

# Disaster-Specific Preparedness/Response Plan

for Public Drinking Water Systems  
Per Chapter 62-555.350 (15) F.A.C.

## XYZ Water System Template

Insert  
your system name here

Address: 123 Main Street  
PO Box 123  
Sample, FL 33333  
Phone: 850-123-4567  
Fax: 850-123-4568  
Contact: Mayor Jane Doe  
E-mail: JaneDoe@web.com  
Connections: 400  
PWS: 5555555  
County: Any County

Insert your system  
information here

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This template and guide has been developed by the Florida Rural Water Association (FRWA) in collaboration with the Washington State Department of Health, Office of Drinking Water, Olympia, Washington; and reviewed by Florida Department of Environmental Protection.

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## Preface

# Chapter 62-555.350 (15) FAC

### Disaster-Specific Preparedness/Response Plans

(15) Suppliers of water who own or operate a community water system serving, or designed to serve, 350 or more persons or 150 or more service connections shall develop a written emergency preparedness/response plan in accordance with Emergency Planning for Water Utilities, AWWA Manual M19, as adopted in Rule 62-555.335, F.A.C., by no later than December 31, 2004, and shall update and implement the plan as necessary thereafter. Said suppliers of water shall coordinate with their Local Emergency Planning Committee and their Florida Department of Law Enforcement Regional Security Task Force when developing their emergency plan and shall include in their plan all of the information in paragraphs (a) through (e) below.

- (a) A Communication Charts as described in Chapter 5 of AWWA Manual M19.
- (b) Written agreements with other agencies, utilities, or response organizations.
- (c) A disaster-specific preparedness/response plan as described in Chapter 5 of AWWA Manual M19 for each of the following disasters: vandalism or sabotage; a drought; a hurricane; a structure fire; and if applicable, a flood, a forest or brush fire, and a hazardous material release. Each disaster-specific preparedness/response plan shall incorporate the results of a vulnerability assessment; shall include actions and procedures, and identify equipment, that can obviate or lessen the impact of such a disaster; and shall include plans and procedures that can be implemented, and identify equipment that can be utilized, in the event of such a disaster.
- (d) Details about how the water system meets the standby power requirements under subsection 62-555.320(14), F.A.C., and, if applicable, recommendations regarding the amount of fuel to maintain on site, and the amount of fuel to hold in reserve under contracts with fuel suppliers, for operation of auxiliary power sources.
- (e) If applicable, recommendations regarding the amount of drinking water treatment chemicals, including chemicals used for regeneration of ion-exchange resins or for onsite generation of disinfectants, to maintain in inventory at treatment plants.

*Specific Authority 403.861(9) FS. Law Implemented 403.852(12), 403.853(6), 403.861(17) FS. History-New 11-19-87, Formerly 17-22.650, Amended 1-18-89, 1-1-93, Formerly 17-555.350, Amended 8-28-03.*

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### Time Extension for Submitting/Completing ERP – December 31, 2005

From: Hoofnagle, Van  
 Sent: Thursday, October 21, 2004 11:25 AM  
 Subject: Time Extension for Submitting/Completing ERP  
 Importance: High

I am sending this e-mail because of possible confusion in some FDEP District Offices or ACHDs regarding the deadline for compliance with the emergency preparedness/response plan requirements in FAC subsection 62-555.350(15).

As John Sowerby and other staff mentioned during Focus On Change presentations early this year on FAC Rule 62-555.350 and during training this summer on the recent amendments to FAC Chapter 62-555, the FDEP intends to amend FAC subsection 62-555.350(15) to give all affected community water systems (i.e., all community water systems serving 350 or more persons or 150 or more service connections) **until the end of 2005** instead of the end of this year to complete a comprehensive emergency preparedness / response plan as required by FAC subsection 62-555.350(15). At this point, it will likely be after the end of this year before we officially make this change to FAC subsection 62-555.350(15). In the meantime, please do not take any enforcement action against community water systems who fail to meet the 12/31/04 deadline in FAC subsection 62-555.350(15). Thanks.

Van Hoofnagle  
 FDEP/DEP Drinking Water Administrator



# Section 1 Communication Charts

The first response step in any emergency is to inform the person at the top of this list, who is responsible for managing the emergency and making key decisions. List the water system chain of command in order of contact.

## Water System Chain of Command – Lines of Authority

Order	Name & Title	Responsibilities During an Emergency	Contact Numbers Information
1			Phone: Cell: Email:
2			Phone: Cell: Email:
3			Phone: Cell: Email:
4			Phone: Cell: Email:
5			Phone: Cell: Email:
6			Phone: Cell: Email:
7			Phone: Cell: Email:



# Emergency Notification

**Notification call-up lists** - Use these lists to notify important parties of an emergency.

<b>Emergency Notification List</b>				
Organization or Department	Name & Position	Telephone	Cell Phone	e-mail
<b>State Warning Point</b>	<b>Duty Officer</b>	<b>800-320-0519</b>	800-320-0519	N/A
Local Law Enforcement				
Fire Department				
Emergency Medical Services				
Water Operator (if contractor)				
County Health Department				
DEP District Office				
County Emergency Management Dept.				
Local Leader (City Mgr., Mayor, Chair. Co. Comm., etc.)				
Local Hazmat Team (if any)				
Hazmat Hotline				
National Spill Response Center.	Duty Officer	800-424-8802	800-424-8802	N/A
Interconnected Water System(s)				
Neighboring Water System (not connected)				
FRWA Water Circuit Rider		850-668-2746		



<b>Priority Customers</b>				
<b>Organization Or Department</b>	<b>Name &amp; Position</b>	<b>Telephone</b>	<b>Cell Phone</b>	<b>email</b>
<b>Hospital Or Clinic(s)</b>				
<b>Nursing Home(s)</b>				
<b>Public Schools</b>				
<b>Private Schools</b>				
<b>Wastewater Treatment Plant</b>				
<b>Food Processing Or Other Industry</b>				

<b>Service / Repair Notifications</b>				
<b>Organization Or Department</b>	<b>Name &amp; Position</b>	<b>Telephone</b>	<b>Cell Phone</b>	<b>email</b>
<b>Electric Utility Co.</b>				
<b>Electrician</b>				
<b>Gas / Propane Supplier</b>				
<b>Water Testing Lab.</b>				
<b>Sewer Utility Co.</b>				
<b>Telephone Co.</b>				
<b>Plumber</b>				
<b>Pump Supplier</b>				
<b>"Dig Safe" or "One Call"</b>				



## Service / Repair Notifications

Organization Or Department	Name & Position	Telephone	Cell Phone	email
Rental Equip. Supplier				
Chlorine Supplier				
Other Chemical Suppliers				
Radio/SCADA Repair Co.				
Bottled Water Service				
Bulk Water Supplier				
Well Drilling Co.				
Pipe Supplier				

## Designated Public Spokesperson and Alternates

Designate a spokesperson (alternates) for delivering messages to the news media & public

Public Spokesperson	Name & Position	Telephone	Cell Phone
Spokesperson			
Alternate 1			
Alternate 2			

## Key Messages

<b>Develop possible messages in advance, and update them as the emergency develops</b>
<ul style="list-style-type: none"> <li>▪</li> </ul>





▪
▪

## Health Advisories – Boil Water Notices

Use the assistance of your County Health Department and/or District FDEP office, and FDEP's Mandatory Health Effects Language, located on FDEP's website at:

<http://www.doh.state.fl.us/environment/water/manual/boil.htm>

<http://www.FDEPDEP.state.fl.us/water/drinkingwater/rules.htm>,

and click on "Mandatory Health Effects Language"., PLUS EPA's templates at:

<http://epa.gov/safewater/pn.html>

Click on "Microsoft Word and Word Perfect files of PN templates" (PN means Public Notifications), then determine which "Tier" of notifications is needed and click on the desired software to receive them in.



## Section 2 Written Agreements With Other Agencies, Utilities, or Response Organizations

**INSERT BELOW** information regarding any written agreements with other agencies, utilities, or response organizations, such as emergency interconnects, mutual aid or FlaWARN.

### Emergency Interconnect(s)

Information on the location of interconnection(s) (if any), type and size of interconnecting pipe, pumps and accessory equipment, meters at interconnection(s), normal pressures at both ends of interconnection, volume of water from interconnection(s), type of agreement and approvals needed for use, procedures necessary to use interconnection, etc.

<b>Location (Street)</b>	
<b>Location (GPS)</b>	
<b>Description</b>	

### Memoranda of Understanding

<b>Organization</b>	
<b>Summary of Understanding</b>	

### Mutual Aid Agreements

<b>Organization</b>	
<b>Summary of Understanding</b>	

### FlaWARN **WEBSITE FOR AGREEMENT: [www.flawarn.org](http://www.flawarn.org)**

<b>Organization</b>	
<b>Summary of Understanding</b>	



## Section 3 Disaster-Specific Preparedness/Response Plan

Your disaster-specific preparedness/response plan must include a Vulnerability Assessment and preparedness / response plans for: vandalism or sabotage; a drought; a hurricane; a structure fire; and if applicable, a flood, a forest or brush fire, and a hazardous material release.

In any event there are a series of general steps to take:

1. Confirm and analyze the type and severity of the emergency.
2. Take immediate actions to save lives.
3. Take action to reduce injuries and system damage.
4. Make repairs based on priority demand.
5. Return the system to normal operation.

### Vulnerability Assessment

It is essential that water systems identify and assess the vulnerability of each system component for both natural and human-caused emergencies, before preparing their disaster-specific preparedness/response plans. Prepare your Vulnerability Assessment by completing the table below:

**Facility Vulnerability Assessment**

System component	Description and condition	Vulnerability	Security improvements (indicate existing or proposed)s
Raw Water Sources			
Pump-house and pumping facilities			
Treatment Facilities			
Storage Facilities			
Distribution System			
Computer and telemetry systems			



## A. Vandalism or Sabotage Response Procedures

1. Utility staff first aware of incident:	a)
	b)
2.	a)
	b)
3.	a)
	b)

## B. Drought Response Procedures

Include water use restrictions per Consumptive Use Permit

1.	a)
	b)
2.	a)
	b)
3.	a)
	b)

## C. Hurricane Preparedness & Response Procedures

<b>Pre- Hurricane</b> <b>(36 to 48 hrs prior to arrival)</b>	1. 2. 3.
<b>Hurricane Watch</b> <b>(24 to 36 hrs prior to arrival)</b>	1. 2. 3.
<b>Hurricane Warning</b> <b>(24 hrs or less prior to arrival)</b>	1. 2. 3.
<b>Recovery Procedures</b>	1. 2. 3.



## D. Structure Fire Response Procedures

1. Utility staff discovering fire: a) b)
2. a) b)
3. a) b)

## E. Flood Preparedness & Response Procedures

Is any critical part of your system in a flood prone area? If so, this procedure is required.  **Not Applicable**

1. a) b)
2. a) b)
3. a) b)

## F. Forest or Brush Fire Response Procedures

M. Is any critical part of your system subject to forest or brush fire? If so, this procedure is required.  **Not Applicable**

1. a) b)
2. a) b)
3. a) b)



## G. Hazardous Material Release Response Procedures

Do you have any hazardous material (chlorine gas) at your water system? If so, this procedure is required. If yes, inclusion of appropriate procedures is required. If not, check "not applicable" and leave the box below blank. Use this table to describe the procedure for response to a hazardous material release that might threaten your water system from outside sources, such as a tanker truck accidental spill.  **Not Applicable**

<ol style="list-style-type: none"> <li>1.             <ol style="list-style-type: none"> <li>a)</li> <li>b)</li> </ol> </li> <li>2.             <ol style="list-style-type: none"> <li>a)</li> <li>b)</li> </ol> </li> <li>3.             <ol style="list-style-type: none"> <li>a)</li> <li>b)</li> </ol> </li> </ol>
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## H. Other Disasters Response Procedures

NONE OF THIS EXAMPLE IS REQUIRED by DEP in Chapter 62-555.350(15). Use it only if there are other disasters that you want to prepare for, such as a Contamination Event, SCADA Attack, or Structural Damage from an Intentional Act? ***Recommended by EPA - Not Required by DEP***

<p>Contamination,</p> <ol style="list-style-type: none"> <li>1.             <ol style="list-style-type: none"> <li>a)</li> <li>b)</li> </ol> </li> <li>2.             <ol style="list-style-type: none"> <li>a)</li> <li>b)</li> </ol> </li> </ol> <p>SCADA Attack</p> <ol style="list-style-type: none"> <li>1.             <ol style="list-style-type: none"> <li>a)</li> <li>b)</li> </ol> </li> <li>2.             <ol style="list-style-type: none"> <li>a)</li> <li>b)</li> </ol> </li> </ol> <p>Structural Damage from an Intentional Act</p> <ol style="list-style-type: none"> <li>1.             <ol style="list-style-type: none"> <li>a)</li> <li>b)</li> </ol> </li> <li>2.             <ol style="list-style-type: none"> <li>a)</li> <li>b)</li> </ol> </li> </ol>
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## Section 4 Standby Power Requirements

Include Details details about how the water system meets the standby power requirements” as described in Ch. 62-555.320(14), and 62-555.350(15)(d) FAC for water source, treatment, and pumping facilities necessary to deliver drinking water at a rate at least equal to the Average Daily Water Demand.

~~The details about standby power should include the following: a description of each standby power source and its location; a description of exactly what facilities each standby power source is connected to and designed to operate; a discussion about whether electrical loads must be manually transferred from one power source to another or will be automatically transferred; etc. Recommendations regarding fuel depend upon the location and reliability of fuel suppliers, power outage history, the status of impending disasters, etc.~~

### Standby Power for Wells Standby Power (or sSurface Wwater iIntakes)

Standby Power (or by alternate means) to OPERATE WELLS at Average Daily Demand

<b>Average Daily Demand (ADD) in gpd or gpm</b>	
<b>Wells Needed to Supply Average Daily Demand</b>	
<b>Standby Generator (kW) Needed for ADD &amp;</b>	
<b>Power Failure Transfer, Alarms &amp; Notifications</b>	
<b>Generator Fuel Consumption</b>	gallons per hour
<b>Recommended On-Site Fuel Storage (gallons)</b>	
<b>Reserve Fuel by Supplier Contract</b>	

### Standby Power for Treatment Facilities Standby Power

Standby Power (or by alternate means) to TREAT WATER at Average Daily Demand

<b>Treatment Facilities Needed to Supply ADD</b>	
<b>Standby Generator (kW) Needed to Operate ADD Treatment Facilities</b>	
<b>Power Failure Transfer, Alarms &amp; Notifications</b>	
<b>Generator Fuel Consumption</b>	gallons per hour
<b>Recommended On-Site Fuel Storage (gallons)</b>	



**Reserve Fuel by Supplier  
Contract**





# Standby Power for Pumping Standby Power

Standby Power (or by alternate means) to PUMP WATER at Average Daily Demand

<b>Pumps Needed to Supply ADD</b>	
<b>Standby Generator (kW) Needed to Pump ADD</b>	
<b>Power Failure Transfer, Alarms &amp; Notifications</b>	
<b>Generator Fuel Consumption</b>	gallons per hour
<b>Recommended On-Site Fuel Storage (gallons)</b>	
<b>Reserve Fuel by Supplier Contract</b>	



## Section 5 Drinking Water Treatment Chemicals & Disinfectants

Include recommendations regarding the amount of drinking water treatment chemicals, to maintain in inventory at treatment plants. Do not just list chemical storage capacity, but instead recommend the minimum amount of chemicals to maintain in inventory, which depends upon the location and reliability of chemical suppliers, the status of impending disasters, etc.

### Disinfection Treatment Information

Disinfection Chemical(s)	Chemical / Location No. 1	Chemical / Location No. 2
Name of Chemical Feed		
Type of Chemical Feed System Location		
Chemical Storage Location		
Recommended Minimum Amount to be Maintained in Storage (gal)		

### Other Chemical Information

Chemical(s) Used	Chemical #1	Chemical #2	Chemical #3	Chemical #4
Name of Chemical				
Type of Chemical Feed System Location				
System Location				
Chemical Storage Location				
Recommended Minimum Amount to be Maintained in Storage (gal)				



# Appendix A

## Basic System information

This information is useful and recommended for inclusion in your ERP. This information is highly useful and essential in preparing your Disaster-Specific Preparedness / Response Plan. Although this information is recommended, it is not required by FDEP in Chapter 62-555.350(15).

Keep this basic information readily available for when you need it for emergency responders, repair people, the news media and potentially, an emergency operator.

### Basic System Information

GPS coordinates will help emergency crews find your system following a major catastrophe.  
Information - Not Required by FDEP

*Recommended*

<b>System identification number (PWS ID)</b>		
<b>System name and address</b>		
<b>GPS Coordinates</b>	Latitude:	Longitude:
<b>Basic description and location of system facilities</b>		
<b>Population served and service connections.</b>	Population =	Connections =
<b>System Owner</b>		
<b>Management Authority</b>		
<b>Name, title, and phone numbers of person responsible for maintaining and implementing the ERP.</b>		

### System Demand

*Recommended Information - Not Required by FDEP*

Demand based on Monthly Operational Records and system capacity based on Sanitary Survey.

<b>Average Daily Demand (gpd)</b>	
<b>Maximum Daily Demand (gpd)</b>	
<b>System Capacity (gpd)</b>	



**Peak Hour Demand (gpm)**



## Location of Pertinent Information *Recommended - Not Required by FDEP*

Item	Location
Distribution System Map	
O&M Manual(s)	
Start-Up / Shut-Down Procedures	

## Well Information

GPS coordinates will help emergency crews find wells following a major catastrophe. *Recommended - Not Required by FDEP*

Well Information	Well No. 1	Well No. 2	Well No. 3	Well No. 4
GPS well tag #				
Location (street)				
GPS Coordinates	Lat: Long:	Lat: Long:	Lat: Long:	Lat: Long:
Well Depth (ft)				
Well Yield (gpd)				
Pump Type				
Manufacturer				
Capacity (gpm)				
Motor Manufacturer				
Horsepower				
Phase				
Volts/Amps Voltage				

## Surface Water Sources

GPS coordinates will help emergency crews find surface water intakes following a major catastrophe. *Recommended - Not Required by FDEP*

Surface Water Information	Intake No. 1	Intake No. 2
Location (Street / Description)		



<b>GPS Coordinates</b>	Lat: Long:	Lat: Long:
<b>Critical Water Level</b>		



## Other Applicable Information

*Recommended - Not Required by FDEP*


## Finished Water Storage

GPS coordinates will help emergency crews find tanks following a major catastrophe. *Recommended Information - Not Required by FDEP*

Name of Storage Unit	Tank No. 1	Tank No. 2	Tank No. 3	Tank No. 4
Location (Street)				
Location (GPS)	Lat: Long:	Lat: Long:	Lat: Long:	Lat: Long:
Type (ground, elevated, etc.)				
Capacity (gal)				
Empty Elevation				
Overflow Elevation				

## High Service Pumps *Recommended - Not Required by FDEP*

HSP	HSP No. 1	HSP No. 2	HSP No. 3	HSP No. 4
Location (street)				
Pump Type				
Manufacturer				
Capacity (gpm)				
Motor Manufacturer				
Horsepower				
Phase				
Volts/Amps Voltage				



# Appendix B Training and Rehearsals

This information is useful and recommended for inclusion in your ERP, it is not required by FDEPDEP in Chapter 62-555.350(15).

Event	Description	People & Organizations Involved	Date





## Appendix C Plan Approval

This information is useful and recommended for inclusion in your ERP, it is not required by FDEP in Chapter 62-555.350(15).

### Plan Approval

*Recommended Information - Not Required by FDEP*

This plan is officially in effect when reviewed, approved, and signed by the following people:

Name / Title	Signature	Date