



## EMERGENCY OPERATIONS PLAN TEMPLATE FOR PUBLIC WATER SYSTEMS

### HOW TO USE THIS TEMPLATE:

This Emergency Operations Plan template was created to assist drinking water systems with the development of system specific emergency response plans. It is designed to be used by any community water system and may be modified to fit the need of each system.

The emergency operations plan must meet the requirements of Title 18, Chapter 4, Article 204 of the Arizona Administrative Code and, at a minimum, detail the steps that the community water system will take to assure continuation of service in the following emergency situations:

1. Loss of a source
2. Loss of water supply due to major component failure
3. Damage to power supply equipment or loss of power
4. Contamination of water in the distribution system from backflow
5. Collapse of a reservoir, reservoir roof, or pump house structure
6. A break in a transmission or distribution line; and
7. Chemical or microbiological contamination of the water supply

The emergency operations plan shall also address the following:

1. Provisions of alternate sources of water during emergency
2. Notice procedures for regulatory agencies, news media, and users
3. Identification of critical components that shall remain in service or be returned to service quickly
4. Critical spare parts inventory; and
5. Staff training in emergency response procedure

Once completed, the plan should be updated regularly and the staff should be informed of any changes to the plan. At minimum, this document needs to be reviewed annually to ensure its contingencies are up to date and applicable to the design of the water system.

**Note:** The plan should be kept in an easily accessible location on site.

Joseph City Domestic Water Improvement  
District  
AZ0409016



**CONTACT INFORMATION**

**Address:** 4504 1<sup>st</sup> North Ave

**Phone:** 928-288-3455

**Email:** josephcityutilities@gmail.com

**Fax:**

**Date Created:** 1-2-2019

**Date Revised:** [INSERT DATE]

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# 1. Public Water System Overview with System Map

GENERAL INFORMATION	
Public Water System Name:	Joseph City Domestic Water Improvement District
Public Water System ID:	AZ0409016
Population Served:	2000
Number of Service Connections:	465
Classification:	Grade 2
Average daily demand:	gal/day
Design capacity:	gal/day
This system consists of <u>2</u> well(s), <u>   </u> surface water intake(s), consecutive connection(s), <u>   </u> treatment plant(s), <u>2</u> storage tank(s), <u>   </u> pressure tank(s), Entry Point(s) to Distribution System (EPDS), and distribution system(s).	
PWS WATER SOURCE(S)	
List all water sources (ground water wells and/or surface water intakes):	
Water Source	Water Source ID
Well #1	55628495
Well #2	55628496
List any disinfection and treatment plants:	
Type of Treatment	Treatment For
Gas Chlorination	
List all storage tanks:	
Storage Tank Name or ID	Capacity/Size
Tank #1	485,000 gallons
Tank #2	500,000 gallons

List all Entry Point(s) to the Distribution System:

EPDS number	Location

### SYSTEM FLOW

Well # 1 / 2 → gas chlorination disinfection → EPDS: 001 → storage tanks → distribution system

### SYSTEM MAP(S) OR SCHEMATIC

Distributions maps and other source details stored in infraMAP software.

## 2. Staff Emergency Responders

*For Medical, Police or Fire Emergencies call 911*

Director, CEO or Owner: Joe Zabadal, Board Chairman  
 Phone Numbers: 928-241-8195 / \_\_\_\_\_

Certified Operator: Terry Oldham Jeff Hammond  
 Phone Numbers: 928-245-1841 / 928-245-1677

After Hour Staff Name and Numbers: Kellen Roberson 928-288-3455

### a. Public Water System Staff Contact List

Staff Member/ Title: Kellen Roberson / Operations Manager  
 Phone Numbers: 928-587-1110 / 928-288-3455  
 Staff Training Skill(s) Grade 1 Water Distribution

Staff Member/ Title: Jim Graham / Field Operator  
 Phone Numbers: 928-587-4469 / \_\_\_\_\_  
 Staff Training Skill(s) \_\_\_\_\_

Staff Member/ Title: Herschel Slivers / Field Operator  
 Phone Numbers: 505-453-7428 / \_\_\_\_\_  
 Staff Training Skill(s) \_\_\_\_\_

### b. Staff Training in Emergency Response Procedures

<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The public water system has provided staff with up-to-date Emergency Operations Plan.
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The public water system has reviewed emergency procedures with staff.

#### Training provided:

Date	Comments
1/29/2019	The emergency response plan has been reviewed by all employees and will be reviewed and updated every January.

### 3. Local Emergency Responders

This section should include the contact information of first responders including public emergency services such as the fire department and local law enforcement, and other relevant contacts such as an electrician, well pump repair services, etc.

General Emergency Assistance – 911

Business Name: Navajo County Emergency Management

Phone Numbers: 928-524-4000 / \_\_\_\_\_

Business Name: Joseph City Fire Department

Phone Numbers: 928-288-3311 / \_\_\_\_\_

Business Name: Joseph City School District

Phone Numbers: 928-288-3307 / 928-386-0972

Business Name: ADEQ Water Quality

Phone Numbers: 602-771-6176 / \_\_\_\_\_

Business Name: Willis Drilling

Phone Numbers: 928-536-4414 / \_\_\_\_\_

Business Name: \_\_\_\_\_

Phone Numbers: \_\_\_\_\_ / \_\_\_\_\_

## 4. Loss of a source

<b>CONTACT</b>
First Public Water System Contact: Kellen Roberson
Second Public Water System Contact: Joe Zabadal
<b>PROCEDURE STEPS</b>
Primary Source – Well #1 Secondary Source – Well #2  <ol style="list-style-type: none"><li>1. Shut down power to Well #1</li><li>2. Close Well #1 distribution valve to prevent backflow</li><li>3. Close Well #1 disinfection valves</li><li>4. Open Well #2 distribution valve</li><li>5. Open Well #2 disinfection valve</li><li>6. Turn on power to Well #2</li></ol>
<b>PROVISION OF ALTERNATE SOURCE OF WATER DURING AN EMERGENCY</b>
<input type="checkbox"/> <b>Other sources</b> (well, surface water): <u>Well #2</u> _____
<input type="checkbox"/> <b>Other Public Water System:</b> Provided by: <u>Holbrook Water Department</u> Contact: <u>Holbrook City Manager – 928-524-6225</u>
<input type="checkbox"/> <b>Bottled water</b> Provided by: <u>Sparkletts</u> Contact name and phone : <u>617-489-8120</u>
<input type="checkbox"/> <b>Hauled water:</b> Provided by: _____ Contact name and phone: _____
<input type="checkbox"/> <b>Other:</b> _____ _____ _____ _____



## 5. Loss of water supply due to major component failure

This public water system is:

**A single well system**

Please specify procedures to follow if anything goes wrong with the well. Items include but are not limited to; well pump failure, booster pump failure, well casing failure, well electrical wiring failure, lightning strikes, pressure tank replacement and well site electrical problems.

Contact information for well driller:

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Contact information for electrician:

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**A multi-well system**

The system will switch to another well and look into why the primary well is not operating. List procedures for switching over to other wells:

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The system has an interconnection with another water system(s). List procedures for using the interconnect to another system:

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The system will contact the well driller to come out for emergency work.

- i. Name: Willis Drilling
- ii. Address: 1351 Main St, Snowflake AZ 85937
- iii. Phone #: 928-536-4414

The system will provide an alternate source of water during an emergency as listed in section 4, Loss of a Source.

Other procedures:

Haul water with a tanker using Holbrook's water well

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**Surface water system**

Please specify procedures to follow if anything goes wrong with the systems intake line or pump(s). Items include but are not limited to; inlet/suction line damage, pump failure, lift pump failure, any treatment plant failures, system electrical wiring failure, lightning strikes, pressure tank replacement and site electrical problems.

The system will switch to the back up well(s) and look into why the primary source water is not operating. List procedures for switching over to back up well(s):

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Contact information for system technician:

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Contact information for electrician:

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## 6. Damage to power supply equipment or loss of power

PROCEDURE DESCRIPTION			
<p><input checked="" type="checkbox"/> This water system is too small to have emergency power equipment of its own. In case of a power outage, that last more than four hours the following power supplier will be contacted to get an estimate of when power will be restored to the water source.</p> <p><b>Power Company:</b> <u>APS</u> <b>Phone Number:</b> <u>1-800-240-2014</u></p> <p><input type="checkbox"/> In case of power equipment failure on the water system side, contact the following company or companies for repair services:</p> <p><b>Company:</b> _____ <b>Phone Number:</b> _____</p> <p><b>Address:</b> _____</p> <p><input type="checkbox"/> This water system has access to a power generator:</p> <p><b>Location of generator(s):</b> _____</p> <p><b>Connection instructions are:</b> <input type="checkbox"/> located with the generator <input type="checkbox"/> attached</p>			
OTHER CONTACTS			
<b>Primary Electrician</b>	Patton Electric	<b>Phone</b>	928-707-0073
<b>Backup Electrician</b>		<b>Phone</b>	
PROCEDURE STEPS			

## 7. Contamination of Water in the Distribution System from a Backflow Incident

STEPS TO IDENTIFY A CROSS-CONNECTION OR A BACKFLOW INCIDENT			
<b>Backflow/Cross Connection Specialist</b>	Cross Connection Environmental	<b>Phone</b>	602-438-8469
<p>(Please describe how the system will identify the cross-connection location, the service connection(s) that are affected include how the system will disconnect or stop the cross-connection, flush or replace the affected lines before returning to service).</p>			
STEPS FOR EMERGENCY DISINFECTION PROCEDURE			
<p>The purpose of disinfection is to kill disease producing organisms which may have gained entrance into a water supply. <b><i>ADEQ Engineering Bulletin No. 8, Disinfection of Water Systems</i></b> can be used as a guideline for disinfecting drinking water systems.</p>			

\*\*\*In the event of a backflow incident, the public water system must complete and submit to ADEQ a backflow incident report as required by R18-4-211(A).\*\*\*

## 8. Collapse of a reservoir, reservoir roof or pump house structure

PROCEDURE DESCRIPTION - COLLAPSE OF STRUCTURE			
CONTACT			
<b>1<sup>st</sup> Contact</b>	Kellen Roberson	<b>Phone</b>	928-587-1110
<b>2<sup>nd</sup> Contact</b>	Joe Zabadal	<b>Phone</b>	928-241-8195
<b>3<sup>rd</sup> Contact</b>	James Graham	<b>Phone</b>	928-587-4469
HEAVY EQUIPMENT			
HEAVY EQUIPMENT PROVIDER		PHONE	
Westover Construction		928-587-0855	
ON-SITE HEAVY EQUIPMENT NAME		LOCATION	
Backhoe		Maintenance Shop	
PROCEDURE STEPS			
<p>Contact Kellen Roberson for access to the maintenance shop, then contact one of the field operators for backhoe operation.</p>			

## 9. A break in a transmission or distribution line

PROCEDURE DESCRIPTION - BREAK IN A TRANSMISSION/DISTRIBUTION LINE			
CONTACT			
1 <sup>st</sup> Contact	Kellen Roberson	Phone	928-587-1110
2 <sup>nd</sup> Contact	James Graham	Phone	928-587-4469
3 <sup>rd</sup> Contact		Phone	
HEAVY EQUIPMENT			
HEAVY EQUIPMENT PROVIDER		PHONE	
Westover Construction		928-587-0855	
ONSITE HEAVY EQUIPMENT NAME		LOCATION	
Backhoe		Maintenance shop	
PROCEDURE STEPS			
Contact Kellen Roberson, she will notify all required parties and the field operators for repair			

## 10. Critical spare parts inventory

<b>CRITICAL PARTS</b>				
<b>Critical Part</b>	<b>Location</b>	<b>In-stock/Location</b>	<b>Supplier</b>	<b>Supplier Contact</b>
	Maintenance Shop			
<b>IDENTIFICATION OF CRITICAL COMPONENTS THAT SHALL REMAIN IN SERVICE OR BE RETURNED TO SERVICE QUICKLY</b>				
<b>Critical Part</b>	<b>Location</b>	<b>In-stock/Location</b>	<b>Supplier</b>	<b>Supplier Contact</b>
<b>PROCEDURE STEPS</b>				
<p>If necessary parts are unavailable in maintenance shop, contact Lance Brown of Core &amp; Main 928-699-0634 or Aaron Cosgray of Central Arizona Supply 928-537-0869</p>				

## 11. Notice procedures for regulatory agencies, news media, and users

When notification is required, the water system will:

- a. Call ADEQ in Phoenix for specific notification guidance and notification templates. If we are unable to contact anyone at the noted phone numbers below, we will call 1-800-234-5677 to leave a detailed description of the ongoing current emergency and contact number(s).

PROCEDURE DESCRIPTION - PUBLIC NOTICE PROCEDURES			
PWS CONTACT			
<b>PWS Public Relations/Media Specialist</b>	Kellen Roberson, Operations Manager	<b>Phone</b>	928-587-1110
<b>1<sup>st</sup> Contact</b>	Joe Zabadal, Board Chairman	<b>Phone</b>	928-241-8195
<b>2<sup>nd</sup> Contact</b>		<b>Phone</b>	
REGULATORY AGENCIES			
REGULATORY AGENCY		PHONE	
ADEQ Drinking Water Monitoring and Protection Unit Manager		602-771-6403	<b>Email:</b> <b>Mailing Address:</b> Attn: Natalie Muilenberg ADEQ – Drinking Water Monitoring and Protection Unit Manager 1110 W. Washington Street Phoenix, AZ 85007
ADEQ Compliance Assistance Coordinator for County		602-771-4667	<b>Email:</b> <b>Mailing Address:</b> Attn: Erin Abel ADEQ – Drinking Water Monitoring and Protection Unit 1110 W. Washington Street Phoenix, AZ 85007
NEWSPAPERS			
NEWSPAPER		PHONE	
NEWS CHANNELS			
NEWS CHANNEL		PHONE	



## 12. Regulatory Reporting Requirements

### R18-4-211. Reporting Requirements

A. Cross connection incidents. A public water system shall submit a written cross connection incident report to the Department and the local county health department within five days of the occurrence of a cross connection problem that results in contamination of water provided by the public water system. The report shall address all of the following:

1. Date and time of discovery of the cross-connection incident,
2. Nature of the cross-connection incident,
3. Affected area,
4. Cause of the cross-connection incident,
5. Public health impact,
6. Date and text of any public health advisory issued,
7. Corrective action taken, and
8. Date of completion of corrective action.

B. Emergencies. A public water system shall notify the Department, by telephone or facsimile, as soon as possible but no later than 24 hours after the occurrence of any of the following emergencies.

1. Loss of water supply from a source;
2. Loss of water supply due to major component failure;
3. Damage to power supply equipment or loss of power;
4. Contamination of water in the distribution system from backflow;
5. Collapse of a reservoir, reservoir roof, or pump house structure;
6. Break in a transmission or distribution line that results in a loss of service to customers for more than four hours; and
7. Chemical or microbiological contamination of the water supply.

C. Waterborne disease outbreak. A public water system shall report to the Department the occurrence of a waterborne disease outbreak that may be attributable to water provided by the public water system as soon as possible but no later than 24 hours after actual notice of the waterborne disease outbreak.

D. Department requests for records. A public water system shall submit to the Department, within the time stated in the Department's request, copies of any records that the public water system is required to retain under this Chapter or copies of any documents that the Department is entitled to inspect under 42U.S.C. 3009j-4(2001).

E. Department reporting forms. A public water system shall report to the Department the results of all analyses completed under this Chapter on Department-approved forms.

F. Direct reporting. A public water system may contract with a laboratory or another agent to report monitoring results to the Department, but the public water system remains legally responsible for compliance with reporting requirements.

G. 48-hour reporting requirement. A public water system shall report the failure to comply with any of the provisions of this Chapter to the Department within 48 hours, except where a different reporting period is specified in this Chapter.