

**HARTSTONE POINTE WATER-SEWER DISTRICT  
SPECIAL MEETING  
CONDUCTED VIA TELECONFERENCE  
Per State of Emergency Declared in Washington State and Mason County  
January 14, 2021 1:00 P.M.**

**AGENDA**

1. Call to Order
2. Roll Call
3. Subscriber Remarks
4. Present Agenda

**BUSINESS:**

5. Conduct an Emergency Response Preparing Retreat (2-32)
6. Schedule a Follow Up Meeting, if Necessary

DRAFT

**Hartstene Pointe Water - Sewer District**



*Dedicated to Service*

**HARTSTENE POINTE WATER SEWER DISTRICT**

**772 E Chesapeake Dr.**

**Shelton, WA 98584**

**360-427-2413**

**info@hpwatersewer.com**

**EMERGENCY RESPONSE PLAN 2021**

## Section 1. Emergency Response Mission and Goals

<p><b>MISSION STATEMENT FOR EMERGENCY RESPONSE</b></p>	<p>IN AN EMERGENCY, THE MISSION OF THE HARTSTENE POINTE WATER-SEWER DISTRICT IS TO PROTECT THE HEALTH OF OUR CUSTOMERS BY BEING PREPARED TO RESPOND IMMEDIATELY TO A VARIETY OF EVENTS THAT MAY RESULT IN CONTAMINATION OF SOURCE WATER, DISRUPTION OF WATER SUPPLY AND CONTAMINATION OF THE PUGET SOUND VIA SEWAGE SPILLS.</p>
<p><b>Goal 1</b></p>	<p>Be able to quickly identify an emergency and initiate timely and effective response action.</p>
<p><b>Goal 2</b></p>	<p>Be able to quickly notify local, state, and federal agencies to assist in the response.</p>
<p><b>Goal 3</b></p>	<p>Protect public health and the environment by being able to quickly determine if the water is not safe to drink or use and being able to advise them of appropriate protective action. To quickly respond to and mitigate contamination to the Puget Sound.</p>
<p><b>Goal 4</b></p>	<p>To be able to quickly respond and repair damages to minimize system down time.</p>

## Section 2. System Information

<b>SYSTEM IDENTIFICATION NUMBER AND PERMIT NUMBER</b>	WATER SYSTEM ID: 315699-O NATIONAL POLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NUMBER : WA0038377
<b>System name and address</b>	Hartstene Pointe Water-Sewer District 772 E Chesapeake Dr. Shelton, WA 98584-7015
<b>Directions to the system</b>	From Shelton proceed 7.8 miles north on State Route 3, turn right onto E. Pickering Road, proceed 3.3 miles straight to Harstine Bridge Road, proceed .6 miles turn left on E. North Island Road and proceed 4.7 miles, turn right into the Hartstene Pointe Maintenance Association, turn right on E. Pointes Drive East proceed 1 mile (4th right) turn right on Chesapeake Drive, take second left. The office and wastewater plant are on the right.
<b>Basic description and location of system facilities</b>	<p>The Hartstene Pointe Water-Sewer District water system consists of one 188,000 gallon 20' diameter by 80' tall steel reservoir. Two active groundwater wells of 165' and 162'. Two additional wells are available for emergency backup. The original well 1 is operable but was disconnected from the treatment facility after Well 4 has was put online in 2019 and has a reduced pumping rate of less than 20 gallons per minute but could be used as a back-up source. The 3<sup>rd</sup> well was drilled in the proximity of the 2<sup>nd</sup> well and capped. Well 3 would require pump placement, electrical controls and a connection to the existing treatment facility. The existing wells pump to their individual treatment facilities consisting of pressure vessel filtration and electronic control systems. The finished water transfers to the distribution system and surplus water fills the storage reservoir. The water transfers from the reservoir to the booster pump station at the base of the reservoir which is used to help pressurize the distribution system. The booster pump station and reservoir are located on the right off of Nantucket at the top end of the RV Storage Lot. The wells are located to the left and right of 202 E Pointes Drive East.</p> <p>Additionally, at the northern most end of Hartstene Pointe at the precise address of 772 E Chesapeake Dr is Hartstene</p>

	Pointe's Wastewater Treatment Facility. Rated for .180MGD, this facility consists of a headworks/screening unit, two sequence batch reactors, one aerobic digester, one laboratory, one sludge pump room, one blower/aeration room, one storage facility and one onsite backup generator.
<b>Location/Town</b>	772 E Chesapeake Dr. Shelton, WA 98584-7015
<b>Population served and service connections from Division of Drinking Water records</b>	Population: Full time 306 Part time and visitors summer 1100 people Service Connections: 462 residential connections
<b>System owner</b>	Hartstene Pointe Water-Sewer District Lead Contact: David Carnahan

<b>NAME, TITLE AND PHONE NUMBER OF PERSON RESPONSIBLE FOR MAINTAINING AND IMPLEMENTING THE EMERGENCY PLAN.</b>	DAVID CARNAHAN GENERAL MANAGER/WATER AND WASTEWATER SYSTEM OPERATOR HARTSTENE POINTE WATER-SEWER DISTRICT WWTPO2, WDM 2, WTPO2, CCS PHONE: 360-427-2413 CELL: 360-490-8137 EMERGENCY PHONE : 360-490-8137
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### Section 3. Chain of Command – Lines of Authority

NAME & TITLE	RESPONSIBILITIES DURING AN EMERGENCY	CONTACT NUMBERS
<b>David Carnahan</b> <b>WWTPO2, WDM 2, WTPO 2 CCCS.</b> <b>General Manager and Water and Wastewater system operator</b>	Responsible for oversee and directing all day to day operations for HPWSD. The General Manager is the lead for managing the emergency, providing information to regulatory agencies, the public and news media. All communications to external parties are to be approved by the General Manager and District Commissioners.	Phone: 360-427-2413 Cell: 360-490-8137
<b>Jeff Palmer</b> <b>Wastewater and Water System Operator</b> <b>WWTPO2, WDM 2, WTPO 1 CCCS</b>	The lead Wastewater Treatment Plant Operator is responsible to perform inspections, maintenance and sampling and relaying critical information, assessing facilities, and providing recommendations to the General Manager.	Phone: 360-427-2413 Home: 360-549-6047
<b>Joseph Sartori</b> <b>Project and Accounts Manager</b> <b>WDM 1, WTPO1, CCCS</b>	Responsible for administration functions in the office including receiving phone calls and keeping a log of events. This person will provide a standard, carefully pre-scripted message to those who call with general questions. Additional information will be released through the General Manager.	Phone: 360-427-2413 Cell: 360-545-2480

## Section 4. Events that Cause Emergencies

The events listed below may cause water system emergencies. They are arranged from highest to lowest probable risk.

<b>TYPE OF EVENT</b>	<b>PROBABILITY OF RISK (HIG-MED-LOW)</b>	<b>COMMENTS</b>
<b>Earthquake</b>	High	Had minimal earthquake damages in February 2001 quake, reservoir was fitted with additional base reinforcement tie downs.
<b>High winds</b>	High	System is vulnerable to high wind events. Power is disrupted. Must maintain adequate fuel on hand for back-up generator.
<b>Ice Storm</b>	Medium	Minor damage caused in December 1996. Extended power outage and temporary road closures.
<b>Construction accident</b>	Medium	Construction crews often hit pipes.
<b>Waterborne Diseases</b>	Medium	Distribution system contamination as a result of back siphoning due to main breaks, repairs or loss of pressure.
<b>Vandalism</b>	Low	Facilities are locked, and have intrusion alarms that alert operators via cell phone.
<b>Chemical Spill</b>	Low	Residential area only; no commercial activity or major roads in wellhead protection area.
<b>System neglect</b>	Low	Treatment facilities replaced 2017. Booster pump station installed 2013. An Annual Pump Preventative Maintenance Program has been established by the District and regular maintenance is done on vulnerable equipment.
<b>Cross Connection</b>	Low	Residential area only; no commercial activity.
<b>Flood</b>	Low	Wells are located in areas not vulnerable to flooding.

<b>TYPE OF EVENT</b>	<b>PROBABILITY OF RISK (HIG-MED-LOW)</b>	<b>COMMENTS</b>
<b>Drought</b>	Low	The wells have level sensors installed to continuously monitor well draw down to monitor water level during extended drought conditions.
<b>Terrorism</b>	Low	Rural location; vandalism more likely.



## Section 5. Severity of Emergencies

Decisions on severity should be collaborative among system personnel, but are ultimately made by the person in charge of the emergency. The information for making such a decision will accumulate over time, and may result in changes in the assessment of severity.

Communicate each assessment of severity immediately to all those dealing with the emergency. Make sure operators have cell phones or radios when they are in the field.

### Level I – Normal (Routine) Emergency:

**DESCRIPTION:** THE HARTSTENE POINTE WATER SEWER DISTRICT WATER SYSTEM CONSIDERS THE FOLLOWING AS LEVEL I EMERGENCIES:

- DISTRIBUTION/COLLECTION LINE BREAKS.
- SERVICE LINE BREAKS.
- SHORT POWER OUTAGES.
- MINOR MECHANICAL PROBLEMS AT FACILITIES.
- OTHER MINOR SITUATIONS WHERE IT IS NOT LIKELY THAT PUBLIC HEALTH WILL BE JEOPARDIZED.

THE SYSTEM HAS SPECIFIC RESPONSE ACTIVITIES IDENTIFIED FOR THESE TYPES OF EMERGENCIES, INCLUDING PROPER SAMPLING, DISINFECTION, AND PRESSURE TESTING ACTIVITIES. SYSTEM PERSONNEL ARE ADVISED AND ARE DIRECTED TO WORK ON THE PROBLEM AND ARE USUALLY CAPABLE OF RESOLVING THE PROBLEM WITHIN 24 HOURS. IF IT IS DETERMINED THAT THE PROBLEM WILL TAKE LONGER THAN 24 HOURS TO RESOLVE AND STORAGE IS LIKELY TO BE DRAWN DOWN BELOW A SAFE OPERATING LEVEL, THE SITUATION WILL BE ELEVATED TO LEVEL II.

## **Level II – Minor Emergency (Alert Status):**

**Description:** The Hartstene Pointe Water Sewer District water system considers the following to be Level II emergencies:

- Disruption in supply such as a transmission main line break, pump failure with a potential for backflow, and loss of pressure.
- Storage is not adequate to handle disruption in an extended well outage.
- An initial positive coliform or E. coli sample.
- An initial primary chemical contaminant sample.
- A disruption in chlorine/chemical feed for the groundwater sources.
- A minor act of vandalism.
- Drought, with a noticeable and continuing decline of water level in the well

## **Level III – Significant Emergency:**

**DESCRIPTION:** THE HARTSTENE POINTE WATER SEWER DISTRICT WATER SYSTEM CONSIDERS THE FOLLOWING AS LEVEL III OR ACTUAL EMERGENCIES:

- A VERIFIED ACUTE CONFIRMED COLIFORM MCL OR E. COLI/FECAL POSITIVE SAMPLE REQUIRING IMMEDIATE CONSIDERATION OF A HEALTH ADVISORY NOTICE TO CUSTOMERS.
- A CONFIRMED SAMPLE OF ANOTHER PRIMARY CONTAMINANT REQUIRING IMMEDIATE CONSIDERATION OF A HEALTH ADVISORY NOTICE TO CUSTOMERS.
- A LOSS OR COMPLETE MALFUNCTION OF THE WATER TREATMENT FACILITIES FOR THE GROUND WATER SOURCE, INCLUDING CHLORINATION AND TREATMENT CHEMICALS.
- A MAJOR LINE BREAK OR OTHER SYSTEM FAILURE RESULTING IN A WATER SHORTAGE OR REQUIRING SYSTEM SHUTDOWN.
- AN ACT OF VANDALISM OR TERRORIST THREAT SUCH AS INTRUSION OR DAMAGE TO A PRIMARY FACILITY.
- SEVERE DROUGHT SIGNIFICANTLY AFFECTING WELL YIELD.
- AN IMMEDIATE THREAT TO PUBLIC HEALTH OF THE CUSTOMERS AND AN ADVISORY IS REQUIRED.

**Level IV – Catastrophic Disaster/Major Emergency:**

**DESCRIPTION:** THE HARTSTENE POINTE WATER SEWER DISTRICT WATER SYSTEM CONSIDERS THE FOLLOWING EVENTS TO BE LEVEL IV OR MAJOR EMERGENCIES:

- EARTHQUAKE THAT SHUTS DOWN THE SYSTEM OR IMPACTS SOURCES, LINES, ETC.
- ACT OF TERRORISM POSSIBLE CONTAMINATING THE WATER SYSTEM WITH BIOLOGICAL OR CHEMICAL AGENTS.
- FLOOD THAT INFILTRATES SYSTEM FACILITIES AND SOURCES.
- CHEMICAL SPILL WITHIN 2000 FEET OF THE SYSTEM'S SOURCES.
- MUDSLIDE OR OTHER EARTH SHIFT THAT CAUSES FAILURE OF TRANSMISSION OR LOSS OF WATER IN WELL.
- STORM THAT SIGNIFICANTLY DAMAGES POWER GRID AND SYSTEM FACILITIES.

## Section 6. Emergency Notification

### Notification call-up lists

Use these lists for notifying important parties during an emergency.

#### Local Notification List:

<b>NAME</b>	<b>TELEPHONE NUMBER</b>
<b>Mason County Sheriff</b>	Dispatch: 360-427-9670, Ext. 313 Emergency: 911 Night: 911
<b>Central Mason Fire and EMS</b>	360-426-5533 Emergency: 911 Night: 911
<b>Ambulance Service</b>	Day: 911 Night: 911
<b>Mason County Health Services:</b>	360-427-9670, Ext. 352 24 Hour Emergency: 360-427-9670, Ext. 274
<b>Mason County Emergency Management</b>	Day: 360-427-7535 After Hours: 911
<b>Water System Operator</b>	David Carnahan Cell 360-490-8137
<b>Water System Operator</b>	Jeff Pamler Cell: 360-549-6047

**State Notification List:**

<b>NAME</b>	<b>TELEPHONE NUMBER</b>
<b>Washington State Patrol</b>	360-426-6674 – Shelton Office Emergency: 911
<b>Division of Drinking Water, Southwest Regional Office 360-236-3030</b>	360-236-3030 Division of Drinking Water after hours (emergency only) 1-877-481-4901
<b>Washington State Public Health Laboratory</b>	206-418-5400
<b>Washington State Department of Ecology</b>	24 hour spill response: 360-407-6300

**Service/repair notification list**

<b>NAME</b>	<b>TELEPHONE NUMBER</b>
<b>Chad Lansford Sare Electric</b>	360-352-2628
<b>Bainbridge Island Electric Ron Lubovich</b>	206-842-4200 Cell: 206-714-6136
<b>PUD #3 Electric Utility</b>	Day: 360-426-8255 Night: 360-426-8255
<b>Chemical Injection Systems and analyzers, TMG Services Jeff Harmon</b>	Office: 1-800-562-2310 Cell: 253-686-7459
<b>A TEC Filtration System</b>	Mac Pennington: 360-901-4533
<b>Grundfos Pumps Matt Gjerstad</b>	Office: 206-576-1720 Cell: 206-730-0539

NAME	TELEPHONE NUMBER
<b>Excavation and Hauling</b> <b>Zephyr's INC. Ron Griffey</b> <b>Pickering Landscape and Hauling</b> <b>Mike Schmidt</b>	Office: 360-275-2861 Cell: 360—340-6507 Home: 360-426-3471 Cell: 360-239-9496
<b>Well Pumps</b> <b>Tacoma Pump &amp; Drilling</b> <b>John Hansen</b> <b>Bison Well Drilling &amp; Septic, LLC</b>	Office: 253-847-9352 Cell: 253-691-8201 Office: 253 847-7744
<b>SCADA and Electronic Control Systems</b> <b>Evolution Controls</b>	Al Friedli Cell: 425-359-5322 Nick Friedli Cell: 425-760-8820 Lance Conrad Cell: 425-737-2180
<b>Onan Backup Generator</b> <b>Cummins Northwest, Inc.</b>	1-800-451-5506 Cell: 360-269-5787
<b>Water Manager Backup Operator,</b> <b>Drew Noble</b> <b>H2O Water Management</b>	360-463-6189
<b>Hydrogeologist</b> <b>Robinson, Noble &amp; SaltBush</b> <b>RH2 Engineers</b> <b>Steve Nelson</b>	206-842-4443 253-475-7711 Office: 425- 951-5406 Cell: 206 794-6613

## Section 7. Notification Procedures

### Notifying water system customers

<b>WHO IS RESPONSIBLE:</b>	<b>DAVID CARNAHAN, GENERAL MANAGER</b>
<b>Procedures:</b>	Refer to specific procedure for individual events, Section 7, Pages 14-16

### Alerting, local law enforcement, state drinking water officials, and local health

<b>WHO IS RESPONSIBLE:</b>	<b>DAVID CARNAHAN, GENERAL MANAGER</b>
<b>Procedures:</b>	Refer to Section 6 Emergency Notification List pages 10 & 11 – notify parties as required for situation.

### Contacting service and repair contractors

<b>WHO IS RESPONSIBLE:</b>	<b>DAVID CARNAHAN, GENERAL MANAGER</b>
<b>Procedures:</b>	Refer to Section 6 Emergency Notification list, Page 11-12 Dependent on services needed.

### Contact neighboring water systems, as necessary

<b>WHO IS RESPONSIBLE:</b>	<b>DAVID CARNAHAN, GENERAL MANAGER</b>
<b>Procedures:</b>	Contact Marcus Vind WDM2, CCS Timberlake Community Club Office 360-427-8928 Cell: 360-463-2533 Emergency Cell: 360-463-0664

## Procedures for issuing a health advisory

<b>WHO IS RESPONSIBLE:</b>	<b>DAVID CARNAHAN, GENERAL MANAGER</b>
<b>Procedures:</b>	<ul style="list-style-type: none"> <li>▪ General Manager confers with key staff to verify problems.</li> <li>▪ General Manager organizes staff to develop the message to be delivered to the customers.</li> <li>▪ General Manager consults with state drinking water staff regarding the problem.</li> <li>▪ General Manager with assistance with staff prepares door hangers, signs and radio message.</li> <li>▪ Water system operator continues to investigate problem and make repairs as necessary.</li> <li>▪ The health advisory notification will be distributed by:             <ol style="list-style-type: none"> <li>1. Field staff placing “health advisory notices” on doors and along travel routes</li> <li>2. Post notice on reader board at entrance to community.</li> <li>3. Staff will place signs on main travel routes into the community.</li> <li>4. Water system manager contacts KMAS am radio and requests issuance of the water health advisory notice.</li> <li>5. will provide a pre-scripted message to phone callers and log in each phone call.</li> </ol> </li> <li>▪ Once contamination is resolved, notify customers.</li> </ul>

## Procedures for notifying system customers of water outage due to main breaks.

<b>WHO IS RESPONSIBLE:</b>	<b>DAVID CARNAHAN, GENERAL MANAGER</b>
<b>Procedures:</b>	<ul style="list-style-type: none"> <li>▪ General Manager confers with key staff to verify problems.</li> <li>▪ General Manager consults with state drinking water staff regarding the problem (if repairs will take longer than six hours).</li> <li>▪ Water System manager organizes staff to develop the message to be delivered to the customers.</li> <li>▪ General Manager with assistance of staff prepares door hangers to distribute to the affected areas.</li> <li>▪ Water system operator continues to investigate</li> </ul>



<b>WHO IS RESPONSIBLE:</b>	<b>DAVID CARNAHAN, GENERAL MANAGER</b>
	<p>Identify problem and make repairs as necessary.</p> <ul style="list-style-type: none"> <li>▪ The water outage notification will be distributed by: <ol style="list-style-type: none"> <li>1. Field staff placing “water outage notifications” on doors.</li> <li>2. Post notice on reader board at entrance to community.</li> <li>3. The Project and Accounts Manager will provide a pre-scripted message to phone callers and log in each phone call.</li> </ol> </li> <li>▪ Water system personnel continuously update the General Manager on water outage and repair status.</li> <li>▪ Once water outage is resolved, notify customers.</li> </ul>

**Procedures for notifying system customers of potential water shortage**

<b>WHO IS RESPONSIBLE:</b>	<b>DAVID CARNAHAN, GENERAL MANAGER</b>
<b>Procedures:</b>	<ul style="list-style-type: none"> <li>▪ General Manager confers with key staff to verify problems.</li> <li>▪ General Manager consults with state drinking water staff regarding the problem.</li> <li>▪ Water System manager organizes staff to develop the message to be delivered to the customers.</li> <li>▪ General Manager with assistance of staff prepares door hangers to distribute to the affected areas.</li> <li>▪ Water system operator continues to investigate problem and make repairs as necessary.</li> <li>▪ The water shortage notification will be distributed by: <ol style="list-style-type: none"> <li>1. Field staff placing “water shortage notices” on doors and along travel routes</li> <li>2. Post notice on reader board at entrance to community.</li> <li>3. Staff will place signs on main travel routes into the community.</li> <li>4. Water system manager contacts KMAS am radio and request issuance of the water shortage notice and request to curtail water use.</li> <li>5. Will provide a pre-scripted message to phone callers and log in each phone call.</li> </ol> </li> <li>▪ Water system personnel continuously update the General Manager on water outage and repair status.</li> <li>▪ Once water shortage is resolved, notify customers.</li> </ul>



## Section 8. Water Quality Sampling

If contamination is suspected, notify and work with the local health jurisdiction and Sate DOH, Division of Drinking Water (DDW) regional office to help identify what testing should be done. This may help prevent illness or even death.

### Water Quality Sampling

<b>SAMPLING PARAMETER</b>	<b>DO WE HAVE PROCEDURES? YES/NO</b>	<b>BASIC STEPS TO CONDUCT SAMPLING (SITES, FREQUENCY, PROCEDURES, LAB REQUIREMENTS, LAB LOCATIONS, CONTACT, ETC.)</b>
<b>Coliform Bacteria</b>	<b>Yes</b>	Refer to Coliform Monitoring Plan Take samples of affected sites, wells and reservoirs. Take samples to Dragon Labs.
<b>Heterotrophic Plate Count (HPC)</b>	<b>No</b>	Contact Spectra Labs for sample containers and procedures
<b>Chlorine Residual</b>	<b>Yes</b>	Check residual at outlet to distribution system. Compare to affected areas.
<b>Chlorine Demand</b>	<b>Yes</b>	Monitor for increase in coverage at plant. Compare to residual in affected areas.
<b>Nitrate/Nitrite</b>	<b>Yes</b>	Sample at well head sample tap of wells in operation. Acquire sample bottles at Spectra Labs Port Orchard. Take samples to lab for analysis.
<b>Total Organic Carbon (TOC)</b>	<b>No</b>	Contact Spectra Labs for sample containers and procedures
<b>Total Halogenated Organic Carbon (TOX)</b>	<b>No</b>	Contact Spectra Labs for sample containers and procedures
<b>Cyanide</b>	<b>No</b>	Contact Spectra Labs for sample containers and procedures

## Section 9. Effective Communication

Communication with customers, the news media, and the general public is a critical part of emergency response.

### Designated public spokesperson

<b>SPOKESPERSON</b>	<b>ALTERNATE 1</b>	<b>ALTERNATE 2</b>
<b>David Carnahan</b>	<b>Jeff Palmer</b>	<b>President of the HPWSD Board of Commissioners</b>

### Key Messages

#### **MESSAGE #1 – WATER CURTAILMENT**

THE HARTSTENE POINTE WATER SEWER DISTRICTS WATER SYSTEM PRODUCTION CAPABILITIES HAVE BEEN REDUCED DUE TO (FILL IN REASON). THE REPAIRS TO THE (STATE AFFECTED SYSTEMS) ARE EXPECTED TO BE COMPLETED BY (DATE).

IN AN EFFORT TO SUPPLY ESSENTIAL WATER SERVICE A WATER USE RESTRICTION IS CURRENTLY IN PLACE. ALL OUTDOOR WATER USE SUCH AS IRRIGATION, CAR WASHING, POOLS AND CLEANING IS PROHIBITED. PLEASE LIMIT INDOOR USE. SHOWER WHEN POSSIBLE RATHER THAN BATHE, LIMIT LAUNDRY USE AND FLUSH TOILETS ONLY AS NEEDED.

YOU WILL BE NOTIFIED WHEN THE PROBLEM IS RESOLVED.

#### **MESSAGE #2**

##### **DRINKING WATER WARNING**

THE HARTSTENE POINTE WATER SEWER DISTRICT WATER SYSTEM, ID 315690, LOCATED IN MASON COUNTY IS CONTAMINATED WITH FECAL COLIFORM/E.COLI BACTERIA.

FECAL COLIFORM/E.COLI BACTERIA WERE DETECTED/CONFIRMED IN THE WATER SUPPLY ON (DATE). THESE BACTERIA CAN MAKE YOU SICK AND ARE A PARTICULAR CONCERN FOR PEOPLE WITH WEAKENED IMMUNE SYSTEMS.

**DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST. BRING ALL WATER TO A ROILING BOIL FOR ONE MINUTE. LET IT COOL BEFORE USING. BOILED OR PURCHASED BOTTLED WATER SHOULD BE USED FOR DRINKING, MAKING ICE, BRUSHING TEETH, WASHING DISHES, AND FOOD PREPARATION UNTIL *FURTHER NOTICE*. BOILING KILLS BACTERIA AND OTHER ORGANISMS IN THE WATER.**

FECAL COLIFORMS AND E.COLI ARE BACTERIA WHOSE PRESENCE INDICATES THAT THE WATER MAY BE CONTAMINATED WITH HUMAN OR ANIMAL WASTES. MICROBES IN THESE WASTES CAN CAUSE SHORT TERM EFFECTS, SUCH AS DIARRHEA, CRAMPS, NAUSEA, HEADACHES, OR OTHER SYMPTOMS. THEY MAY POSE A SPECIAL HEALTH RISK FOR INFANTS, YOUNG CHILDREN, SOME OF THE ELDERLY, AND PEOPLE WITH SEVERELY COMPROMISED IMMUNE SYSTEMS. ***THE SYMPTOMS ABOVE ARE NOT CAUSED ONLY BY ORGANISMS IN DRINKING WATER. IF YOU EXPERIENCE ANY OF THESE SYMPTOMS AND THEY PERSIST YOU MAY WANT TO SEEK MEDICAL ADVICE. PEOPLE AT INCREASED RISK SHOULD SEEK ADVICE ABOUT DRINKING WATER FROM THEIR HEALTH CARE PROVIDER.***

WHAT HAPPENED? WHAT IS THE SUSPECTED OR KNOWN SOURCE OF CONTAMINATION? (FILL IN WITH CORRECT INFORMATION)

THE FOLLOWING IS BEING DONE TO CORRECT THE PROBLEM. (FILL IN WITH APPROPRIATE INFORMATION).

## Section 10. Response Actions for Specific Events

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 action 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.

The following tables identify the assessment, set forth immediate response actions, define what notifications need to be made, and describe important follow-up actions.

### A. Power outage

ASSESSMENT	THE WATER SYSTEM HAS A BACKUP GENERATOR AT ITS LEAD WELL LOCATED BEHIND THE LOCKED FENCE CLOSE TO THE MAIL ROOM WITH A WEEK SUPPLY OF PROPANE. THE WASTEWATER SYSTEM HAS A BACKUP GENERATOR FOR THE WASTE WATER TREATMENT PLANT AND LAB WITH AN 8 DAY FUEL SUPPLY; CHECK WITH PUD #3 FOR ESTIMATED DATE OF REPAIRS
Immediate Actions	Check fuel levels, order diesel and propane if fuel tank is at or below half full.
Notifications	Notify Fire Department that maximum flow is not available. Flow at hydrants limited to 800 GPM
Follow-up actions	Top off generator fuel. Notify Fire Department that flow at hydrants normal.

### B. Transmission or main break

ASSESSMENT	IDENTIFY LOCATION, MAIN SIZE, AND REPAIR COMPONENTS AND EQUIPMENT NEEDED FOR REPAIR.
Immediate Actions	Reduce flow by throttling valves, maintain positive pressure until excavation and drainage completed for repair. Make repair.
Notifications	See Notification Procedure for Main break. Section 7; Page 14-16. Notify Fire Department if hydrants are shut down

Follow-up actions	Flush and test affected main. Resume services. Notify Fire Dist.
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C. Chlorine, treatment equipment failure.

ASSESSMENT	DETERMINE FAILED COMPONENT – REFER TO SYSTEM O & M FOR SPECIFIC COMPONENT.
Immediate Actions	<p>Take effected well offline if the production level of the other well is sufficient to support system supply.  Determine which system(s) have failed.</p> <p><b>Peristaltic pump tube failure:</b> A peristaltic pump tube failure will alarm the operator and shut down the effected pump. Replace the pump tube; replacement tubes are kept in inventory. Clear SCADA alarm put chemical injection pump back in service.</p> <p><b>Peristaltic pump failure:</b> Contact TMG Services for repair /replacement. <b>(All the peristaltic pumps for both sites are the same model, recommend having a spare on hand.)</b></p> <p><b>SCADA hypochlorite chemical injection rate control failure:</b> Reset hypochlorite trimming function on RTU control screen; If malfunction continues contact Evolution Controls for repair. Manually adjust chemical pump injection rates if well production needed and monitor chemical dosage for optimal chemical injection rates until problem resolved.</p> <p><b>Chlorine residual analyzer failure:</b> Check analyzer to determine problem. Calibrate chlorine residual probe readings, reset unit, if unit is still malfunctioning, contact TMG Services for repair. Manually adjust chlorine pump injection rates and put well back online if well production needed. Monitor finished water chlorine residual and adjust dosage rate as needed.</p>
Chlorine system failure notifications	Contact DOH if residual drops below .2PPM – notify customers – Drinking Water Advisory
Follow-up actions	Lift the Drinking Water Advisory. Contact DOH systems normal.

**For pump tube/pump failure and manual operating procedures for ferric and potassium permanganate chemical injection pumps follow the hypochlorite pump procedures.**

D. Filter Failure:

ASSESSMENT	DETERMINE FAILED COMPONENT – REFER TO O & M MANUAL FOR ATEC FILTRATION SYSTEM.
Immediate Actions	Shut down well at affected system if reservoir storage is adequate.  <b>Control Board Failure:</b> Contact ATEC Systems for replacement board. <b>Pneumatic Control Failure:</b> Check and/or replace compressor or failed lines. <b>SCADA control system failure:</b> Reset PLC, if failure not resolved contact Evolution Control for assistance/repairs.
Notifications	The filter systems are for the removal of iron, manganese and arsenic. Minimal threat to public health; no customer notifications required. Take the affected facility offline until repairs are completed. Notify Commissioners.
Follow-up actions	Monitor the filters operation after repair. Perform on site tests for iron and manganese removal; take arsenic samples to lab for analysis.

E. Source (Well) Pump Failure:

ASSESSMENT	CHECK SYSTEM CONTROL PANEL, MOTOR STARTER, AND ERROR CODES FOR CAUSE.
Immediate Actions	Determine cause of failure, determine which component has failed. Contact appropriate repair contact for repair. Determine if water restriction notice is needed.  If well pump replacement required decontaminate well and take a bacterial sample; if sample results are satisfactory put well back online.
Notifications	Notify customers and Fire Department if water shortage is anticipated. Contact DOH with assessment.
Follow-up actions	Remove water use restriction; notify customers, Fire Department and DOH.



F. Microbial (coliform, E. coli) contamination

ASSESSMENT	UPON RECEIPT OF A TOTAL COLIFORM POSITIVE SAMPLE, DETERMINE BY RESAMPLING IF CONTAMINATION IS LOCALIZED OR SYSTEM-WISE.
Immediate Actions	<p>Hartstene Pointe Water Sewer District samples one location monthly for bacteriological contamination at four rotating locations at the ends of the distribution system. (Refer to Coliform Monitoring Plan). If a sample test positive for total coliform a total of five repeat samples will be collected per the Coliform Monitoring Plans, repeat sample location within 24 hours of notification. At least one additional sample will be taken at the sample tap at the entry to the distribution system. If any of the repeat samples detect coliform bacteria, the initial findings are considered confirmed.</p> <p>An inspection of all system facilities will be done to determine the source of contamination.</p> <p>Contact the WSDOH for assistance upon confirmation of an E.coli positive sample and issue a health advisory within 24 hours to alert all users that there is a health risk associated with the water supply. Take additional samples to find and eliminate potential contamination sources. See appendix B for coliform information.</p> <p>Make necessary repairs, disinfect and flush system. Take follow-up samples to confirm removal of contamination in all affected areas.</p>
Notifications	<p>Notify WSDOH Drinking Water Division of potential contamination. Issue Health Advisory/Boil Water Notice to all customers.</p> <p><b>Notify customers via Code Red</b> of health advisory. See Appendix B for notification and news release.</p>
Follow-up actions	<p>The General Manager with assistance from staff will confirm satisfactory follow up samples. Confer with DOH on satisfactory samples and ability to deliver safe water.</p> <p>Notify customers of satisfactory sample results and issue a Safe To Drink the Water Notification.</p> <p>Put information regarding contamination and remediation in annual Consumer Confidence Report. See appendix B for notification and reporting requirements</p>

G. Chemical contamination

ASSESSMENT	DETERMINE SOURCE OF CONTAMINATION IF POSSIBLE AND EFFECTED AREAS OF SYSTEM.
Immediate Actions	Contact DOH for assistance. Remove source of contamination if possible
Notifications	Notify customers of hazard based on contaminants and hazard level.
Follow-up actions	Disinfect, flush, test effected systems, and verify results of test. Confer with DOH on system status. Notify customers.

H. Vandalism or terrorist attack

ASSESSMENT	<p>INSPECT THE FACILITIES BUT DO NOT DISTURB ANY EVIDENCE. TAKE ANY SUSPICIOUS ACTIVITY OR EVIDENCE OF VANDALISM OR SABOTAGE SERIOUSLY. DOCUMENT WHAT YOU SEE AND KEEP NOTES AS YOU ASSESS THE SITUATION.</p> <p>DETERMINE WHETHER THERE IS BIOLOGICAL OR CHEMICAL CONTAMINATION, OR DAMAGE TO SYSTEM COMPONENTS THAT DISRUPTS SUPPLY.</p>
Immediate Actions	<p>Notify General Manager immediately.</p> <p>General Manager will assess situation and notify the District Commissioners. Call DOH regional office at 360-236-3030. Contact Mason County Sheriff Department. Consult with Sheriff Department to determine whether the threat is credible. If there is strong evidence of sabotage or terrorist activities call the FBI at 206-622-0460.</p> <p>Consult with DOH to determine immediate actions needed to protect the public health. Isolate affected areas, shut down critical facilities and issue boil water or do not drink advisories.</p> <p>If contamination is suspected, sample for coliform, chlorine residual, nitrate or nitrite. Collect samples for future analysis and store them appropriately according to specific sample requirements.</p> <p>Assemble a response team with expertise in the areas needed to resolve the situation. Designate a response coordinator.</p> <p>Develop a communication strategy and communicate with affected people regularly.</p> <p>If appropriate, drain, clean, repair and disinfect the system.</p> <p>Contact alternative drinking water supplier if needed. Make necessary repairs to affected equipment.</p>

Notifications	<p>General Manager, District Commissioners  Mason County Sheriff Department  FBI if needed  WSDOH Drinking Water Division if contamination is suspected.  Customers if there is a potential health threat or water use restriction necessary.  KMAS and the Shelton Journal as needed.</p>
Follow-up actions	<p>General Manager determines system condition, satisfactory test results and system's capability to provide safe and adequate water to customers. Coordinate with Department of Health on system condition and water quality results for recommendation to resume normal operations.  Notify customers when situation is normal.</p>

I. Reduction or loss of water in the well

ASSESSMENT	<p>DETERMINE IF DIMINISHED WATER PRODUCTION IS DUE TO PHYSICAL LOSS OF WATER, WELL PUMP OR WELL SCREEN ISSUES.</p>
Immediate Actions	<p>Check static well water level and compare to records. Perform draw down test and recovery test. Calculate gallons per foot.  Check amp draw of well pump if static and draw down are acceptable. If the pump is failing contact listed well contractors. If static level of well is ok, but draw down and recovery are not contact the listed hydrogeologists for assessment.  If static water level is below normal check static levels in the other wells and compare to records. If all wells static levels are down, issue water use restriction notice.  <b>Refer to HPWSD Water Shortage Plan Appendix ?* for detailed water restriction information.</b></p> <p>If water production problem is limited to one well curtail use of problem well until repairs or reconditioning of well is completed.</p>

Notifications	Notify DOH if water production decline will affect the system ability to supply customers or affect fire flow capabilities. Notify customers if a water use restriction becomes necessary. Notify Fire Department if fire flow will be affected.
Follow-up actions	Disinfect, flush and take bacteriological samples for testing if well required pump replacement or screen rehabilitation. If test satisfactory put well back in service. Notify customers, Fire Department and DOH that system is back to normal.

#### J. Drought

ASSESSMENT	THE WELLS ARE ALL AT 155 - 165 FEET DEEP AND HAVE NEVER BEEN AFFECTED BY DRY SUMMER CONDITIONS. STATIC WATER LEVELS ARE THE SAME AS THEY WERE WHEN INITIALLY DRILLED.
Immediate Actions	If a prolonged, severe, drought condition exists increase frequency of well draw down test. If static levels drop issue water restrictions. Notify DOH and Fire Department.
Notifications	Notify DOH and Fire Department. Notify customers of water use restrictions
Follow-up actions	When static well water levels return to normal lift water use restriction, notify DOH, Fire Department, and customers.

#### K. Flood

ASSESSMENT	WELLS ARE IN LOCATIONS THAT ARE NORMALLY NOT AFFECTED BY FLOOD WATER OR RUN-OFF.
Immediate Actions	Check wells for any evidence of flooding. If flooding is suspected shut down the affected well and issue a boil water precautionary statement. Test well for contamination. If bacteriological results tests are positive decontaminate, flush and test well again.  If storm water runoff erosion exposes or threatens the integrity of water mains shut down the main line valves on each side of the affected area until integrity of the main has been stabilized.
Notifications	Issue a boil water notice to customers and notify the DOH. Notify customers affected by water main shut down the DOH and Fire Department.

Follow-up actions	<p>After flood event check for exposed or broken main lines. Make repairs to main lines as needed, flush, disinfect and sample.</p> <p>Provide water from unaffected area or make available at facility until tests verified.</p> <p>Notify customers when water is safe to drink and conditions normal.</p> <p>Contact DOH and Fire Department that operations are restored.</p>
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#### L. Earthquake

ASSESSMENT	<p>INSPECT BUILDINGS AND RESERVOIRS TO DETERMINE IF STRUCTURAL DAMAGE CREATES A SAFETY ISSUE FOR PROXIMITY OR ENTRY TO FACILITIES.</p> <p>DETERMINE CONDITION OF ELECTRICAL SUPPLY, CRITICAL EQUIPMENT AND OPERATIONAL LEVELS OF RESOURCES AVAILABLE.</p>
<p>Immediate Actions</p> <p><b>Refer to water supply after an earthquake appendix ?*</b></p>	<p>During earthquake and aftershocks vacate buildings, stay a safe distance from reservoirs and structures. If reservoirs and structures are intact and safe temporarily shut down wells to prevent pump damage due to heavy sediment in casing. Check water pressure levels to distribution system to determine if water mains have been damaged. Locate and isolate broken main lines to reserve existing water supply. Isolate damaged reservoir before putting wells back in service. Monitor well production, booster pump operation and confirm treatment equipment operation is satisfactory.</p> <p>In the event that major structural damage has occurred, but power supply is intact, shut off main power supply feed (if safe to enter filtration buildings) until damage to electrical supply lines can be assessed. If normal power supply has been interrupted and back-up generator is operational, shut down generator until damage to electrical system has been assessed. Restore power to water system components after it has been determined that electrical systems and equipment are in satisfactory condition. Contact electrician and equipment repair vendors to make repairs to damaged components as necessary. Issue water use restrictions if production levels are below normal to conserve water for drinking until repairs are complete.</p>
Notifications	<p>Notify customers in affected areas of use restrictions, water use curtailment or outages for repairs.</p> <p>Issue a boil water notice if contamination due to low pressure or main breaks suspected.</p> <p>Notify DOH of possible contamination and public notification.</p> <p>Contact Fire Department if unable to provide fire flow.</p>

Follow-up actions	<p>General Manager and support staff inspect all system facilities, insure all water quality tests have been done and the system has been flushed and disinfected if necessary. General Manager makes a decision on current condition of system.</p> <p>General Manager verifies water quality results and coordinates with DOH on system condition and water quality results. Notify customers and Fire Department that normal operations resumed.</p>
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## Section 11. Alternative Water Sources

There are no Group A systems within 10 miles capable of supplying water to the community.

Alternate source(s) of water

<b>ALTERNATIVE SOURCES</b>	<b>NAMES</b>	<b>PHONE</b>	<b>AVAILABILITY</b>	<b>IS THE WATER SAFE FOR DRINKING?</b>
<b>Bottled Water</b>	Walmart	360-427-6226	Up to 1000 gallons in one gallon jugs in 2 hours. 350 gallons per pallet can be ordered and available in 48 hours.	Yes
<b>Bottled Water</b>	Mason County Emergency Management	360-427-7535	Up to 1000 gallons in 1 gallon jugs in 2 hours	Yes
<b>Tanker</b>	Mason County Fire District #5	360-426-5533	5,000 gallons in one hour	No
<b>HPMA pool water</b>	On-site	360-426-2300	80,000	No – can be used for toilet flushing, must be boiled and/or disinfected for personal hygiene use. *

**Depending on the condition of the pool water; with proper filtration may be made safe for drinking and cooking.**

## Section 12. Curtailing Water Use

Example: Curtailing water Use

WATER CURTAILMENT MEASURES	ACTIONS
<p>Restrict outside water usage including watering lawns, washing cars, etc. Request curtailment of inside usage Contact owners of vacation property with irrigation system to shut down automatic watering.</p> <p><b>Refer to HPWSD Water Shortage Plan Appendix ?* for detailed information</b></p>	<p>Upon making the decision that curtailment is needed:</p> <ul style="list-style-type: none"> <li>▪ Notify Customers via Code Red</li> <li>▪ Draft door hanger with curtailment messages.</li> <li>▪ Post on customer doors.</li> <li>▪ Post message on Hartstene Pointe Water Sewer Districts Sandwich Board at community entrance.</li> <li>▪ Monitor system usage and spot check meter usage if time is available.</li> <li>▪ Continue message as long as curtailment is warranted.</li> </ul>

### Water Curtailment Message:

Hartstene Pointe Water Sewer District water production capabilities have been reduced due to (fill in reason). the repairs to the (state affected systems) are expected to be completed by (date).

In an effort to supply essential water service a water use restriction is currently in place. All outdoor water use such as irrigation, car washing, pools and cleaning is prohibited. Please limit indoor use. Shower when possible rather than bathe, limit laundry use and flush toilets only as needed.

You will be notified when the problem is resolved.



**Plan approval**

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

<b>NAME/TITLE</b>	<b>SIGNATURE</b>	<b>DATE</b>
Commissioner # 1-Andrew Hosbador		
Commissioner # 2-Earl J Anderson		
Commissioner # 3-Stacy Swart		
David Carnahan General Manager Certified Water Operator WDM2, CCS and WTPO 2		