroup, CIPAC. Portions of the document are included in Appendix A.
7. The plan shall address recovery and continuity of operations.
8. Recommendations are requested on the best internal use of Nixle for emergency situations and applicability of EPA Water Utility Response On-the-Go application for NTMWD emergency response.
9. NTMWD is in process of building a new operations building to include an Emergency Operations Center. Recommendations are requested for features and supplies to include in the Emergency Operations Center.
10. Conduct a thorough Training Needs Analysis to identify specific training NTMWD staff needs to successfully execute emergency management and response operations.
 - a. Provide training on the Integrated Emergency Management Plan to Leadership positions and selected general staff utilizing the National Incident Managements System (NIMS) and Incident Command System (ICS) structure and protocols.
 - b. Provide training to NTMWD Leadership positions and selected general staff on crisis communications and recommended best practices for crisis/public communication protocols.
 - c. Provide Hazardous Materials (HazMat) Response Technician training to select NTMWD staff. Training must meet the requirements of NFPA 472 and Occupational Health and Safety Administration standard 29 CFR 1910.120.
11. Develop and deliver one, or more, facilitated discussions, seminars, workshop, drills or table-top exercises to assist NTMWD to understand and be prepared to execute the Integrated Emergency Response Plan.
12. The selected consultant may be asked to participate in an emergency situation where the emergency operations center is activated and to facilitate after action reviews. It is desired that the organization that provides the Emergency Response Plan and training shall have the capability to assess operations of the plan and facilitate after action reviews.

C. PROJECT APPROACH and DELIVERABLES:

Latitude is provided to the Consultant for development of the specific tasks that may be included in a Scope of Work; however, the Consultant should consider, at a minimum, incorporating the following items.

- 1) Clarify the water, wastewater and solid waste objectives by:
 - a) Identify and clarify the system missions.
 - b) Identify the consequences that could affect the mission.
 - c) Identify and prioritize the assets that need to be protected.
 - d) Identify and prioritize the malevolent acts or actions that could impact or affect the system operation.
- 2) Conduct a complete system inventory if necessary. Please note that many assets are identified in the NTMWD Maximo and GIS systems.
 - a) Identify and prioritize the most critical elements or facilities.
 - b) Describe the consequences of the loss of critical facilities or functions.
 - c) Identify and prioritize the most critical natural hazards.
 - d) Analyze the risk associated with and the impacts of granting access to District facilities under lease agreements with private service providers such as cellular telephone companies.
- 3) Conduct a threat assessment.
 - a) Define the type or types of terrorism acts that could happen and evaluate the likelihood of what type or types of action that could be conducted such as: physical damage; chemical, biological or radiological damage; disruption of the interdependency systems, such as electrical, transportation, etc.
 - b) Define the likelihood of the threat source such as terrorist, internal, or vandalism.
 - c) Define the type or types of natural hazards that could impact the District and evaluate the likelihood that the District could be affected by the hazard.
 - d) Prioritize the hazards.
 - e) Document the process used to determine the type of hazard and likelihood of occurrence.
 - f) Develop or identify the system and facility characteristics.

- g) Identify important facilities, processes and assets.
- h) Inventory of system protection elements and asses their capabilities and reliability.
- 4) Describe the methodology that will be used to develop the Vulnerability Assessment and the Emergency Response Plan.
- 5) Describe the methodology that will be used to review and/or revise the Emergency Response Plan.
- 6) Develop recommendations for hazard mitigation strategies.
- 7) Provide protocols for Continuity of Operations and Recovery. IT disaster recovery is not mandatory. IT has a recovery plan that can be referenced. Concern is to be able to keep the water and wastewater plants operational during a disaster. The current ERP does not address what to do past the first 24-48 hours. Staff will be exhausted, worried about their own families and may not focus on recovery. What can NTMWD do to provide continuity?
- 8) Deliverables shall include requested emergency response plan, training plan and training of necessary staff, continuity of operations and vulnerability assessment. Training should follow the training requirements, structure and guidance of the National Incident Management System (NIMS).
- 9) Documents shall be delivered as an indexed electronic document and seven (7) hardcopies.

D. PROPOSAL ELEMENTS & EVALUATION CRITERIA:

Proposals should present information in a straightforward and concise manner, while ensuring complete and detailed descriptions of the proposing team (to include the prime, key team members and major sub-consultants) and the team's ability to meet the requirements and provide the requested services of this RFP. The written proposals should be prepared in the same sequential order of proposal criteria as outlined below.

The cover letter shall include the RFP Title, Name, Title, Email Address, Phone Number and current Address of the submitting firm's main contact.

When responding to, or generating, a Request For Proposal (RFP), a consultant should identify the:

1. Cover Letter: The letter shall specifically stipulate that all terms and conditions contained in the Request for Proposals are accepted by the Consultant. The letter shall specifically state which members of the Consultant's team have attended the Sandia Methodology (RAM-WSM) classes or seminars and which members have experience with the FEMA Hazard Mitigation Planning Guidelines. The letter must also state the name(s) of the person(s) authorized to represent the Consultant in any negotiations and the name(s) of the person(s) authorized to sign the contract that may result. The cover letter should not exceed two (2) pages in length and may summarize the proposal and qualifications of the consulting team.
2. Consulting Approach
 - A. Define the underlying approach towards consulting for this type of project.
 - B. Define the role of the consultant.
 - C. Define the expected role of the client.
 - D. Describe the technical approach of the project.
 - E. Describe the methodologies for achieving the project goals and objectives to include statistical and computing approaches if necessary.
 - F. Describe how the required deliverables will be produced.
3. Project Management Structure
 - A. Identify key personnel and their areas of responsibility as it relates to the project. Identify staff that is trained or exceptionally knowledgeable in RAM-WSM and FEMA Hazard Mitigation Planning.
 - B. Identify the project leader and the relationship of other staff to the project leader.
 - C. Include a resume or vita of the principle project members.
4. Qualifications and Experience
 - A. Provide description of the organization as it relates to the project including:
 1. general performance capabilities and reputation,
 2. quality of performance on previous contracts of a similar nature.
 - B. Provide references for projects completed that are similar to this project. Each reference must include a contact name, title, address, e-mail address and phone number.
5. Subcontractors
 - A. Identify all subcontractors.
 - B. Describe the services to be provided by the subcontractors and their experience in these areas.
6. Client Staff and Resources
 - A. Describe the extent to which the consultant will utilize the Client's resources in terms of:
 1. Staff
 2. Space
 3. Computer Time
 4. Equipment

7. **Project Timeline:** The proposal shall provide a preliminary schedule that identifies all tasks, time required to complete each task, task dependencies, critical decision points, and total project timeline. It is required that deliverables be completed before September 30, 2018.

Proposals are to address, and will be evaluated upon, the following criteria:

INITIAL EVALUATION PHASE

1. Qualifications & Experience 40 PTS

Proposers must have at least five (5) years of experience providing the services described in this RFP. Identify the proposed team (to include working titles, degrees, certificates and licenses), demonstrate the team's experience in performing the requested services and describe how the team meets or exceeds the required qualifications.

Resumes of the key individuals may be included.

NTMWD will evaluate the experience, technical competence and qualifications of the Key Personnel identified, their project specific roles and responsibilities, and overall organization of the project team. Emphasis will be placed on experience and expertise in performing work of similar scope and complexity.

Include a list of recent contracts/projects in the last five years, to include a point of contact, contact information (phone and e-mail), and brief description, for services relevant to the items listed in the Scope of Services as performed by the key personnel. Only projects completed by key members of the project team will be considered.

2. Project Approach Narrative 30 PTS

Proposals should clearly outline the team's recommended approach and methodology for:

- **Accomplishing the Scope of Services:** Clearly describe the approaches and methods that will be used to accomplish the tasks required in the scope of services. Include a summary of innovative ideas and suggestions for enhancing the scope of services.
- **Schedule:** Outline the team's experience providing comparable services to organizations whose employees are engaged in diverse industrial activities at multiple sites and across multiple shifts and describe how the team can respond to the NTMWD request for services. The response should address the Proposer's schedule commitments.
- **Coordination & Communication:** Provide a plan for communications and coordination between the NTMWD project manager and the various supervisors overseeing office and field work.

3. Compensation 30 PTS

Present detailed information on the firm's proposed fee structure for all resources for the services proposed. The North Texas Municipal Water District is exempt from appropriate State and Federal Sales Taxes. DO NOT include tax on bid prices or invoices. It is desired that the cost of services be detailed so that services may be selected in whole or in part. For example, cost associated with vulnerability assessment, costs associated with plan review, costs associated with training, etc.

Please identify training and/or services that may be funded by other entities. For example, if part of the proposed vulnerability/security assessment can be performed by the consultant under a FEMA grant, please notate that in the proposal. NTMWD is aware that parts of this project may be funded by grants however it is desired that activities be performed under one project for consistency and ease of implementation.

FINAL EVALUATION PHASE (if applicable)

4. Interviews (as requested by the NTMWD) 100 PTS

If an award is not made based on the written evaluations alone, interviews may be conducted with the top-ranked proposers. Failure to participate in the interview process will result in the Proposer's disqualification from further consideration. Travel costs will not be reimbursed for the interview.

5. References

Reference checks may be performed on the selected firm, if based directly on the proposals received, or on shortlisted firms if interviews are being requested. The NTMWD may evaluate the reference checks to assess the proposed team's overall performance and success of previous, similar work. Reference checks may also be utilized to validate information contained in the proposal.

PROCUREMENT PROCESS

SOLICITATION TIMELINE:	September 13, 2017
Issuance of RFP	
Proposal packets due	Friday, October 6, 2017 2 pm
Interviews (if required)	Wednesday, October 18, 2017
Final Selection*	Friday, October 27, 2017

ADDENDA

The NTMWD may make changes to this Solicitation. Oral or other interpretations, clarifications or submittal instructions will be without legal effect. Any information

modifying a solicitation will be furnished in a formal, written addendum. Addenda will be posted to the District's web site.

SUBMITTAL PROCESS

Three hardcopies and an electronic copy of proposals must be received via mail on or before 2 pm on October 6, 2017. Proposals shall be submitted to:

Elizabeth Turner, Special Projects Manager
North Texas Municipal Water District
PO Box 2408 (for mailed proposals)
501 E. Brown Street (for hand delivered proposals or by FedEx/UPS)
Wylie, TX 75098

So that the bid will not be opened until the appointed hour, mark envelopes in lower left corner, "**Emergency Response Plan**". **ALL BIDS MUST BE SIGNED BY HAND**. The bid agreement must be signed and dated by an authorized agent of your company.

Questions concerning the proposal may be e-mailed to Elizabeth Turner, eturner@ntmwd.com.

All proposals submitted shall be valid and binding on the submitting firm for a period of ninety days following the Proposal submittal deadline and for any extension of time granted by the submitting firm.

EVALUATION AND AWARD PROCESS

An evaluation team will review each proposal and evaluate all responses received based upon the criteria listed herein. The NTMWD may request clarifications or additional information, if needed. After the evaluation team individually scores each proposal, the scores are tallied and the firms are ranked based on the scores.

A selection may be made based on the proposals and initial evaluation criteria alone. Alternatively, the evaluation team may create a concise list of the top ranked firms and invite the short-listed firms in for interview and/or check references. Scores for reference checks and interviews will be tallied and added to the short-listed firm's initial evaluation scores. Final selection will be based on reference checks and interviews.

The NTMWD intends to select the Proposer who represents the best value to the NTMWD and begin the award process based on the evaluated scores. This proposal will be awarded to the most advantageous proposer demonstrating compliance with the specifications; however, NTMWD reserves the right to award on a partial or total basis depending on which is most advantageous to NTMWD.

The NTMWD reserves the right to accept or reject any or all information in its entirety or in part and to waive informalities and minor irregularities and to contract as the best interest of the NTMWD may require. The NTMWD reserves the right to reject any or all Proposals submitted as non-responsive or non-responsible.

Procedure When Only One Proposal is received

If a single responsive proposal is received, the Bidder shall provide any additional data required by the NTMWD to analyze the proposal. The NTMWD reserves the right to reject such proposals for any reason.

GENERAL INFORMATION

COSTS BORNE BY PROPOSERS

All costs incurred in the preparation of a Proposal and participation in this RFP and negotiation process shall be borne by the proposing firms.

PUBLIC DISCLOSURE

Proposals submitted under this Solicitation will be considered public documents and, with limited exceptions, will become public information and may be reviewed by appointment by anyone requesting to do so following the conclusion of the evaluation, negotiation, and award process. This process is concluded when a signed contract is completed between the NTMWD and the selected Consultant.

If a firm considers any portion of its response to be protected under the law, the vendor shall clearly identify each such portion with words such as "CONFIDENTIAL," "PROPRIETARY" or "TRADE SECRET" on each page for which the protection is sought. If a request is made for disclosure of such portion, the NTMWD will notify the vendor of the request and allow the vendor not less than ten (10) days to seek a protective order from the Courts or other appropriate remedy and/or waive the claimed confidentiality. Unless such protective order is obtained and provided to the NTMWD by the stated deadline, the NTMWD will release the requested portions of the Proposals. By submitting a response, the vendor assents to the procedure outlined in this paragraph and shall have no claim against the NTMWD because actions taken under such procedure.

CONFIDENTIALITY OF PROJECT INFORMATION

The District requires that the selected consulting organization and their staff assigned to this project keep all information learned about the District's security system confidential. Disclosure of any information gathered as part of the assessment has the potential to pose a significant risk to public health and safety. During the project, the Consultant shall make provisions to secure all project records, including drafts. After completion of the project, the Consultant will deliver to the District all drafts and all documents pertaining to the security system obtained from the District or generated during this project. All final reports pertaining to the Vulnerability Assessment and any section or part of the Hazard Mitigation Plan pertaining to system security shall have stamped on each page "NOT FOR PUBLIC DISCLOSURE." The Consultant shall not make available or use any system information drafts or reports for any purpose without the written consent of the District.

BID PROPOSAL

EMERGENCY RESPONSE

The undersigned hereby certifies that he/she understands all the above specifications, has read them carefully and shall furnish and deliver all articles or services specified in this request for proposal.

FIRM SUBMITTING BID

AUTHORIZED REPRESENTATIVE	
PRINTED NAME and Title	SIGNATURE

ADDRESS			
ADDRESS	CITY	STATE	ZIP CODE

TELEPHONE NUMBER	E-MAIL ADDRESS

Appendix A
Excerpts from
All-Hazard Consequence Management
Planning for the Water Sector, CIPAC
Workgroup, CIPAC. 2009.

Section III. Guidelines for Improving Resiliency for All Hazards and Consequences

This section describes preparedness, response, and recovery actions utilities can take to improve their resiliency across all hazards and consequences. In this context, resiliency is generally defined as the ability of a utility's business operations to rapidly adapt and respond to internal or external changes (such as emergencies) and continue operation with limited impacts to the community and customers. Remember that this is not meant to be a substitute for utility-specific emergency response planning. Utilities should use these lists of actions to expand and improve the Emergency Response Plans they may already have in place or to begin creating a written Emergency Response Plan if they do not already have one.

Preparedness Actions to Improve Resiliency Across All Hazards

Preparedness improves a utility's ability to respond to an incident with confidence and increases system resilience in a wide-spread emergency. Preparedness refers to actions, programs, policies, procedures, and systems put into place across the utility by utility management before an incident to 1) prevent or mitigate consequences and 2) support response and recovery activities. The actions listed below are intended to spark thinking and help utilities improve their general preparedness, response, and recovery plans. These are actions utilities can take to prepare for initial response and recovery to an acceptable level of operations as quickly as possible. The suggested actions are grouped according to related concepts, are not in priority order, and are intended to operate as an inter-related whole.

To help utilities consider how each of the preparedness actions might be implemented via a NIMS or ICS organization, suggested NIMS or ICS function assignments are provided in the right column of the table below. In some cases collaboration between multiple NIMS or ICS function assignments is important for completeness and accuracy of the information or plan. The actions are written with the utility's management in mind, not solely for field responders or field ICS positions. These are not rigid assignments, and may be modified or vary when applied to a particular utility or situation. As a reminder, the specific NIMS and ICS functions and their roles are:⁵

Management:⁶ establishes policy, sets priorities, creates the course for successful accomplishment of set objectives, approves plans, manages/coordinates deployment of resources, and communicates with the public and other agencies.

⁵ The descriptions of the NIMS and ICS functions are paraphrased from the NIMS and ICS references to illustrate the concepts for purposes of this document. They are illustrative descriptions and are not intended to replace the formal definitions established by NIMS.

⁶ Command is the term used in ICS to identify the regulatory or delegated authority in the field, during response. During preparedness leadership tasks may be addressed by the management of the utility to implement, rather than leaders in the field. Hence the term Management is used.

Operations: develops and implements strategies and tactics to carry out incident objectives, coordinates field resources, and identifies needed personnel or resources.

Planning: collects, analyzes, and disseminates information and intelligence, manages the planning process, compiles an Action Plan and other related documents, and manages technical specialists.

Logistics: provides transportation, communications, supplies, equipment maintenance and fueling, food, and medical services for incident personnel, and all off-incident resources.

Finance: provides financial and cost analysis, oversees contract negotiations, tracks personnel and equipment time, processes claims for accidents and injuries, and works with Logistics to ensure resources are procured.

Know the Utility's Hazards and Consequences

<u>Actions</u>	<u>NIMS/ICS Function</u>
<input type="checkbox"/> Determine what types of incidents are high risk and high probability in the utility's area. The utility should give these types of incidents special consideration as it plans.	<i>Planning</i>
<input type="checkbox"/> Identify and implement actions that the utility can take to mitigate the consequences of high risk, high probability incidents.	<i>Planning</i>
<input type="checkbox"/> Evaluate utility system vulnerabilities and identify mitigation measures to incorporate into a recovery plan to rebuild a more resilient system.	<i>Planning</i>

Connect with the Emergency Management Agency in the Utility's Area

<u>Actions</u>	<u>NIMS/ICS Function</u>
<input type="checkbox"/> Learn the emergency operations protocols and procedures that will be enacted by local emergency responders in your area during an incident and understand how the NIMS ICS are applied in the utility's jurisdiction. Ensure key managers and system operators complete ICS 100 and 200 training at a minimum. Information on training is available at http://training.fema.gov/ .	<i>Management</i>
<input type="checkbox"/> Identify and build relationships with key response partners, especially local emergency managers. For example, the utility should know who is likely to assume the position of incident commander for high risk, high probability incidents; how to work with local emergency planning committees (LEPCs); how the local and utility EOC will be activated; and what response actions the utility is likely to be called on to support as well as how local emergency responders and local EOC can support the utility.	<i>Management</i>
<input type="checkbox"/> The utility should supply copies of its emergency preparedness, response, and recovery plans and other key utility information to response partners, especially local fire departments, police departments, and the utility's local emergency management organization. Sensitive information should be safeguarded by response partners or, if	<i>Management</i>

not needed, scrubbed from plans provided to outside agencies.	
<input type="checkbox"/> Record the names and contact information for key response partners and update it frequently. Establish a time or occurrence when to update contact information, such as the start of hurricane season, the beginning of the calendar year, or after conducting exercises.	<i>Planning</i>

Identify Response Roles and Responsibilities in the Utility’s Organization

<u>Actions</u>	<u>NIMS/ICS Function</u>
<input type="checkbox"/> Establish a chain of command and line of succession plan so decision-making authority is clear and responsibilities can be carried out confidently even if usual decision-makers are not available. Regularly update the chain of command and line of succession and ensure that personnel in the line of succession know the circumstances under which it is their responsibility to assume command. Establish a time or occurrence to update the chain of command and line of succession, such as the start of hurricane season, the beginning of the calendar year, or after conducting exercises.	<i>Management</i>
<input type="checkbox"/> Identify primary and alternate staff for each key position and those responsible for responding to incidents, including primary and alternate assignments for each NIMS or ICS function (management, planning, operations, logistics, and finance).	<i>Management</i>
<input type="checkbox"/> Establish protocols to collect and manage incident information, such as sampling and analysis results and incident status reports, and ensure the utility can make this information available to the incident commander, other incident response managers, local community EOC, and utility management if needed.	<i>Operations and Planning</i>
<input type="checkbox"/> Establish an incident notification flow chart clearly identifying key staff and response partners to contact. Record contact information and update it frequently.	<i>Planning</i>

Ensure Resources to Maintain Minimum Operations

<u>Actions</u>	<u>NIMS/ICS Function</u>
<input type="checkbox"/> Develop utility procedures, including easily understood checklists and/or flowcharts to identify and document: <ul style="list-style-type: none"> <input type="checkbox"/> What is damaged and how; <input type="checkbox"/> What services the utility can still safely deliver; <input type="checkbox"/> What is needed to restore minimal service; <input type="checkbox"/> What is needed to recover to full service; <input type="checkbox"/> How long these different stages of recovery will take; and 	<i>Planning</i>

<u>Actions</u>	<u>NIMS/ICS Function</u>
<input type="checkbox"/> What resources the utility has on hand and what additional resources it needs.	
<input type="checkbox"/> Identify the minimum resources (including personnel) the utility needs to maintain minimum operations and essential services and also identify how long the utility can maintain those operations/services without outside help. The utility should be able to maintain operation s/services on its own for at least 72 hours.	<i>Operations and Planning</i>
<input type="checkbox"/> Identify key interdependencies with other sectors such as power generation, telecommunications, and chemical suppliers; consider how the utility would maintain minimum services and essential operations if another sector were to be out of service during an incident.	<i>Operations and Planning</i>
<input type="checkbox"/> Develop an internal protocol for when to activate WARN, other mutual aid arrangements, and emergency contractors. Also consider what procedures need to be in place at each utility facility to provide aid to another utility through the WARN system or other mutual aid agreements.	<i>Management</i>
<input type="checkbox"/> Establish policies to authorize expenditures for supplies and other necessary equipment during a response. This might include pre-authorization s of certain expenditures or establishing emergency accounts or contracts with suppliers or contractors. Mark all emergency-related contracts and pre-authorization s clearly so staff can find them quickly.	<i>Management and Finance</i>
<input type="checkbox"/> Establish a protocol to increase the amount of cash the utility has on hand during an incident and increase limits on employee credit cards (if applicable) to facilitate purchase of supplies/equipment during response.	<i>Finance</i>
<input type="checkbox"/> Establish a utility Emergency Operations Center or Departmental Operations Center (DOC) for the utility. This is a location where key utility employees would meet during an emergency to manage the response. The utility EOC/DOC should contain copies of all key documents and should be equipped with all of the communication systems that a utility would plan to use during an incident. It is prudent to also establish a backup EOC/DOC in the event the primary EOC/DOC is inaccessible during an incident.	<i>Management</i>

Create Backup Plans for Key Functions and Resources

<u>Actions</u>	<u>NIMS/ICS Function</u>
<input type="checkbox"/> Document the skills and training of each utility employee (including equipment they are authorized to operate) and promote cross-training for key operators, responders, and emergency management functions. For smaller utilities this may mean that a single employee learns multiple response functions.	<i>Operations</i>
<input type="checkbox"/> Establish backup communications networks to check on facilities that rely on telemetry	<i>Logistics</i>

<u>Actions</u>	<u>NIMS/ICS Function</u>
or other systems to manage operational systems and to communicate with utility incident command staff, partner utilities, primary agencies and response partners if normal lines of communication are down.	
<input type="checkbox"/> Provide key utility management and staff with radios or other alternate means of communication so they can contact key facilities during an incident even if normal communication lines are down and they cannot go to the facility in person (e.g., because roads are impassable).	<i>Logistics</i>
<input type="checkbox"/> Develop alternative communications networks, including potentially a “face to face” communications network (i.e., sending a utility staff person out in a vehicle to communicate with the EOC or first responders), for use when technology-based systems have failed.	<i>Management</i>
<input type="checkbox"/> Create a contingency plan for acquisition of key resources; for example, participation in a WARN or other mutual aid network, identifying suppliers out of the immediate geographical area and entering into contracts with them in advance of an incident. Resource typing considerations must be included. Information on resource typing is available at http://www.tawwa.org/AWWA%20Resource%20Typing%20Manual.pdf . ⁷	<i>Logistics</i>
<input type="checkbox"/> Prepare plans to provide for fire suppression (if this has been affected) and alternative sources of potable drinking water and wastewater facilities, if needed.	<i>Planning</i>
<input type="checkbox"/> Ensure the utility is prepared to receive equipment and/or personnel support during an incident, for example, through appropriate site preparation, equipment interoperability procedures and start-up/shut-down checklists.	<i>Operations</i>
<input type="checkbox"/> Determine generator needs for each facility in case of extended power outage. Calculate power load requirements and install appropriate quick connects and switch gear for portable generators.	<i>Logistics</i>
<input type="checkbox"/> Determine whether adequate fuel supply exists on-site to run generators for critical systems and for how long. For diesel generators, the typical consumption rate is typically 2.5 gallons per hour for every 10kW generated.	<i>Logistics</i>

⁷ AWWA. Water & Wastewater Mutual Aid & Assistance Resource Typing Manual. April 2008. <<http://www.tawwa.org/AWWA%20Resource%20Typing%20Manual.pdf>>

Identify and Safeguard Key Utility Information for Response and Business Continuity

<u>Actions</u>	<u>NIMS/ICS Function</u>
<input type="checkbox"/> Identify key utility information and vital records, including descriptions of the system, electronic and hard copy maps, as-built drawings, deeds, site plans, and schematics with GPS locations of key infrastructure, system capabilities, and emergency resources such as backup power supplies, and redundant facilities.	<i>Planning</i>
<input type="checkbox"/> Identify key business systems, such as financial records and billing systems that will be needed to continue operations during an incident.	<i>Finance</i>
<input type="checkbox"/> Catalog and prioritize all utility control systems. Determine which control systems should be restored first in an emergency.	<i>Operations</i>
<input type="checkbox"/> Back up key utility information, vital records, and key business systems. Ensure the utility has access to these records and systems during an incident, for example, if an emergency were to make it impossible to reach utility facilities. Maintain paper copies of key information at multiple safe locations. Backed up digital data also should be stored off-site at safe locations.	<i>Operations, Logistics and Finance</i>
<input type="checkbox"/> Create a master employee list to share with first responders and emergency managers.	<i>Operations and Logistics</i>
<input type="checkbox"/> Provide staff with an official utility ID for access through police or hazmat zones or to allow movement in quarantine areas.	<i>Operations and Logistics</i>

Understand and Plan for Cost Reimbursement Procedures

<u>Actions</u>	<u>NIMS/ICS Function</u>
<input type="checkbox"/> Understand the protocols and requirements for cost reimbursement through insurance, WARN or other mutual aid agreements, and state disaster assistance programs. Ensure the utility knows what records and information will be needed to support reimbursement claims. Prepare electronic collection forms as needed to gather cost and time documentation.	<i>Finance</i>
<input type="checkbox"/> Research, understand, and prepare plans and protocols to follow the requirements identified in mutual aid agreements that may be used during local or regional incidents.	<i>Finance</i>
<input type="checkbox"/> Understand the utility's own insurance deductible, coverage, and obligations.	<i>Finance</i>
<input type="checkbox"/> Incorporate collection of cost reimbursement information (including receipts and time sheets) into the utility's response and recovery protocols.	<i>Finance</i>
<input type="checkbox"/> Develop procedures, forms, and protocols to ensure the utility collects necessary information on all response actions and expenditures (including personnel, equipment, and supplies) from the beginning of the response.	<i>Finance</i>

Train and Practice and Improve the Utility's Emergency Response and Recovery Plans Over Time

<u>Actions</u>	<u>NIMS/ICS Function</u>
<input type="checkbox"/> Implement a program/policy to support the continuous cycle of planning, training, equipping, exercising, evaluating, and taking actions to reduce potential consequences so the utility becomes better prepared and more resilient over time.	<i>Management</i>
<input type="checkbox"/> Create training and exercise plans to prepare staff and managers to carry out response actions. This could include innovative training approaches such as job shadowing and just-in-time training.	<i>Logistics</i>
<input type="checkbox"/> Establish protocols for post-incident assessments, including lessons learned and steps to take to prevent recurrence or reduce impacts, and document successes. Prepare a list of questions to ask during After Action Reviews and draft outlines of what to include in an After Action Report. Please see the FEMA HSEEP website at: https://hseep.dhs.gov/pages/1001_HSEEP7.aspx for more information. ⁸	<i>Planning</i>
<input type="checkbox"/> Ensure there are documented procedures in place to carry out the reimbursement process and file appropriate insurance or post-disaster public assistance claims. Please see the FEMA Applicant Handbook website at: http://www.fema.gov/government/grant/pa/apphandbk.shtml for more information. ⁹	<i>Finance</i>

Establish Protocols for Communication with the Public

<u>Actions</u>	<u>NIMS/ICS Function</u>
<input type="checkbox"/> Establish crisis communication procedures and key messages for each consequence. Information on message mapping can be found on the EPA website at http://www.epa.gov/nhsrc/news/news040207.html . ¹⁰	<i>Management</i>
<input type="checkbox"/> Establish procedures for warning customers, employees, contractors, visitors, and others who might not be familiar with the facility's warning system and what the warnings mean.	<i>Management</i>
<input type="checkbox"/> Establish procedures for providing the public with information as required by state primacy agencies and necessary under the Public Notification Rule. ¹¹ EPA's Public Notification Handbook provides an explanation of EPA's Public Notification Rule and	<i>Management</i>

⁸ US DHS. FEMA Homeland Security Exercise and Evaluation Program. <https://hseep.dhs.gov/pages/1001_HSEEP7.aspx>

⁹ US DHS. FEMA Applicant Handbook. <<http://www.fema.gov/government/grant/pa/apphandbk.shtml>>

¹⁰ US EPA Homeland Security Research. Message Mapping. <<http://www.epa.gov/nhsrc/news/news040207.html>>

¹¹ US EPA. National Primary Drinking Water Regulations: Public Notification Rule. 4 May 2000. State primacy agencies may have alternate or more detailed requirements. <<http://www.epa.gov/ogwdw/dwa/course-ndwr.html>>

<u>Actions</u>	<u>NIMS/ICS Function</u>
<p>provides examples of effective public notices along with templates. For more information, please see the Revised Public Notification Handbook website at: http://www.epa.gov/ogwdw000/publicnotification/pdfs/guide_publicnotification_pnhandbook.pdf.¹²</p>	
<p><input type="checkbox"/> Identify and document contact information for critical customers and sensitive subpopulations. Critical customers and sensitive populations could include, but are not limited to, hospitals, fire stations, schools and universities, and group elderly housing/care facilities.</p>	<i>Planning</i>

Be Prepared to Continue Operations During Recovery

<u>Actions</u>	<u>NIMS/ICS Function</u>
<p><input type="checkbox"/> Prepare procedures for drafting multiple transition staffing plans such as: initial responder relief, management of ongoing day-to-day operations, managing longer-term recovery, and mitigation planning. In an incident of any complexity or size, the recovery effort may need dedicated staff.</p>	<i>Logistics</i>
<p><input type="checkbox"/> Research and maintain documents required to obtain permits for construction, wastewater discharges, and/or other regulatory authorizations that might be needed during recovery.</p>	<i>Planning</i>
<p><input type="checkbox"/> Determine what skill sets and certifications are needed to start and run critical equipment and note the personnel who meet the requirements. Cross-train staff to ensure availability of employees with essential skills; this includes having the appropriate number of certified operators to operate the facility during staff shortages.</p>	<i>Operations, Logistics</i>
<p><input type="checkbox"/> If not already written, consider developing start/connect checklists specific to individual equipment and make them accessible to staff and emergency response personnel. This is especially helpful if an emergency responder or untrained utility staff person has to operate the equipment and not a trained utility staff person.</p>	<i>Operations</i>
<p><input type="checkbox"/> Consider developing site-specific expedient training videos on how to perform critical tasks that can be viewed by personnel who do not normally perform those tasks. Training videos can be as simple as a recording of staff performing critical tasks.</p>	<i>Logistics</i>

¹² US EPA. Revised Public Notification Handbook. March 2007. http://www.epa.gov/ogwdw000/publicnotification/pdfs/guide_publicnotification_pnhandbook.pdf

Be Prepared to Support Employees During an Emergency

<u>Actions</u>	<u>NIMS/ICS Function</u>
<input type="checkbox"/> Maintain food, potable water, first-aid, and other emergency supplies at all facilities where personnel work.	<i>Logistics</i>
<input type="checkbox"/> Sheltering-in-place may be required during certain types of emergencies, including severe weather, chemical release, terrorist/hostile attack, and civil unrest. Review, document, and practice how to turn off HVAC with outside air exchange systems such as air conditioners. (See Figure 3.)	<i>Logistics</i>
<input type="checkbox"/> Encourage employees to have personal emergency preparedness plans in order and establish protocols to help employees working in an emergency check on the safety of their families. This may include providing model family emergency plans for employees to use. (See Figures 5 and 6.)	<i>Management</i>
<input type="checkbox"/> Document emergency contact information for all utility staff and keep it with the utility's emergency response and recovery plans. (See Figure 4.)	<i>Planning and Logistics</i>