

City of San Augustine

Emergency Preparedness Plan

Citywide Operations Basic Plan

Appendix 1 – City of San Augustine Water System

Emergency Preparedness Plan

Initial Submission by Jeaneyse L. Mosby Date July 18, 2022
Jeaneyse L. Mosby City Manager

Approved by Council _____





City of San Augustine
Emergency Preparedness Plan

Citywide Operations Basic Plan

Approved _____
by
City Council

Signed by:

Leroy Hughes, Mayor

Attested by:

Wylma Hewett, City Secretary

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1. Introduction

This Emergency Preparedness Plan – “Citywide Basic Plan” for the City of San Augustine supersedes and rescinds all previous versions of any Emergency Preparedness Plan the City of San Augustine may have in place.

This Plan and any related Annexes shall have the all departments reviewed by the City Manager’s office annually to be updated as necessary, and submitted to the Texas Division of Emergency Management (TDEM) for certification and Texas Commission on Environmental Quality (TCEQ) for certification.

In the event that any portion of this Plan is held invalid by judicial or administrative ruling, such ruling shall not affect the validity of the remaining portions of the Plan.

The City Manager may develop and distribute minor changes to this plan. Major revisions and recertification of this plan must be approved by the City Council and must signed by the Mayor of the City of San Augustine.

1.1 PURPOSE

The City of San Augustine Emergency Preparedness Plan (EPP) applies to all areas with the incorporated city limits of the City of San Augustine. This Citywide Basic Plan, along with its Annexes, are the components of the EPP that was developed to provide the general and conceptual framework for efficient use during a major emergency or disaster. The plan also provides for the city to coordinate efficient use of outside resources during a major emergency or disaster. The EPP is establishes the framework for how the City of San Augustine responds to disasters, regardless of the initial cause or hazard.

The EPP is meant to provide the guidance, framework, and insight into City-wide strategic decision making as it relates to emergency operations and disasters.

This plan will used as a reference when integrating internal plans and emergency-related standard operating procedures (SOP’s) and emergency-related orders.

The EPP will be used as a timely resolution that may arise during pre-disaster hazard mitigation and to lessen the effects of known hazards, during pre-disaster preparedness activities to enable to the City’s capability to respond to a disaster, during the actual response of a disaster, and/or during the post-disaster recovery process.

The EPP contains concepts, policies, and procedures that apply regardless of the nature or the origin of the emergency or disaster. Although the EPP does not address unique conditions that may arise from a particular hazard, emergency or disaster, it does, however, provide a framework and guideline for City department staff to work together to maintain hazard-specific plans and procedures.

Listed below are the things that the EPP addresses:

- Overview of the Emergency Preparedness Plan.
- Authority of the Emergency Preparedness Plan.
- Emergency powers of local government, including the declaration of local disaster emergency.
- The chain of command for disaster operations.
- Incident management organization.
- The functions of the Emergency Preparedness Center (EPC).
- Development of training and exercises of departmental emergency plans.
- Help create departmental emergency checklists.
- The requirement for all City Departments to contribute to the development of functional and hazard-specific Annexes of this plan.
- The responsibility of each Department or agency Head to be familiar with the detailed emergency plans that support the city-wide Basic Plan of the EPP.
- Requesting external resources and Mutual Aid Assistance.
- The administrative procedures for maintaining and updating emergency plans.
- Authorities and References

The organizational and operational concepts contained in this plan are set forth on the basis of the following authorities:

- **BE SURE TO NAME AUTHORITIES--- SB--- and ANY OTHER AUTHORIES**

The EOP meets the requirements of the following State – required Annexes:

- **LIST THOSE REQUIREMENTS**

1.2 SITUATION

The City of San Augustine is located in San Augustine County and is the county seat of San Augustine County spanning over five (5) miles. The current population after the 2020 census is 1,852 making us the 634th largest city in Texas. The average household income in San Augustine is \$48,686. The poverty rate in San Augustine is 27.40%. The demographic racial composition of San Augustine, according to the most recent ACS, is as follows:

- Black or African American 45.69%
- White 44.79%
- Two or more races 8.79%
- Asian 0.74%
- Native American; Native Hawaiian or Pacific Islander; and other race 0.00%

San Augustine has a population density of 393 people per square mile with a total of 781 Residential electrical connections; 264 Commercial electrical connections; 895 Residential water connections; 199 Commercial water connections; six (6) Wholesale Water connections; 621 Residential sewer connections; and 161 Commercial sewer connections according to the

April 29, 2022 billing cycle. Of the connections mentioned, the Commercial accounts include four (4) nursing facilities; several food facilities; the major grocery shopping facility; one (1) hospital; one (1) dialysis; and the entire San Augustine ISD locations.

1.2.1 Weather

San Augustine experiences weather conditions that include hurricanes even though they are located inland and tornadoes during those seasons, severe thunderstorms which can include hail, effects of tropical storms and has had colder winter weather recently.

Depending on the severity of the weather condition there can be city-wide outages or partial outages for both the electrical distribution and the water distribution.

San Augustine is a pass through for persons who may have to evacuate due to hurricanes from the Beaumont area and Houston Area, but is now a designated evacuee location.

The water distribution has been affected by drought as well.

1.2.2 Transportation Routes

There is a railroad right-of-way that goes through the City of San Augustine operated by Timberrock Railroad that travels parallel to the Ayish Bayou. The trains may carry bulk shipments of an array of hazardous materials.

There are two (2) main state highways that run through the city. The corridors are State Highway 96 (El Camion Crossing with the city limits), State Highway 147 N and State Highway 147 S (Broadway Street) and State Highway 21 (Main Street and then after the intersection of Columbia Street and Main Street where it becomes Columbia Street)

State Highway 96 runs through San Augustine adjacent to the majority of the eating facilities and nursing facilities; and State Highway 147 North runs adjacent to the San Augustine ISD High, Middle and Elementary Schools; and State Highway 21 run along the Elementary School and a nursing facility and the San Augustine Courthouse; State Highway 147 S crosses the railroad tracks and the Ayish Bayou at one point and also runs adjacent to the Wastewater Treatment plant for a short distance.

1.2.3 Utilities

The City of San Augustine is purchasing its electricity from the Deep East Texas Electric Coop and has two metering points one (1) on the East side of town located FM 353 (Patroon Road) and one (1) on the West side of town adjacent to the intersection of State Highway 96 and State Highway 21.

The city produces its own water at the Water Treatment Plant located on FM 2213; and has a Wastewater Treatment Plant located on FM 147 which can have a reasonable amount of chemicals such as chlorine and other potentially hazardous chemicals.

Because of the weather conditions the City of San Augustine is subject to, there can be extensive and lengthy failures of electrical power and other utilities.

1.3 ASSUMPTIONS

The City of San Augustine is preparing this City-wide Basic Plan under the assumption that in the event of an emergency or disaster, the city will have enough resources for this plan to be implemented.

If the emergency or disaster is of a large enough scale, the city can request Mutual Aid through Texas Public Power Association and other cities within the state will come with their resources or other states if the emergency or disaster is state wide. The assistance is normally personnel and equipment. Any state or federal assistance, if approved, will generally be in the form of financial reimbursement and requires a thorough and intensive application process.

The City of San Augustine is included in the San Augustine County Hazard Mitigation Plan.

1.4 HAZARD AND RISK INDEX

The City of San Augustine has the possibility of being impacted by potential natural and man-made hazards that have been identified and assessed. These hazards have been identified upon past history and national data sources. They are as follows in order of hazard level.

HAZARD	HAZARD LEVEL
Hurricanes /Tropical Storms	Relatively High
Extreme Heat / Heat Wave	Relatively High
Tornado	High
Infectious Disease (Pandemic)	High
Thunderstorms	High
Wind	High
Lightning	High
Hail	Relatively Moderate
Winter Weather / Ice Storms	Relatively Moderate
Flooding	Moderate
Drought	Moderate
Wildfire	Relatively Low
Earthquake	Low

1.5 HAZARDS DEFINED

Additional details on the hazards that could potentially impact the City of San Augustine is given in the following section.

1.5.1 Hurricanes / Tropical Storms

Hurricanes are large, swirling storms and produce winds of 74 mph or higher. Although the City of San Augustine is not located adjacent to the Texas Coast, Hurricanes and tropical storms are a hazard. The higher the category, the more damage can be sustained from a hurricane's strong winds and can be felt in the city. In addition to winds, tropical storms can produce heavy rains and tornadoes. "Hurricane Season" begins on June 1 and ends on November 30; however, they have been known to occur outside of this time frame. San Augustine is not a city that provides shelter for coastal evacuees, but can experience high traffic on Hwy. 96 from those passing through.

Hurricanes can cause outages in electrical services; and with water and wastewater treatment plants.

1.5.2 Extreme Heat / Heat Wave

The City of San Augustine can experience extreme temperatures in the summer, when the summers are hot. Temperatures are rarely above 98 degrees Fahrenheit. The heat index can be high from mid-June to until early October. Heat advisories can be put in effect. If outside events can be rescheduled to avoid strenuous activities is best or take extra precautions. The signs and symptoms of heat exhaustion and heat stroke should be known, and lightweight and loose-fitting clothing should be worn when possible. To reduce risk when working outdoors, the Occupational Safety and Health Administration recommends scheduling frequent rest breaks in shaded or air-conditioned environments. Extreme Heat can be taxing on electrical infrastructure as well.

1.5.3 Tornado

Texas can a high average of tornadoes a year. Tornado Season is normally in the months of April, May, and June, but can occur in any month of the year. Although San Augustine is not in "Tornado Alley Map" we are loose-fitting shown in the "Dixie Alley Map" Tornadoes can cause destruction to powerlines causing areas to be without electrical services for up to days, which can impact water and wastewater plants providing those services.

1.5.4 Infectious Disease (Pandemic)

Infectious disease spread can cause a pandemic that can change how the entire world operates. The City of San Augustine may not be in the middle of an area that a pandemic reaches first, but can still be touched because we have people that are going to areas that may be easily reached and returning; as well as people leaving easily reached locations coming to this area.

1.5.5 Thunderstorms; Winds; Lightning; and Hail

Thunderstorms normally have strong winds, and often produce heavy rains, sleet, or hail. Lightning can also be produced. Because they are a norm for our area, they are a high hazard. These storms can also produce tornadoes. As with any storm and the fact out electrical lines are in the air, the accompanied winds can be a danger for our electrical infrastructure. The wind, sleet and hail can cause damage to property.

1.5.6 Winter Weather / Ice Storms

Although the majority of winters in San Augustine do not have severe cold extreme winter weather and ice storms conditions can occur. Sever winter weather can include freezing rain, ice, and occasionally snow. Freezing precipitation can accumulate and cause tree limbs to fall on power lines, poles to break resulting in outages; communication outages, water pumps at water treatment plants to freeze which causes water shortages or outages. Personal property can be damaged as well. Road conditions become dangerous, and because we do not have severe winter weather that last for long periods is extreme situations traffic accidents occur.

1.5.7 Flooding

Flash flooding can occur when heavy rains comes fast and the soil does not have time to absorb it in. Our low areas and bayou can experience too much rain water at one time causing dangerous road conditions and over flowing and problems for our wastewater infrastructure. 100-year flood caused havoc for our city when it happened impacting traveling conditions and flooding of homes and businesses.

1.5.8 Drought

Should a drought occur the water resources are adversely impacted. The city has a drought contingency plan in place. Local farmers are impacted as well. Dry or dead vegetation increases our normal low hazard risk of wildfires. Wildfires can cause loss of wildlife life; trees; homes. If a drought lasts for months or years all of the impacts are intensified and cause a drain on resources.

1.5.9 Earthquake

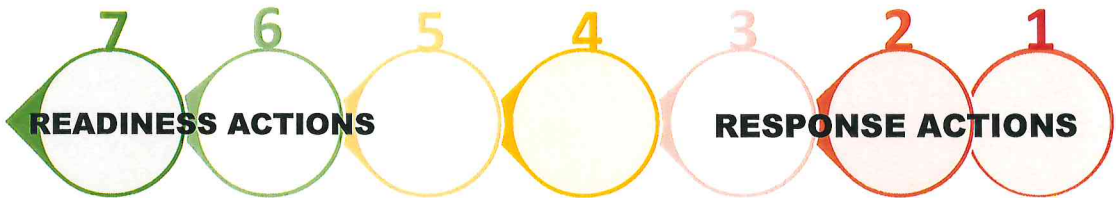
An earthquake is a very low hazard risk but nearby places having experienced them in the years and months past. The San Augustine area has experience one as well it was of a low magnitude.

2. Organizational Concepts

2.1 OPCON – LEVELS OF EMERGENCY

Emergencies can occur with a split second or you can have an opportunity to make plans before they happen or as they happen. In either occurrence, an established operating condition system should be in place to help each individual involved have a handy check list a visual picture of what each department needs to be doing and on the same level and mindset of the severity of the situation. Although each department will have, they own internal actions that need to be attended to, their readiness and actions should be on the same level.

The City Manager will notify department heads when OPCON levels change as the emergency severity intensifies or declines.



City of San Augustine Preparedness Conditions Levels

OPCON	DEFINITION	DESCRIPTION
7	<i>Day to Day</i>	<p>Departments will be operational on a normal basis of regular job duties. Any hazards that happen would be minimal and will be handled by the departments. There will be no requirement for coordination beyond what may occur between of the city departments.</p> <p>It should always be the intension of the departments to practice preventive measures of possible hazards, make sure personnel is trained, and should an hazard occur be ready to evaluate and identify such hazards.</p>
6	<i>Potential Threat</i>	<p>This will be when a weather alert has been received of hazard weather conditions; an event is planned within or on the outskirts of the city that could bring an unordinary number of people into the city, school events or any such</p>

OPCON	DEFINITION	DESCRIPTION
<p style="text-align: center;">6</p> <p>Continued</p>		<p>occurrence which would cause the monitoring stage of operations and preparedness.</p> <p>All equipment and supplies will be check and made readily available and or extra man power put on standby because of a potential significant impact of city services and operations to the community.</p>
<p style="text-align: center;">5</p>	<p style="text-align: center;"><i>Likely Threat</i></p>	<p>This will be when the alert stage of an event is occurring and signs of the likely threat have developed. Weather conditions are progressing and timeline of a the alerted potential impact to city operations will more than likely occur.</p> <p>Departments are doing internal emergency preparedness and readiness actions and have a check list readily handy for when the impact occurs.</p> <p>Departments will know they will need to respond even if communication is interrupted in a timely manner but with the safety of themselves at a priority.</p>
<p style="text-align: center;">4</p>	<p style="text-align: center;"><i>Limited or Pre-Planned Event</i></p>	<p>A pre-planned event would be if levels 3, 2, or 1 have occurred and impacted the community and things are returning to somewhat normal daily activities for</p> <ul style="list-style-type: none"> ▪ some or all of the city departments, other agencies and community ▪ but there is still the need in the community to assist with them receiving water, hygiene items, food or any other items that are being distributed and a joint coordination is needed among agencies for this special event. <p>The distribution of meals to personnel assisting with Mutual Aid is being conducted.</p> <p>For these special events then the Event Operations Center (EvOC) will or could be activated either within the Fire Hall bay area or on the premises close by.</p> <p>Normally these events will have a time span for only a few hours.</p>

OPCON	DEFINITION	DESCRIPTION
3	<i>Significant Event</i>	<p>This would be an event that has occurred,</p> <ul style="list-style-type: none"> ▪ but the City's infrasture has not been impacted significantly ▪ or the event has impacted other agencies in the surrounding community and the resource capabilities of the City and those agencies impacted will be obtained by them locally first with the possibility of an additional regional or State resources being requested. <p>The EOC may be activated as well as any annexes that the city may own.</p> <p>A Declaration of Local Disaster is anticipated from the County Judge.</p>
2	<i>Major (Disaster) Event</i>	<p>Resources of the City of San Augustine will be taxed greatly and likely exceeded because of this event or disaster. Restoration of normal services and activities will occur over a period of days with some response actions requiring weeks or months.</p> <p>The EOC will be activated along with the EvOC being utilized if necessary and any annexes that the city may own.</p> <p>The City Manager's office and office staff will be on high alert.</p> <p>A Declaration of Local Disaster will be likely declared by the County Judge.</p>
1	<i>Catastrophic Event</i>	<p>Resources of the City of San Augustine will be exhausted and response actions will exceed that of local resource capabilities. Actions to restore to normanicy will take place over a period of weeks or longer. Recovery actions will continue for months or even possibly years.</p> <p>The EOC will be activated along with the EvOC being utilized if necessary and any annexes that the city may own.</p> <p>The City Manager's office and office staff will be on high alert.</p> <p>A Declaration of Local Disaster will be declared by the County Judge.</p>

2.2 CITY OF SAN AUGUSTINE EMERGENCY MANAGEMENT

City of San Augustine Emergency Management falls under the San Augustine County Emergency Management. It is the responsibility of the San Augustine County OEM to develop and implement a comprehensive Emergency Management Plan, with the mission of providing a safe and secure environment to the residents and businesses of San Augustine County.

The Emergency Management Plan defines who does what, when, where and how, in order to:

- mitigate the effects of a hazard
- prepare for measures to be taken which will minimize damage,
- respond during emergencies and provide whatever aid and assistance is necessary,
- establish a recovery system in order to return the community to its normal state of affairs.

2.2.1 Authority of the Mayor

The Mayor is the presiding officer of the City Council and the Emergency Management Director giving the Mayor the authority to appoint the Emergency Management Coordinator as stated in Section 1.02.031 of Article 1.02 Emergency Management Division 2 in Chapter 1 General Provisions of the Code of Ordinances for the City of San Augustine, but EMO for San Augustine County is the County Judge. The Mayor and City Manager are listed on the San Augustine County Emergency Management Contact List.

When the Mayor makes a Declaration of Local Disaster and exercises the power of that office, the City Manager will execute the orders as directed by the Mayor.

The director shall be responsible for a program of comprehensive emergency management within the city and for carrying out the duties and responsibilities set forth in this division. He/she may delegate authority for execution of these duties to the coordinator, but ultimate responsibility for such execution shall remain with the director.

The operational emergency management organization of the city shall consist of the officers and employees of the city so designated by the director in the emergency management plan, as well as organized volunteer groups. The functions and duties of this organization shall be distributed among such officers and employees in accordance with the terms of the emergency management plan.

2.2.2 Powers and Duties of the Mayor as Emergency Management Director

The Emergency Management Program states the duties and responsibilities of the emergency management director shall include the following:

- Conduct an ongoing survey of actual or potential hazards which threaten life and property within the city and an ongoing program of identifying and requiring or recommending the implementation

of measures which would tend to prevent the occurrence or reduce the impact of such hazards if a disaster did occur.

- Supervision of the development and approval of an emergency management plan for the city, and shall recommend for adoption by the board of aldermen all mutual aid arrangements deemed necessary for the implementation of such plan.
- Authority to declare a local state of disaster. The declaration may not be continued or renewed for a period in excess of 7 days except by or with the consent of the board of aldermen. Any order or proclamation declaring, continuing, or terminating a local state of disaster shall be given prompt and general publicity and shall be filed promptly with the city secretary.
- Issuance of necessary proclamations, regulations, or directives that are necessary for carrying out the purposes of this division. Such proclamations, regulations, or directives shall be disseminated promptly by means calculated to bring the contents to the attention of the general public and, unless circumstances attendant on the disaster prevent or impede, promptly filed with the city secretary.
- Direction and control of the operations of the city emergency management organization as well as the training of emergency management personnel.
- Determination of all questions of authority and responsibility that may arise within the emergency management organization of the city.
- Maintenance of liaison with other municipal, county, district, state, regional or federal emergency management organizations.
- Marshaling of all necessary personnel, equipment or supplies from any department of the city to aid in the carrying out of the provisions of the emergency management plan.
- Supervision of the drafting and execution of mutual aid agreements, in cooperation with the representatives of the state and of other local political subdivisions of the state, and the drafting and execution, if deemed desirable, of an agreement with the county in which the city is located and with other municipalities within the county, for the county-wide coordination of emergency management efforts.
- Supervision of, and final authorization for, the procurement of all necessary supplies and equipment, including acceptance of private contributions, which may be offered for the purpose of improving emergency management within the city.
- Authorizing of agreements, after approval by the city attorney, for use of private property for public shelter and other purposes.
- Survey of the availability of existing personnel, equipment, supplies, and services which could be used during a disaster, as provided for herein.
- Other requirements as specified in the Texas Disaster Act of 1975, Vernon's Texas Codes Annotated, Government Code chapter 418.

3. Concept of Operations

This EOP addresses a range of emergencies from relatively minor incidents to large scale disaster. There are disasters that provide enough warning for departments to provide a warning to the public and implement mitigation measures to prevent or reduce damages to life, property and effects on the environment. Other instances arise with little or no advance warning which causes the immediate activation of the EOP. All departments of the City of San Augustine are expected to react promptly and effectively respond to all emergencies taking the necessary actions. This can include assisting other departments with mutual aid.

4. Administration Support

4.1 Maintaining Log Requirements

All departments will maintain an overall incident log for each major incident. The detailed records on disaster – related expenses shall include but are not limited to the following:

- Labor
 - Paid (regular and overtime)
 - Volunteer Hours
- Equipment Used
 - City owned
 - Rental / Leased
 - Volunteered
- Materials
 - Purchased
 - Taken from Inventory
 - Volunteered
- Contracts
 - Mutual Aid
 - Services
 - Repairs

The purpose to maintain an incident log is to help administration after the recovery with providing information to FEMA, TDEM or any other agency that may need this information to help obtain assistance if provided.

5. Plan Development and Maintenance

The City of San Augustine EOP applies to the City of San Augustine and its incorporated areas and its property that lies outside of the incorporated areas. This EOP is made up of the Basic Plan and Appendix 1 Emergency Preparedness Plan the City's Water System TX2030001.

- Basic plan
 - The Basic Plan is the strategic document that outlines the general operations for departments during a major emergency or disaster. The Basic Plan provided guidance for the multiple departments of the City of San Augustine.
- Appendix 1 Emergency Preparedness Plan for City of San Augustine Water System
 - This EPP for the City of San Augustine Water System provides the framework for the management of operations related to this Water System.

Both the Basic Plan and the EPP for the City of San Augustine will be updated as required by the State of Texas, the Public Utilities Commission, or as other State or Local emergency agencies require.

City of San Augustine Water System Emergency Preparedness Plan

Appendix 1

General Information

Water System Name:	City of San Augustine
PWS ID No. (if applicable):	2030001
District No. (if applicable):	
County:	San Augustine County
CCN No. (if applicable):	CN600630289
Owner:	City of San Augustine
Prepared by:	Jeaneyse L. Mosby
Preparer's Phone No.:	936-275-2121
Preparer's Email:	Jeaneyse.mosby@cityofsanaugustinetx.gov
Preparer's Mailing Address:	301 South Harrison Street
Preparer Title:	City Manager
Preparer's Organization:	City of San Augustine
Expected Completion Date for EPP Plan Implementation:	Currently Implemented

Option(s) Chosen:

1. Refer to Section III-ALTERNATE POWER OPTIONS OVERVIEW.

Circle **all** Option(s) that will provide emergency operations during extended power outages lasting more than 24 hours for this affected utility.

1 2A 2B 3A 3B 4 5 6 7 8A 8B 9 10A 10B 11 12 13 14

2. Short Explanation of Proposed Emergency Preparedness Plan (i.e., *Using portable generator to power 2 out of 3 wells*): The generator that is currently in place is permanently installed with an automatic start. It cycles on every two (2) weeks so any problems can be detected prior to the need for using the generator.
3. Will this plan provide for 20 pounds per square inch (psi) of pressure to all your direct customers during a power outage lasting more than 24 hours caused by a natural disaster? Yes
4. Is a timeline to implement the plan (TWC 13.1394(b)(2)(B)) provided as an attachment?

I certify, under penalty of law, that all the information provided herein is true and accurate to the best of my knowledge.

Signature: _____ Title City Manager

Date July 18, 2022

UPDATES TO EMERGENCY PREPAREDNESS PLAN (EPP)

The EPP is updated as changes occur such as dictated by personnel, phone numbers, water plant additions, modifications, and serving additional water systems.

Record updates below:

Last Updated By	Title	Purpose (page #s)	On (Date)
Jeaneyse L. Mosby	City Manager	Filing of Plan	July 18, 2022

SECTION I – INTRODUCTION

1. APPLICABILITY

This emergency preparedness plan template was developed for the operators and administrators of affected utilities to comply with the requirements for “affected utilities” in Texas Water Code, Section 13.1394 as required by Senate Bill 3 (SB 3) and to demonstrate the affected utility’s ability to provide emergency operations during extended power outages lasting **more than 24 hours**.

An ***affected utility*** is a retail public utility, exempt utility, or provider or conveyer of potable or raw water service that furnishes water service to more than one customer, provides overnight accommodations, and is **not** an affected utility under Texas Water Code, Section 13.1395. An ***extended power outage*** means a power outage lasting more than 24 hours.

If you believe that you are NOT an affected utility please email PDWEPP@tceq.texas.gov to ensure that the requirements do not apply to the water system.

Describe Your Water System. Check all that apply.

Residential Commercial Industrial Wholesale Institution

Is This EPP For An Existing or Proposed Water System?

2. CONTACT INFORMATION

During any type of emergency, the following person(s) will be responsible for the water system (contact will be attempted in the order indicated):

Name	Title in the Organization	E-mail	Office Phone Number	Cell Phone Number	Home Phone Number	Other Phone Number
Chris Anding	Superintendent	Chris.anding@cityofsanaugustinetx.gov		936-201-4985		
Joey Dickerson	Supervisor	Joey.dickerson@cityofsanaugustinetx.gov		936-201-6278		
Jeremy Lynch	Operator	Jeremy.lynch@cityofsanaugustinetx.gov		936-201-6389		
Jeaneyse L. Mosby	City Manager	Jeaneyse.mosby@cityofsanaugustinetx.gov		936-288-6770		936-201-7037

3. Location of Maps

The maps are not required to be submitted to TCEQ for review of the EPP but should be available in case of an emergency to enable staff to locate valves, lines, and meters.

Where are your distribution system(s) map(s) located? The maps are located at the WTP

4. Diagram of Water System

Submit a diagram of your drinking water system that shows all equipment (source(s), tank(s), pumps), treatment chemicals, and any open or closed interconnects with other water systems. Please See Diagrams 1 & 2

Section II – DESCRIPTION OF THE WATER SYSTEM

IMPORTANT: Include only the equipment located at your water system, not the equipment located at another water system unless two or more systems rely on each other during an emergency, and it is documented in a contract or written agreement.

1. SOURCE INFORMATION

A. Groundwater Systems - Does Your Water System Have A Ground Water Well(s)?

YES NO (If NO, go to 1.B)

TCEQ Source ID	Owner's Designation	Well Location	Used During an Emergency?	What plant name is this source associated with?	Pump Capacity
			YES <input type="checkbox"/> NO <input type="checkbox"/>		gpm
			YES <input type="checkbox"/> NO <input type="checkbox"/>		gpm
			YES <input type="checkbox"/> NO <input type="checkbox"/>		gpm

B. Surface Water/GUI Systems: Does Your Water System Treat Surface Water or Ground Water Under the Influence of Surface Water Sources(s) (raw water intake pump information)?

YES NO (If NO, go to 1.C)

TCEQ Source ID	Owner's Designation	Intake Location	Used During an Emergency?	Number of Pumps	What plant name is this source associated with?	Total Pump Capacity at Intake
2030001	City of San Augustine	City Lake	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	3	San Augustine Water Treatment Plant	600 gpm
			YES <input type="checkbox"/> NO <input type="checkbox"/>			gpm
			YES <input type="checkbox"/> NO <input type="checkbox"/>			gpm

C. Does Your Water System Purchase (or Receive) Water? YES NO (If NO, go to 2.A)

i. Is this affected utility a direct pressure system? (Does the provider's water flow directly into your distribution system, not into a tank? Direct pressure systems generally have no tanks or pumps.)

YES NO

ii. Does this affected utility re-pressurize the water received from the provider? (Does the water from the provider flow into a tank which is then pumped out into the distribution system by your **own** pumps?)

YES NO

Provider Name	PWS ID	Pressure Plane (if more than 1 plane)	Will You Rely on This Provider for Water During an Emergency?	Will You Rely on This Provider for Pressure at Your Customer's Connections During an Emergency?	Capacity	Normally Open or Closed Interconnect?
			YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>	gpm	
			YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>	gpm	
			YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>	gpm	

2. TREATMENT INFORMATION

A. Does Your Water System Disinfect the Water? YES NO (If NO, go to 2.B)

YES NO (If NO, go to 2.B)

Disinfectant (Disinfectant Name)	Location (Plant Name)	Disinfectant Used During an Emergency?	Type of Disinfectant (Liquid/Gas)	Volume Stored (gals or lbs.)	Days of Storage (Emergency Demand)	Electricity Required to Feed Disinfectant?
Chlorine	San Augustine Water Treatment Plant	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Gas	4000 Gals.	365	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
		YES <input type="checkbox"/> NO <input type="checkbox"/>				YES <input type="checkbox"/> NO <input type="checkbox"/>
		YES <input type="checkbox"/> NO <input type="checkbox"/>				YES <input type="checkbox"/> NO <input type="checkbox"/>

B. Does Your Water System Provide Treatment Other Than Disinfection (example: polyphosphate,

caustic etc.)?

YES NO (If NO, go to 2.C)

Chemical Feed Pump (Chemical Feed Name)	Location (Plant Name)	Chemical Used During an Emergency?	Type of Chemical (Liquid/Gas)	Volume Stored (gals or lbs.)	Days of Storage (Emergency Demand)	Electricity Required to Feed Chemical
Caustic	San Augustine Water Treatment Plant	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Liquid	500 Gals	365	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
1700 Polymier	San Augustine Water Treatment Plant	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Liquid	500 Gals	365	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
		YES <input type="checkbox"/> NO <input type="checkbox"/>				YES <input type="checkbox"/> NO <input type="checkbox"/>

Does Your Water System Have Transfer Pump(s) Between Treatment Units? These are the pumps located within the treatment processes of your treatment Plant(s).

(Do not include well or intake pumps)

YES NO (If NO, go to 3.A)

In-Plant Transfer Pump Name	Location (Plant Name)	Pump Used During an Emergency?	Pump Capacity
Clear Well Transfer Pump	San Augustine Water Treatment Plant	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	1200 gpm
Clear Well Transfer Pump	San Augustine Water Treatment Plant	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	1200 gpm
		YES <input type="checkbox"/> NO <input type="checkbox"/>	gpm

3. DISTRIBUTION SYSTEM INFORMATION

A. Does Your Water System Have Booster and/or Service Pumps in the Distribution system?

YES NO (If NO, go to 3.B)

Booster/Service Pump Name	Location (include pressure plane)	Pump Used During an Emergency?	Pump Capacity
147 Booster Station	Hwy 147 Pressure Plane 3	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	300 gpm
Hospital Booster Station	Milam and Livingston Pressure Plane 1	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	300 gpm
Light Plant Booster Station	Broadway – Pressure Plane 1	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	300 gpm

Does Your Water System Have Any Finished Water Storage/Pressurization Tanks?

YES NO (If NO, go to 4.A)

Tank Type (Elevated, Hydropneumatic, Ground or Standpipe)	Location (include pressure plane)	Tank Used During an Emergency?	Tank Capacity
500,000 Elevated	Milam Street – Pressure Plane 1	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	500,000 gal
100,000 Ground	Broadway Street Pressure Plane 1	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	100,000 gal

Tank Type (<i>Elevated, Hydropneumatic, Ground or Standpipe</i>)	Location (<i>include pressure plane</i>)	Tank Used During an Emergency?	Tank Capacity
500,000 Elevated	Hwy. 96 N. Pressure Plane 2	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	500,000 gal

4. PRESSURE PLANES

Does Your Water System Have More Than One Pressure Plane?
go to 5)

YES NO (If NO,

Pressure Plane	TCEQ Source ID(s) or Provider PWS ID(s)	Plant Names(s) (If Applicable)	Pump Names(s) (If Applicable)
3	2030001	147 Booster Station	147 Booster Station
1	2030001	Hospital and Light Plant	Hospital and Light Plant Station
2	2030001	Hwy. 96 Elevated	Hwy. 96 Elevated

5. SYSTEM DEMAND

Emergency Operation means the demand in MGD from the highest emergency usage day (not normal daily usage) occurring during a natural disaster within the last 3 years, excluding fire events and large water main breaks.

Demand Information	Normal Operation	Emergency Operation
Average Daily Demand:	<u>700,000</u> MGD	<u>600,000</u> MGD
Maximum Daily Demand:	<u>850,000</u> MGD	<u>700,000</u> MGD
System Capacity:	<u>1,100,000</u> MGD	<u>1,100,000</u> MGD

6. SYSTEM SIZE

A. Does Your Water System Sell/Provide Water to Other Water Systems?

YES NO (If NO, go to 6.B)

Receiver/Buyer Name	PWS ID (if applicable)	Will you provide "water only" to this Receiver During an Emergency?	Will You Provide 20 psi to the Receiver's Distribution System During an Emergency?	Capacity in GPM sold to Receiver on daily basis	Number of Connections in the Receiver's Water System	Normally Open or Closed Interconnect?
San Augustine Rural Water		YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		621	Normally Open
		YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>			
		YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>			

Number of Connections and Population in Each Pressure Plane in Your Water System?

(If applicable, include any connections from other water systems you may serve in the table in 6.A)

Pressure Plane <i>(if applicable)</i>	Number of Connections	Population
Pressure Plane 3	102	2108
Pressure Plane 1	651	
Pressure Plane 2	543	

7. POWER PROVIDER(s)

Electric Utility or Retail Electrical Provider(s)	Deep East Texas Electric Coop
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8. ELECTRICAL SCHEMATIC

Provide an electrical schematic or diagram of your water system's emergency power facilities and the equipment (treatment(s), supply, pressure maintenance, etc.) that is powered. See Diagram 3

9. OTHER PERTINENT SYSTEM INFORMATION

Other information about the system that could be useful during an emergency or that will add clarity to your EPP. (This can include plant equipment not used or any other circumstances that would clarify how the affected utility will meet the EPP requirements):

N/A

Section III– Alternate Power Options Overview

The following is a list that will assist in determining which option (or options) should be selected to demonstrate the ability to provide emergency operations during extended power outages lasting more than 24 hours. Provide the required information on the following applicable pages. You must select at least one option and **options (7-13) may require more than one option.**

OPTION 1: PERMANENTLY INSTALLED AUTOMATIC STARTING AUXILIARY GENERATOR(S)

COMPLETE OPTION 1 – Sections A through C

OPTION 2A: YOUR SYSTEM WILL RELY ON YOUR PROVIDER DURING AN EXTENDED POWER OUTAGE

The type of systems that will utilize this option are a distribution only system which receives water under direct pressure relying on their provider for water at 20 psi throughout their distribution system. A water system receives water to a tank and re-pressurizes the water to maintain 20 psi in their distribution system may also choose this option. Choose if you will rely on a water provider *during an extended power outage*.

COMPLETE OPTION 2A – Sections A and B

OPTION 2B: MEMBER OF TXWARN

A “**distribution only**” system may only use this option if it needs certified staff for operational purposes or needs equipment to repair their distribution system. A **distribution only system** will need to choose Option 2A for the purpose of maintaining 20 psi in its distribution system during an extended power outage.

COMPLETE OPTION 2B – Sections A through B

OPTION 3A: NEGOTIATION OF LEASING AND CONTRACTING AGREEMENTS

Your facility has obtained a leasing or contract agreement for emergency power equipment and fuel. The agreement(s) must provide for coordination with the Texas Division of Emergency Management.

COMPLETE OPTION 3A – Sections A through D

OPTION 3B: MUTUAL AID AGREEMENT(S) WITH OTHER WATER PROVIDERS

Your facility is a member of another mutual aid provider, you have identified, and will make available one or more resources with another mutual aid provider. Your facility has obtained mutual aid agreement(s) for emergency power equipment and fuel with other water providers including retail, exempt, potable, or raw water providers. The agreement(s) must provide for coordination with the Texas Division of Emergency Management.

COMPLETE OPTION 3B – Sections A through B

OPTION 4: USE OF PORTABLE GENERATOR(S) CAPABLE OF SERVING MULTIPLE FACILITIES EQUIPPED WITH QUICK-CONNECT SYSTEMS

A portable generator capable of being moved to serve multiple facilities where both the portable generator and facilities are equipped with compatible quick-connect systems.

COMPLETE OPTION 4 – Sections A through D

OPTION 5: USE OF ON-SITE ELECTRICAL GENERATION OR DISTRIBUTED GENERATION FACILITIES

On-site electrical generation or distributed generation facilities. On-site electrical generation means that each facility generates, or can generate, its own power rather than being powered by a commercial electric power grid. Distributed Generation Facilities are small-scale power producing facilities located near the electrical load, which may feed into a common grid. An example is electricity generated by solar power.

COMPLETE OPTION 5 – Sections A through D

OPTION 6: HARDENING THE ELECTRIC TRANSMISSION AND DISTRIBUTION SYSTEM SERVING THE WATER SYSTEM

One alternative is to relocate electric transmission lines for the system from overhead to underground and protect them from strong winds. Another alternative is to replace overhead transmission lines, poles and rated appurtenances with ones that can withstand historical hurricane-force wind velocities, and trim or remove any trees or branches next to and above the overhead transmission lines.

COMPLETE OPTION 6 – Sections A and B

OPTION 7: USE AND MAINTENANCE OF DIRECT ENGINE OR RIGHT-ANGLE DRIVES

Direct engine or right-angle drive. This option is only available to existing facilities, **may** require more than one option, and must still provide 20 psi throughout the distribution system.

COMPLETE OPTION 7 – Sections A through C

OPTION 8A: DESIGNATION OF THE WATER SYSTEM AS A CRITICAL LOAD FACILITY

Your water system is registered with your electric provider as a critical load facility, this **will** require more than one option, and must provide 20 psi throughout the distribution system (see page 19 for additional information on the requirement for a second option). Will require documentation from your electric provider indicating your facility is protected from power loss lasting more than 24 hours.

COMPLETE OPTION 8 – Sections A and B

OPTION 8B: RECOGNITION OF THE WATER SYSTEM AS HAVING REDUNDANT, ISOLATED, OR DEDICATED ELECTRICAL FEEDS

Your water system has redundant, isolated, or dedicated electrical feeds to water plant(s) and equipment, this **will** require more than one option, and must provide 20 psi throughout the distribution system (see page 21 for additional information on the requirement for a second option). Will require documentation from your electric provider indicating your facility is protected from power loss lasting more than 24 hours.

COMPLETE OPTION 8B – Sections A and C

OPTION 9: PROVIDE WATER STORAGE CAPABILITIES

Your water system has sufficient ground, elevated, or standpipe storage to provide your entire distribution system with water at 20 psi during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option.

COMPLETE OPTION 9 – Sections A and E

OPTION 10A: WATER IS DELIVERED TO YOUR DISTRIBUTION SYSTEM FROM OUTSIDE YOUR SERVICE AREA USING AN EMERGENCY INTERCONNECT

Water is delivered from outside your service area in such a manner that you can provide water at 20 psi to your distribution system during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option.

COMPLETE OPTION 10 – Sections A and F

OPTION 10B: WATER IS DELIVERED TO YOUR DISTRIBUTION SYSTEM FROM OUTSIDE YOUR SERVICE AREA USING A WATER HAULER

Water is delivered from outside your service area in such a manner that you can provide water at 20 psi to your distribution system during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option.

COMPLETE OPTION 10 – Sections A and H

OPTION 11: WATER SYSTEM HAS THE ABILITY TO PROVIDE WATER THROUGH ARTESIAN FLOWS

An affected utility can provide water using an approved artesian source to their distribution system at 20 psi during an extended power outage lasting more than 24 hours. This option **will** need to be combined with another option (see page 28 for additional information on the requirement for a second option).

COMPLETE OPTION 11 – Sections A and E

OPTION 12: REDUNDANT INTERCONNECTIVITY BETWEEN PRESSURE ZONES

An affected utility opens valves in one or more pressure zones within their water system to provide water at 20 psi in all pressure zones throughout its entire distribution system during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option.

COMPLETE OPTION 12 – Sections A and D

OPTION 13: USE EMERGENCY WATER DEMAND RULES TO MAINTAIN EMERGENCY OPERATIONS

An affected utility will provide a minimum of 0.35 gallons per minute (gpm) per connection to the distribution system while maintaining distribution pressures of at least 20 psi in the event of the loss of normal power supply. This option **will** need to be combined with other option(s) to ensure 20 psi during a water outage lasting more than 24 hours (see page 30 for additional information on the requirement for a second option).

COMPLETE OPTION 13 – Sections A and D

OPTION 14: ANY OTHER ALTERNATIVE DETERMINED BY THE COMMISSION TO BE ACCEPTABLE

An affected utility can propose other alternatives of meeting the requirements of TWC 13.1394 if the alternative(s) ensure water will be provided at 20 psi throughout the distribution system during a water outage lasting more than 24 hours.

COMPLETE OPTION 14 – Sections A and B

Section IV– Alternate Power Options Details

OPTION 1: PERMANENTLY INSTALLED AUXILIARY GENERATOR(S)

A. Generator Specifications.

Please list **all** the generators, **all** equipment to be powered, and the power needs for each piece of equipment.

Generator Brand & Model	Max Power (KW)*	Phase	Fuel Type	Automatic Switch Gear?	Facility Staffed 24 hours a day, 7 days a week?	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered**
Taylor	400	1 <input type="checkbox"/>	Diesel	YES <input checked="" type="checkbox"/>	YES <input checked="" type="checkbox"/>	Well pump 1 <input type="checkbox"/>	kW
		2 <input type="checkbox"/>		NO <input type="checkbox"/>	NO <input type="checkbox"/>	Well pump 2 <input type="checkbox"/>	kW
		3 <input checked="" type="checkbox"/>				Well pump 3 <input type="checkbox"/>	kW
						Booster pump 1 <input checked="" type="checkbox"/>	kW
						Booster pump 2 <input checked="" type="checkbox"/>	kW

Generator Brand & Model	Max Power (KW)*	Phase	Fuel Type	Automatic Switch Gear?	Facility Staffed 24 hours a day, 7 days a week?	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered**
						Booster pump 3 <input checked="" type="checkbox"/>	kW
						Disinfection Equipment <input checked="" type="checkbox"/>	kW
						Treatment Equipment <input checked="" type="checkbox"/>	150 kW
						Compressor(s) <input checked="" type="checkbox"/>	kW
						<input type="checkbox"/>	kW
Cummins	60	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/>	Natural Gas	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Booster Pump 1	15 kW
						Booster Pump 2	15 kW
							kW
							kW
Cummins	100	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/>	Diesel	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Booster Pump 1	20 kW
						Booster Pump 2	20 kW
							kW
							kW
**The generator's total KWs cannot be less than the KWs listed under the power requirements for each facility and treatment unit that will be provided power. The generator must be able to power the equipment listed by the water system. **							

Fuel Location

- i. Physical Location of Fuel Supply (GPS or "911" address):

Water Plant

GPS
31°30'35.01"N
94°06'27.37"W

147 Booster Station

GPS
31°32'34.85"N
94°05'51.05"W

Light Plant

GPS
31°31'57.41"N
94°06'49.47"W

Fuel Re-supply. Must have sufficient fuel to provide emergency power for a minimum of 48 hours or more if needed based on past power outages and utility knowledge.

- i. How much fuel is stored on site? 1000 Gals. Diesel

- ii. How much fuel does the generator use per hour? (Attachment **B** may assist in determining that amount) Water Plant 400 KW = 6.9 gals. Light Plant - 100 kw = 2.6 Gals.
- iii. Does the water system have access to additives/other methods to prevent fuel from freezing as per manufactures recommendations (example diesel additives)? Yes

OPTION 2A: YOUR SYSTEM WILL RELY ON YOUR PROVIDER DURING AN EXTENDED POWER OUTAGE

Choose only if you will rely on purchased water as your source to provide 20 psi to your customer's connections during an extended power outage (emergency operations). You are required to provide written documentation as described below to be able to use this option.

Provider Name	PWS ID	PRESSURE PLANE	In an emergency, will water from this provider go to a tank?	In an emergency, will you rely on this provider for pressure at 20 psi to YOUR customer's connections?
			N/A	
			YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
			YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
			YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>

A. Is your water system solely relying on a provider(s) for emergency operations? (This means, the provider's water flows directly into your distribution system, and not into a tank, you have no tanks or pumps, and your provider is also providing 20 psi of pressure in your distribution system.)

- YES (If yes, you must submit documentation under 2A.i. listed below.)
- NO (Please fill out the pages for the alternative power option that will power the equipment)

- i. Please provide **one or more** of the following:
 - A copy of the contract(s) with your provider(s) that includes language guaranteeing 20 psi throughout your distribution system or specific pressure plane. Please tab the page and highlight the section in the contract guaranteeing pressure.
 - A letter from the provider(s) including language guaranteeing 20 psi throughout your distribution system or specific pressure plane.
 - Page(s) from the provider's EPP which includes the connection count for your system (or pressure plane) in the provider's connection count.
 - An engineering study (hydraulic analysis) sealed by a Texas Licensed Professional Engineer demonstrating that the provider is capable, of providing your entire distribution system with water services at a minimum of 20 psi.
- ii. Does your water system operate any equipment such as booster disinfection that will need power during an emergency?
 - YES (Please fill out the pages for the alternative power option that will power the equipment)
 - NO

Is your water system solely relying on *water only* from your provider(s) into a tank and your water system will be re-pressurizing the water received from the provider? (This means the water from the provider flows into a tank which is then pumped out into the distribution system by

your **own** pumps. Your water system is not relying on the provider for pressure.)

YES (If yes, you must submit documentation under 2.B.i. listed below and fill out the pages for the alternative power option(s) that will power the re-pressurization equipment.)

NO

i. Please provide **one or more** of the following:

A copy of the contract(s) with your provider(s) that includes language guaranteeing your water system with water. Please tab the page and highlight the section in the contract guaranteeing water.

A letter from the provider(s) which includes language guaranteeing water to your water system or specific pressure plane.

Page(s) from the provider's EPP which includes the connection count for your system (or pressure plane) in the provider's connection count.

ii. Does your water system operate any equipment such as booster disinfection that will need power during an emergency?

YES (Please fill out the pages for the alternative power option that will power the equipment) **NO**

OPTION 2B: CONTRIBUTING MEMBER OF TXWARN

Member has identified needed resource(s) to the TXWARN system. Installation of a quick connect system is required with this option. A **"distribution only" system may not use this option to maintain 20psi in distribution**. A distribution only system is defined as a system that receives treated water from another entity and does not maintain storage or pressure facilities.

A. Please provide ALL of the following items

A copy of the TXWARN membership profile page.

A copy of the mutual aid agreement with TXWARN (Applicable to Investor/Private Owned Water systems)

A local government entity is covered by the Texas Statewide Mutual Aid System as stated in the Texas Government Code Section 418.111 Subchapter E (Applicable to Cities, Counties, and Districts)

Generator specifications

Please list the items hoped to be obtained from TXWARN. List **all** equipment to be powered, and the power needs for each piece of equipment.

Generator	Power (KW)	Quick Connect Installed?	Phase	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements of Each Facility and Treatment Unit Powered		
		YES <input type="checkbox"/>	1 <input type="checkbox"/>	Well pump 1 <input type="checkbox"/>	kW		
		NO <input type="checkbox"/>	2 <input type="checkbox"/>	Well pump 2 <input type="checkbox"/>	kW		
		Date to be installed	3 <input type="checkbox"/>	Well pump 3 <input type="checkbox"/>	kW		
				Booster pump 1 <input type="checkbox"/>	kW		
				Booster pump 2 <input type="checkbox"/>	kW		
				Booster pump 3 <input type="checkbox"/>	kW		
				Disinfection Equipment <input type="checkbox"/>	kW		
				Treatment Equipment <input type="checkbox"/>	kW		
				Compressor(s) <input type="checkbox"/>	kW		
				<input type="checkbox"/>	kW		
				YES <input type="checkbox"/>	1 <input type="checkbox"/>		kW
				NO <input type="checkbox"/>	2 <input type="checkbox"/>		kW
		Date to be installed	3 <input type="checkbox"/>		kW		
					kW		
					kW		
					kW		
					kW		
					kW		
					kW		

N/A

The generator's total KWs **cannot be less than the KWs listed under the power requirements for each facility and treatment unit that will be provided power. The generator must be able to power the equipment listed by the water system. **

OPTION 3A: NEGOTIATION OF LEASING AND CONTRACTING AGREEMENTS

Your water system will obtain an agreement with a generator providing company. Installation of a quick connect system is required with this option. Please note that the agreement must provide for coordination with the Texas Division of Emergency Management.

A. Provide a signed copy of the agreement

Generator Specifications

Please list the generator to be leased, all equipment to be powered, and the power needs for each piece of equipment.

Generator Brand & Model	Max Power (KW)	Phase	Quick Connect Installed?	Fuel Type	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered
		1 <input type="checkbox"/>	YES <input type="checkbox"/>		Well pump 1 <input type="checkbox"/>	kW
		2 <input type="checkbox"/>	NO <input type="checkbox"/>		Well pump 2 <input type="checkbox"/>	kW
		3 <input type="checkbox"/>	Date to be installed		Well pump 3 <input type="checkbox"/>	kW
					Booster pump 1 <input type="checkbox"/>	kW
					Booster pump 2 <input type="checkbox"/>	kW
					Booster pump 3 <input type="checkbox"/>	kW
					Disinfection Equipment <input type="checkbox"/>	kW
					Treatment Equipment <input type="checkbox"/>	kW
					Compressor(s) <input type="checkbox"/>	kW
					<input type="checkbox"/>	kW
		1 <input type="checkbox"/>	YES <input type="checkbox"/>			kW
		2 <input type="checkbox"/>	NO <input type="checkbox"/>			kW
		3 <input type="checkbox"/>	Date to be installed			kW
		1 <input type="checkbox"/>	YES <input type="checkbox"/>			kW
		2 <input type="checkbox"/>	NO <input type="checkbox"/>			kW
		3 <input type="checkbox"/>	Date to be installed			kW

****The generator's total KWs cannot be less than the KWs listed under the power requirements for each facility and treatment unit that will be provided power. The generator must be able to power the equipment listed by the water system. ****

Fuel Location

- i. Physical Location of Fuel Supply (GPS or "911" address):

Fuel Re-supply. Must have sufficient fuel to provide emergency power for a minimum of 48 hours or more if needed based on past power outages and utility knowledge.

- i. How much fuel is stored on site?
- ii. How much fuel does the generator use per hour? (Attachment B may assist in determining that amount.)

OPTION 3B: MUTUAL AID AGREEMENT WITH ANOTHER WATER PROVIDER(S)

Member has identified needed resource(s) to another water provider as part of a mutual aid agreement. Installation of a quick connect system is required with this option. **A "distribution only" system may not use this option to maintain 20psi.** Please note that the agreement must provide for coordination with the Texas Division of Emergency Management.

A. Please provide ALL of the following items:

- Name of water system(s) or group that you have a mutual aid agreement with.
- A copy of the mutual aid agreement from each water provider.
- Highlight the area in the agreement that lists the resource(s) to be provided by the water system(s).

Generator specifications

Please list the items that are anticipated to be obtained through a mutual-aid agreement. List **all** equipment to be powered, and the power needs for each piece of equipment.

Generator Brand & Model	Max Power (KW)	Phase	Quick Connect Installed?	Fuel Type	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered
NVA		1 <input type="checkbox"/>	YES <input type="checkbox"/>		Well pump 1 <input type="checkbox"/>	kW
		2 <input type="checkbox"/>	NO <input type="checkbox"/>		Well pump 2 <input type="checkbox"/>	kW
		3 <input type="checkbox"/>	Date to be installed		Well pump 3 <input type="checkbox"/>	kW
					Booster pump 1 <input type="checkbox"/>	kW
					Booster pump 2 <input type="checkbox"/>	kW
					Booster pump 3 <input type="checkbox"/>	kW
					Disinfection Equipment <input type="checkbox"/>	kW
					Treatment Equipment <input type="checkbox"/>	kW
					Compressor(s) <input type="checkbox"/>	kW
						<input type="checkbox"/>
		1 <input type="checkbox"/>	YES <input type="checkbox"/>			kW

Generator Brand & Model	Max Power (KW)	Phase	Quick Connect Installed?	Fuel Type	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered
		2 <input type="checkbox"/>	NO <input type="checkbox"/>			kW
		3 <input type="checkbox"/>	Date to be installed			kW
		1 <input type="checkbox"/>	YES <input type="checkbox"/>			kW
		2 <input type="checkbox"/>	NO <input type="checkbox"/>			kW
		3 <input type="checkbox"/>	Date to be installed			kW

****The generator's total KWs cannot be less than the KWs listed under the power requirements for each facility and treatment unit that will be provided power. The generator must be able to power the equipment listed by the water system. ****

OPTION 4: USE OF PORTABLE GENERATOR(S) CAPABLE OF SERVING MULTIPLE FACILITIES EQUIPPED WITH QUICK-CONNECT SYSTEM(S)

A. Please list the storage location of the portable generator. If sharing the generator, list the name of the water system you are sharing with and their location.

Generator Brand & Model	Generator Storage Location	Distance from Your Water System	Other Water Systems Sharing This Generator (PWS Name and ID if applicable)	Distance Between Your Water System and Those Sharing the Generator

Generator specifications

Please list all the portable generators, all equipment to be powered, and the power needs for each piece of equipment.

Generator Brand & Model	Max Power (KW)	Phase	Fuel Type	Quick Connect Installed?	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered
		1 <input type="checkbox"/>		YES <input type="checkbox"/>	Well pump 1	kW
		2 <input type="checkbox"/>		NO <input type="checkbox"/>	Well pump 2	kW
		3 <input type="checkbox"/>		Date to be installed	Well pump 3	kW
					Booster pump 1	kW

Generator Brand & Model	Max Power (KW)	Phase	Fuel Type	Quick Connect Installed?	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements for Each Facility and Treatment Unit Powered
				N/A	Booster pump 2 <input type="checkbox"/>	kW
					Booster pump 3 <input type="checkbox"/>	kW
					Disinfection Equipment <input type="checkbox"/>	kW
					Treatment Equipment <input type="checkbox"/>	kW
					Compressor(s) <input type="checkbox"/>	kW
					<input type="checkbox"/>	kW
		1 <input type="checkbox"/>		YES <input type="checkbox"/>		kW
		2 <input type="checkbox"/>		NO <input type="checkbox"/>		kW
		3 <input type="checkbox"/>		Date to be installed		kW

Fuel Location (if applicable)

- i. Physical Location of Fuel Supply (GPS or "911" address):

Fuel Re-supply. Must have sufficient fuel to provide emergency power for a minimum of 48 hours or more if needed based on past power outages and utility knowledge.

- i. How much fuel is stored on site?
- ii. How much fuel does the generator use per hour? (Attachment B may assist in determining that amount.)

OPTION 5: USE OF ON-SITE ELECTRICAL GENERATION OR DISTRIBUTED GENERATION FACILITIES

Onsite Electrical Generation means that each facility generates its own power rather than being powered by a commercial electric power grid. Distributed Generation Facilities are small-scale power producing facilities located near the electrical load which may feed into a common grid.

A. On-Site Electrical Generation or Distributed Generation Specifications

- i. Describe On-Site Electrical Generation or Distributed Generation Facility:

On-site Electrical Generation or Distributed Generation Specifications

Please list **all** facilities, list **all** equipment to be powered and the power needs for each piece of equipment.

Type of On-site Electrical Generation Facilities.	Max Power (KW)	Fuel Type (if applicable)	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements of Each Facility and Treatment Unit Powered
			Well pump 1 <input type="checkbox"/>	kW

Type of On-site Electrical Generation Facilities.	Max Power (KW)	Fuel Type (if applicable)	List all Facilities and Treatment Units That Will Be Powered During an Emergency	Power Requirements of Each Facility and Treatment Unit Powered
			Well pump 2 <input type="checkbox"/>	kW
			Well pump 3 <input type="checkbox"/>	kW
			Booster pump 1 <input type="checkbox"/>	kW
			Booster pump 2 <input type="checkbox"/>	kW
			Booster pump 3 <input type="checkbox"/>	kW
			Disinfection Equipment <input type="checkbox"/>	kW
			Treatment Equipment <input type="checkbox"/>	kW
			Compressor(s) <input type="checkbox"/>	kW
			<input type="checkbox"/>	kW
				kW
				kW
				kW
				kW

Fuel Location

- i. Physical Location of Fuel Supply (GPS or "911" address):

Fuel Re-supply. Must have sufficient fuel to provide emergency power for a minimum of 48 hours or more if needed based on past power outages and utility knowledge.

- i. How much fuel is stored on site?
- ii. How much fuel does the generator use per hour? (Attachment B may assist in determining that amount)

OPTION 6: HARDENING THE ELECTRIC TRANSMISSION AND DISTRIBUTION SYSTEM SERVING THE WATER SYSTEM

One alternative is to relocate electric transmission lines for the system from overhead to underground and protect them from flooding. Another alternative is to replace overhead transmission lines, poles and rated appurtenances with ones that can withstand historical hurricane-force wind velocities, and trim or remove any trees or branches next to and above the overhead transmission lines.

A. Hardening Description

- i. Describe the hardening activities:

Diagram

Include a diagram showing the electrical system, including the power transmission system (from the power generation facility to the customer's power meter) and distribution system (the water system's electrical wiring after the customer's power meter) feeding each water facility and the preventive measures taken for each.

OPTION 7: USE AND MAINTENANCE OF DIRECT ENGINE OR RIGHT- ANGLE DRIVES

(EXISTING FACILITIES ONLY) This option is only available to existing facilities and, **may** require more than one option. If right angle drive is located only on a well how will treated water be sent to the distribution system or if located only on a booster pump, how is treated water entering a storage tank, and must still provide 20 psi throughout the distribution system.

A. Direct Engine or Right-Angle Drive Specification

Please list all the drives, **all** equipment to be powered, and the power needs for each piece of equipment.

Brand or Model	Max Power (HP, kW)	RPM	Fuel Type	List all Facilities and Treatment Units Powered	Power Requirements of Each Facility and Treatment Unit Powered (circle appropriate unit)
				Well pump 1 <input type="checkbox"/>	kW or HP
				Well pump 2 <input type="checkbox"/>	kW or HP
				Well pump 3 <input type="checkbox"/>	kW or HP
				Booster pump 1 <input type="checkbox"/>	kW or HP
				Booster pump 2 <input type="checkbox"/>	kW or HP
				Booster pump 3 <input type="checkbox"/>	kW or HP
				Disinfection Equipment <input type="checkbox"/>	kW or HP
				Treatment Equipment <input type="checkbox"/>	kW or HP
				Compressor(s) <input type="checkbox"/>	kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP
					kW or HP

Fuel Location (if applicable)

- i. Physical Location of Fuel Supply (GPS or "911" address):

Fuel Re-supply. Must have sufficient fuel to provide emergency power for a minimum of 48

hours or more if needed based on past power outages and utility knowledge.

- i. How much fuel is stored on site?
- ii. How much fuel does the generator use per hour? (Attachment B may assist in determining that amount.)

OPTION 8A: DESIGNATION OF THE WATER SYSTEM AS A CRITICAL LOAD FACILITY

Your water system is registered with your electric provider as a critical load facility. This **will** require more than one option, because designation of critical load does not guarantee an uninterrupted supply of electricity. It is the responsibility of the water system to plan for alternative sources of electric power should a localized outage or load shed event occur. The water system is required to provide 20 psi throughout the distribution system.

A. Provide ALL of the following items for designation of Critical Load Facility.

- Name of electric provider(s).
- A copy of the letter or email from your electric provider(s) designating your water system as having critical load status.
- Submit a diagram of your water system that includes all equipment listed in Section II DESCRIPTION OF THE WATER SYSTEM
- Please choose other option(s) to ensure your utility can maintain 20psi if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

Please provide other option(s) _____ then complete that section of the EPP.

Indicate all facilities that are included in critical load _____ (please refer to the facilities listed for the PWS in Section II - Description of the Water System) and use the exact same naming convention.

Name of Plant	Address to Electric Meter Providing Power to Plant

OPTION 8B: DESIGNATION OF THE WATER SYSTEM AS HAVING REDUNDANT, ISOLATED, OR DEDICATED ELECTRICAL FEEDS

Your water system has redundant, isolated, or dedicated electrical feeds. This **will** require more than one option, because having redundant, isolated, or dedicated electrical feeds does not guarantee an uninterrupted supply of electricity. It is the responsibility of the water system to plan for alternative sources of electric power should a localized outage or load shed event occur. The water system is required to provide 20 psi throughout the distribution system.

A. Provide the following if facility has redundant, isolated, or dedicated electrical feeds

Name of electric provider(s) that will provide redundant, isolated, or dedicated electrical feeds.

A copy of the letter or email from your electric provider(s) that designates your water system as having redundant, isolated, or dedicated electrical feeds.

Submit a diagram of your water system that includes all equipment listed in Section II DESCRIPTION OF THE WATER SYSTEM

Please choose other option(s) to ensure your facility can maintain 20psi if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

Please provide other option(s) _____ when complete this section of the EPP.

Indicate all facilities that are included in having redundant, isolated, or dedicated electrical feeds:

Name of Plant	Address to Electric Meter Providing Power to Plant
NMA	

Indicate the facilities not included in having redundant, isolated, or dedicated electrical feeds:

Name of Plant	Address to Facility without Dedicated Electrical Feeds

OPTION 9: PROVIDE WATER STORAGE CAPABILITIES

Your water system has sufficient ground, elevated, or standpipe storage to provide your entire distribution system with water at 20 psi during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option if the water system does not have sufficient, useful storage during a power outage lasting longer than 24 hours. It is the responsibility of the water system to plan for alternative sources of electric power should the water system not have sufficient storage to last for greater than 24 hours.

A. Explain how the water in storage will flow to customers, and how it will be replenished (with or without electricity)?

Pressure From EST

Does the water system have an existing, valid exception or alternative capacity requirement (ACR) for elevated or ground storage capacity? [30 TAC §290.45(g) and or 30 TAC §290.39(I)]

YES **

NO

** Water systems with an exception or alternative capacity requirement that *is less than*, the required minimum capacity requirements for storage, will be required to choose a different option. A different option is required because an exception or alternative capacity requirement reduces the water system's minimum required treatment capacity and consequently reduces the system's ability to provide useful¹ water storage capacity during an outage lasting more than 24 hours.

Use the diagram on the next page to assist you in answering questions C and D.

What is the useful storage¹ capacity of all storage tanks that maintain distribution pressures above 20 psi (46 feet of residual hydraulic head above the highest connection)?

Note: If you have dedicated fire storage, do not include it in the number above.

Useful storage capacity of all storage tanks: 1.1 MGD

Using the water systems Maximum Daily Demand (MDD) listed in question 5 under Section II – Description of the Water System, divide the useful storage volume (million gallons) for maintaining distribution pressures above 20 psi by the MDD under emergencies. This is the amount of days water can be provided if storage was full before the start of the emergency.

Number of days water can be provided before a state of emergency arises: 1.5 Days

Please choose other option(s) to ensure your utility can maintain 20 psi if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

Please provide other option(s) _____ then complete that section of the EPP.

¹ The AWWA Drinking Water Dictionary defines useful storage as "water storage that is readily available for discharge into a distribution system, such as water in an elevated storage tank or in a ground storage tank that can be pumped into the system. Water in a ground storage tank below the suction level of the pump would be storage, but not useful storage".

OPTION 10A: WATER IS DELIVERED TO YOUR DISTRIBUTION SYSTEM FROM OUTSIDE YOUR SERVICE AREA USING EMERGENCY INTERCONNECTS

The affected utility would be receiving water temporarily until natural disaster has passed.

Water is delivered from outside your service area in such a manner that you can provide water at 20 psi to your distribution system during an extended power outage lasting more than 24 hours. This option **may** need to be combined with an additional option depending on if the entire water system will be receiving water from the interconnect. An affected utility opens one or more emergency interconnects with other water systems that can provide water into different pressure zones of the affected utility requesting to use this option.

If Using Emergency Interconnects (normally closed) to provide water to your service area:

A. List water system(s) that will be providing your connections with water during an emergency, where the providing system obtains its water, and the number of connections that will be provided water.

PWS ID Number and Name	Where does this system obtain its water?	Connections Served

Provide the following information:

1. A map of your distribution system and highlight the area that will be provided water by a different water system.
2. Is the interconnect under direct pressure or is it an air gap into a storage tank?

3. Provide a copy of an agreement in contact that indicates the providing system agrees to provide and maintain water to your distribution system at 20psi.
List storage tank(s) that have an air gap interconnect?

Plant Name (Needs to match with listing under Section 1 of EPP)	Storage Tank(s)

Will both water systems be using the same type of disinfection?

YES

NO

If you answered **NO** and the emergency source contains a different disinfectant than what the water system distributes under normal operations, provide the following information:

YES NO Will the water system use only the emergency source during an emergency?

YES NO Will the water system modify their distribution system to ensure areas with different disinfectants will be isolated from each other?

YES NO Does the water system currently have a valid exception to blend chlorine and chloramines in an emergency?

If the disinfection used is not the same for both water systems, explain how the water system

will notify customers of the change for health purposes? [30 TAC §290.47(h)]

If only part of your system will have service maintained by interconnection, please provide information on what option applies to the rest of the system. Option _____ and complete that section of the EPP.

If water is delivered into a storage tank, please choose additional option(s) to ensure your utility can maintain 20 psi if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

Please provide other option(s) _____ then complete that section of the EPP. **OPTION 10B:
WATER IS DELIVERED TO YOUR DISTRIBUTION SYSTEM FROM OUTSIDE
YOUR SERVICE AREA USING WATER HAULER(S)**

The affected utility would be receiving water temporarily until natural disaster has passed. Water is delivered to your service area using a water hauler and, you can provide water at 20 psi to your distribution system during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option if the water system cannot deliver water pressurized to 20 psi to the distribution system.

If using Water Hauler(s) to provide water to your service area:

A. Provide documentation that the water hauler is approved and registered to haul water by the TCEQ.

Approved Water Hauler ID (Can be verified in Texas Drinking Water Watch)	
List all water providers utilized by the water hauler and the type of disinfection used by each provider to ensure compatibility with disinfection protocols.	
Water Provider ID	Type of Disinfection Used
Explain how the water will be pumped from the water hauler into the storage tank?	
Which storage tanks will be filled by the water hauler?	
Plant Name (Needs to match with listing under Section II of EPP)	Storage Tank(s)
Explain how the water will be pumped from the storage tank into the distribution system?	

Will the water hauler be able to supply enough water to the distribution system in a timely manner?

YES NO

If only part of your system will have service maintained by water hauling, please provide information on what option applies to the rest of the system.

Please provide option(s) _____ and complete that section of the EPP.

If water is delivered into a storage tank, please choose another option(s) to ensure your utility can maintain 20 psi if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

Please provide another option(s) _____ then complete that section of the EPP.

OPTION 11: WATER SYSTEM HAS THE ABILITY TO PROVIDE WATER THROUGH ARTESIAN FLOWS

An affected utility can provide water using an approved artesian source to their distribution system at 20 psi during an extended power outage lasting more than 24 hours. This **will** need to be combined with another option if the water system is unable to ensure water is consistently treated and distributed at 20psi to your distribution system. It is the responsibility of the water system to plan for alternative sources of electric power should the water system be unable to consistently provide 20 psi of pressurized treated water to the distribution system.

A. Please provide the well identification number of the approved artesian source:

TX _____

What is the flow of the source in GPM? _____

How will the source water get treated and distributed consistently to the distribution system?

How will pumps be powered?

Please choose other option(s) _____ to ensure your utility can continuously treat, disinfect, and pressure your system to 20 psi if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours. You may not be required to provide an additional option if it can document that your utility can continuously treat, disinfect, and pressure your system to 20 psi, if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

Please provide another option(s) _____ then complete that section of the EPP.

OPTION 12: REDUNDANT INTERCONNECTIVITY BETWEEN PRESSURE ZONES

An affected utility opens valves in one or more of their pressure zones to provide water at 20 psi throughout its distribution system during an extended power outage lasting more than 24 hours. This option **may** need to be combined with another option to ensure the system can provide 20 psi throughout its distribution system.

- A. Explain how the water will flow to customers within one or more pressure zones, and how it will be replenished (with or without electricity)?**

Please provide the following:

- A map of your system delineating pressure planes, and show elevated tanks, elevation contours of each zone and isolation valves.
- Provide useful storage of each elevated storage tank, see **(Option 9 Question C-D and Diagram page 25)**.
- A capacity report with details that show each pressure plane can provide 0.35 gpm per connection.
- Are there areas that will need inline booster pumps? If so, how will they be powered?
Please provide a schematic of the connection.

Please choose other option(s) to ensure your utility can continuously treat, disinfect, and pressurize your system to 20 psi, if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

Please provide your other option(s) _____ then complete that section of the EPP.

A hydraulic study will be required if you are unable to demonstrate that your water system can maintain a minimum of 20 psi in distribution based on the information provided in Items A and B. For example, if elevation contour difference exceeds feet of useful storage or if water supply does not appear adequate for an electrical outage lasting more than 24 hours.

Our engineering department can provide.

OUR

OPTION 13: USE EMERGENCY WATER DEMAND RULES TO MAINTAIN EMERGENCY OPERATIONS

An affected utility will provide a minimum of 0.35 gallons per minute (gpm) per connection to the distribution system while maintaining distribution pressures of at least 20 psi in the event of the loss of normal power supply. This option **will** need to be combined with another option to ensure 20 psi during a water outage lasting more than 24 hours since just reducing water demand will not be adequate to provide water during an extended power outage.

- A. How will you communicate with your customers that you have instituted your Drought Contingency Plan during an extended power outage? (e.g., Utility website, Social Media, Radio, TV, reverse 911, door tags, signs posted at Subdivision entrances)**

Please choose additional option to ensure your utility can maintain 20 psi if your electrical provider fails to provide your facility with power during an outage lasting longer than 24 hours.

Please provide other option(s) Back-up Generator then complete that section of the EPP.

Explanation and Authority

During periods of drought, a major leak, a system failure, or excessive consumption beyond the capacity of the system, etc., the City of San Augustine, Chris Anding (e.g. *PWS name, owner*)

name, owner representative, Operator, etc.) has the capability to conserve and restrict water use based upon the local water system regulations found in _____ (Drought contingency plan, rental agreement, city ordinance, etc.). During times of drought or other problems that limit the availability of water, public notice of water use restrictions will be issued by: _____ (*e.g., PWS name, owner name, owner representative, operator, etc.*). City of San Augustine – Chris Anding

WATER RESTRICTION STAGES

N/A

Fill in the levels or stages of restrictions that will be applied, the conditions that generally will trigger them and the types of restrictions that will be applied. The conditions that trigger various restriction stages could be based upon critical source water levels and other conditions such as imminent loss of water or pressure.

See Diagram 4 Section Table 2-1 Trigger Conditions

Restriction Stage	Stage Trigger(s)	Restrictions
I		
II		
III		

See Diagram 4 For further information

OPTION 14: ANY OTHER ALTERNATIVE DETERMINED BY THE COMMISSION TO BE ACCEPTABLE

An affected utility can propose other alternatives of meeting the requirements of TWC 13.1394 if the alternative(s) ensure water will be provided at 20 psi throughout the distribution system during a water outage lasting more than 24 hours.

A. The following methods would **NOT** be acceptable options

i. Evacuation

The EPP must show how you will provide water during an extended power outage caused by a natural disaster, not during the disaster when it is unsafe. The rule specifically states the water is to be provided after it is safe and practicable. The people who are evacuated may return when it is safe to do so after the disaster has passed, but before power is returned to your water system. In the case, of the most recent winter storm power was not restored for several days. You must be able to provide water after the disaster, but before normal power is restored.

ii. Providing bottled water

The EPP must show how you will provide water at **20 psi** at each of your customer's connections.

iii. Relying on your provider **without** the documentation that states the provider will provide your system with 20psi throughout your distribution system.

Alternative Description

Describe the alternative and how it will provide 20 psi throughout your distribution system:

Section V – Emergency Communications

Emergency Communications are an essential part of an emergency response event. Knowing who to notify before an emergency event occurs is the best way to ensure that you, your system, and your customers receive needed emergency assistance. Many numbers have been provided to assist you with completing this portion of the plan. Please feel free to make copies of the pages in Section IV to post at your facility and/or to train your employees.

If the Organization is not applicable to your utility, please enter **N/A**. You are required to provide phone numbers for your County Judge and County Sheriff's Office.

If you are a member of another mutual aid organization other than TXWARN please include them on this list.

A. Emergency Contacts

Organization	Phone Numbers (include area code)		E-Mail or Website
	Day	Evening	
Fire Department	911	911	
Police Department	911	911	
Emergency Medical Service	911	911	
TCEQ Water Homeland Security	888/777-3186	888/777-3186	
Texas PUC	512/936-7405		http://www.puc.texas.gov/industry/water/utilities/fmt.aspx Email: water@puc.texas.gov
National Response Center	800/424-8802	800/424-8802	http://nrc.uscg.mil/Default.aspx
State Spill Hotline	800/832-8224	800/832-8224	https://www.tceq.texas.gov/response/spills
Poison Control	800/222-1222	800/222-1222	http://poisoncontrol.org/home/
CHLOREP (Chlorine Emergency Plan)	800/424-9300	800/424-9300	https://www.chlorineinstitute.org/emergency-preparedness/chlorep/
TCEQ Regional Office	24-hour cell phone 512/965-2717		Website: https://www.tceq.texas.gov/agency/directory/region/reglist.html
<u>County Judge</u>	936-275-2762		Email: _____ Website:
County Office of Emergency Management	936-275-2762		Email: Website:
County Sheriff's Office	936-275-2424	936-275-2424	Email: Website:
County Public Health & Environmental Services			Email:

Organization	Phone Numbers (include area code)		E-Mail or Website
	Day	Evening	
			Website:
City Mayor's Office	936-275-2121	936-275-2121	Email: Website: www.cityofsanaugustinetx.gov
Local Public Health & Environmental Services			Email: Website:
Local Office of Emergency Management			Email: Website:
TX Division of Emergency Management (TDEM)	Provides list of State and District Coordinators which assist local officials with state assistance requests. Requests must start at local level first.		https://tdem.texas.gov/field-response/
TXWARN	866/9-TXWARN (866/989-9276)		Email: info@txwarn.org https://www.txwarn.org
Other Mutual Aid Provider			Email: Website:

Local Contact Notification List

Identify those entities that should be notified in the event of an extended power outage requiring emergency operations. These are people who you provide water to that you may need to contact during an emergency.

Organization	Contact Name	Title	Phone Numbers (include area code)			E-Mail
			Day	Evening	Cellular/Pager	
Other Local Government Officials						
Hospitals served by the Affected Utility						
Nursing Homes served by the Affected Utility						
Pharmacies						
Priority Water Users (Those that are critically dependent upon water)						

Organization	Contact Name	Title	Phone Numbers (include area code)			E-Mail
			Day	Evening	Cellular/Pager	
including schools, dialysis centers, institutions, individuals with special needs, businesses, and other interconnected water systems, etc.)						
Others						

Chemical Supplier Information

Identify your Chemical Suppliers. You may need to contact them for more chemicals during an emergency

Chemical	Supplier	Contact Name	Phone Number Day	Phone Number Evening	Cell Phone	E-Mail
Caustic	Simply Aquatics	Kevin Hister	1-409-420-0774	Same		
Polymier	Simply Aquatics	Kevin Hister	01-409-420-0774	Same		

Certified Laboratory Information

Identify your laboratory and a backup laboratory. You may need a backup laboratory if your lab is nonfunctional.

Organization	Contact Name	Title	Phone Numbers (include area code)			E-Mail
			Day	Evening	Cellular/Pager	
East Tex Environmental	Paul Hughes	Manager	936-569-8879	Same	936-552-1966	

Fuel Supplier Contact Information (if applicable)

Identify your Fuel Suppliers. You may need to contact them for fuel during an emergency

Fuel Type	Supplier	Contact Name	Phone Number Day	Phone Number Evening	Cell Phone	E-Mail

Utilities Contact Information

Identify your Utilities Contacts. You may need to contact them during an emergency and use **N/A** if a listed organization does not apply to your water system.

Organization	N/A	Contact Name	Title	Phone Numbers (include area code)			E-Mail
				Day	Evening	Cellular/Pager	
Electric Utility Company		Deep East Texas Electric Coop		1-936-229-4000	936-288-3339		
Gas Utility Company	NA						
Sewer Utility Company	NA						
Telephone Utility Company		ATT					
Wholesale Water Provider	NA						
Wholesale Water Provider	NA						
Other	NA						

Bulk Water Suppliers

Identify any bulk or bottled water suppliers that you might utilize in an emergency.

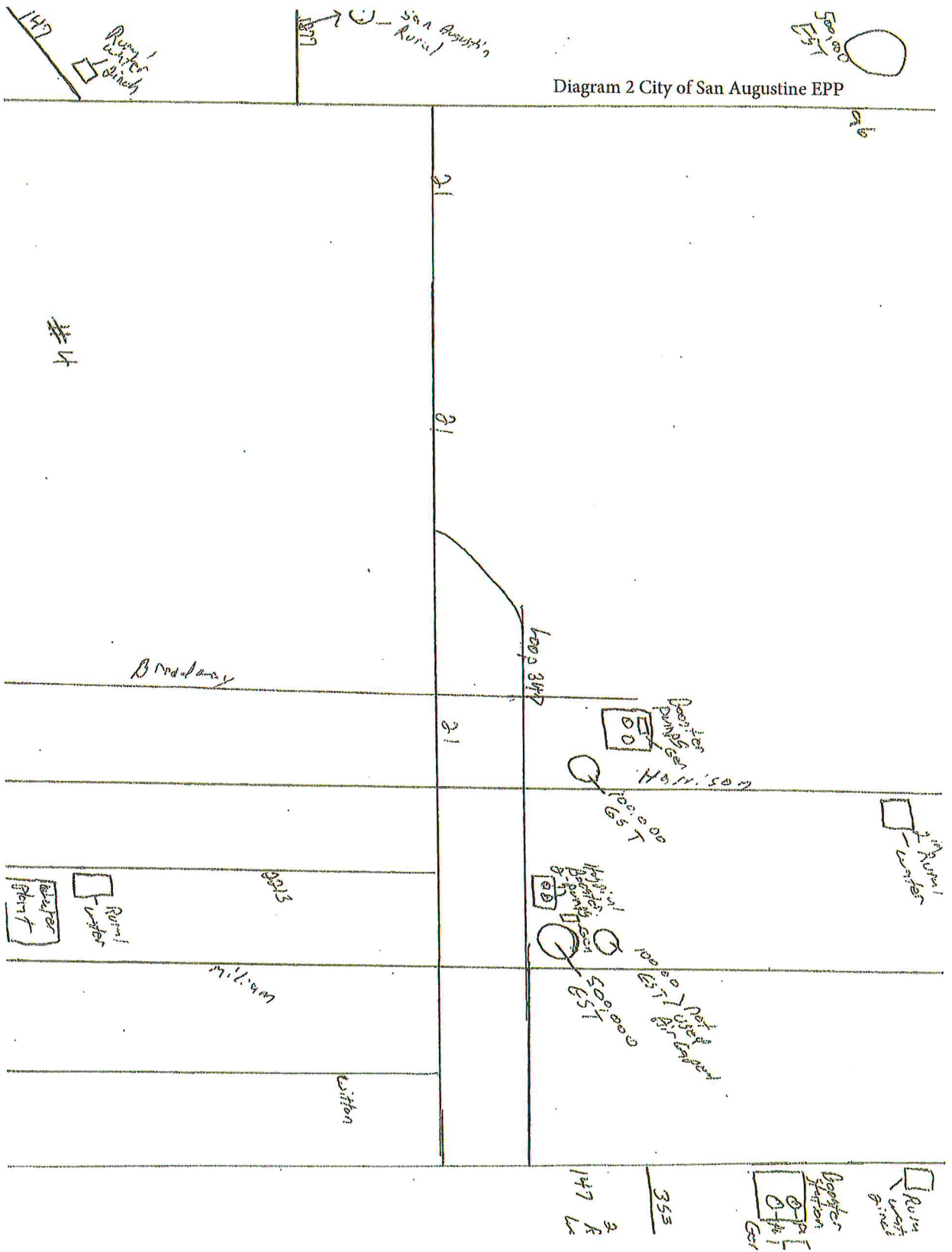
Organization	Contact Name	Title	Phone Numbers (include area code)			E-Mail
			Day	Evening	Cellular/Pager	
Bulk Water Haulers						
Bottle Water Sources						

Media Notification List

Identify the media organizations that you might need to contact to provide information to your customers. Also identify who is your media spokesperson. If you have a different method to communicate to your customers, please list under **Other**.

Organization	Contact Name	Title	Day	Evening	Cellular/Pager	E-Mail
Designated Water System Spokesperson	Leroy Hughes	Mayor	936-275-7564		936-275-7564	
Newspaper - Local	Stephen Hays	Owner	936-275-2181			
Newspaper – Regional State						
Radio						
Television						
Other						

Diagram 2 City of San Augustine EPP



100 kW - Light plant
 Booster station
 2-25 HP-pumps
 Cummins

Cummins
 Hospital
 Gen generator
 Hospital
 Booster
 station - 2
 20 HP
 pumps

60
 kW
 Cummins

2
 20 HP
 pumps

147
 Booster Station

Diagram 3 City of San Augustine EPP

400
 kW
 Taylor

Water Plant
 400 kW. Runs
 The plant

All Generators
 Have Automatic
 Transfer Switches

Diagram 4 - City of San Augustine EPP

2.3 Trigger Conditions and Response Measures

The City uses treated water pumped from one (1) ground water well and one (1) surface water treatment plant owned by City of San Augustine. These water sources meet the current needs of its customers. The City must be prepared to respond to any emergency water supply situation. The city will implement the Best Management Practices in this Water Conservation and Emergency Water Management Plan to reduce water usage and water loss.

Four (4) threshold levels have been identified for triggering various responses to water supply emergencies. These trigger conditions and corresponding emergency response measures are presented in Table 2-1.

Table 2-1 Trigger Conditions

STAGE	TRIGGER CONDITIONS	RESPONSE MEASURES
Stage 1: Mild Water Shortage Alert Voluntary Water Use Curtailment	<ul style="list-style-type: none"> • Water pumped in excess of 522,284 gallons or 80% of daily average pumped for three consecutive days. • If the City Lake Reservoir declines below 8 feet mean depth 	<ul style="list-style-type: none"> • Formal public notification by City of San Augustine of Stage 1 conditions. • Initiate public information efforts. • Notify major commercial, institutional, industrial and wholesale water customers. • Increase water supply and demand monitoring. • Increase leak detection and repair efforts.
Stage 2: Moderate Water Shortage Alert Mandatory Water Use Curtailment	<ul style="list-style-type: none"> • Water use in excess of 587,570 gallons pumped or 90 % of daily average pumped for three consecutive days; or, • System demands cause ground and/or elevated water storage levels to fall daily and recover completely only during the overnight low demand periods. • If the City Lake Reservoir declines below 7 feet mean depth 	<ul style="list-style-type: none"> • Continue implementation of all relevant actions in preceding stage. • Formal public notification of Stage 2- Moderate water shortage conditions and request for mandatory water use curtailment. • Water waste prohibited. Car washing, window washing, pavement washing, etc. prohibited except when a bucket is used. • Lawn and garden irrigation restricted to every other day during the hours of 6:00 AM to 10:00 AM and 8:00 PM to 10: PM using only a handheld hose for application.
Phase 3: Severe Water Shortage Alert Mandatory Water Use Curtailment	<ul style="list-style-type: none"> • Water pumped in excess of 652,856 gallons or 100% of daily average pumped for three consecutive days; or, • Failure of storage tanks or other major system component which reduce the availability of water to less than 50% (326,428 gallons) of the average daily usage or causes health or safety hazard. • If City Lake Reservoir declines below 6.5 feet mean depth 	<ul style="list-style-type: none"> • Maintain pertinent preceding stage actions. • Water waste prohibited. Car washing, window washing, pavement washing, etc. prohibited except when a bucket is used. • Lawn and garden irrigation restricted to every fourth day during the hours of 6:00 AM to 10:00 AM and 8:00 PM to 10: PM using only a handheld hose for application.
Stage 4: Emergency Water Shortage Alert Mandatory Water Use Curtailment (Pro Rata Water Allocations)	<ul style="list-style-type: none"> • Major water line breaks, loss of a water well or pump, or system failure occur, when cause unprecedented loss of capability to provide water service. • Natural or man-made contamination of the water supply source. • Any emergency drawdown of the City Lake Reservoir for structural integrity purposes; or • Any condition exists which prevents or imminently threatens to prevent 	<ul style="list-style-type: none"> • Maintain pertinent preceding stage actions. All non-essential outdoor water uses prohibited. • Assess the severity of the problem and identify the actions needed and time required to resolve the issues. • Notify TCEQ, County, and or State emergency response officials, request assistance, if appropriate. • Undertake necessary actions, including repairs and/or clean-up.