

BARLOW WATER IMPROVEMENT DISTRICT (BWID)

EMERGENCY RESPONSE PLAN

Revised 09.25.17

The purpose of this plan is to assist personnel and provide direction in the event of an emergency or catastrophe. The District Manager/Operator is John Herlocker. Should the District Manager/Operator be unavailable, contact person is the Board Chairperson. All operations, maintenance, repairs and management are to be consistent with acceptable standard procedures commonly known and practiced in the profession of public water system operations and consistent with OAR Chapter 333.

EMERGENCY CONTACT NAMES AND TELEPHONE NUMBERS

Oregon Health Authority – Data On-line <https://yourwater.oregon.gov/inventory.php?pwsno=00909>

1. District Manager/Operator	Office	541.544.2920
	Cell	541.993.8995
2. Board Chair	Daily Holman	503.964.1232
3. Alternate/Backup Operator	Donnie Veenker	503.680.2641
4. County Health Department	John Zalaznik	541.506.2600
5. Oregon Health Authority Drinking Water Section (DHS/DWS)	Michael Perry	503.731.4010
6. Engineer/System Design	Tenneson Engineering	541.296.9177
7. Telemetry / SCADA –	The Automation Group	541.359.3755
8. Hazardous Material Response Team		800.452.0311
9. Wasco County Sheriff		541.296.5454
10. Neighboring Water System Operator	Elton Martin / WW&S	541.993.9902
11. Excavation & Repairs	See list	
12. OR Association of Water Utilities	Jason Green	503.873.8353
13. OAWU – Circuit Rider	Hans Schroeder	541.969.9900
14. Consolidated Pipe Supply	Rob Jackson	541.279.3636
15. Parts – Ferguson Waterworks		503.240.6747
16. Parts – United Pipe		541.382.9311
17. Sodium Hypochlorite 12.5%	Univar - Portland	503.222.1721
18. Chlorination Pump – Pacific Supply	Greg Brown	503.647.5869
19. Generator – Pacific Power Group	Dave Mueller	360.887.5912
20. Generator Fuel – Carson Oil	Marc Reed	541.645.0383
21. Cathodic Protection – Corrpro	Sean Bass	602.708.6522
22. Wasco Co. Emergency Operations		503.647.5869
	After Hours	541.506.2790
23. Wasco Co. Road Dept. /Bulk Water Tanker Hauler		541.506.2640 ODOT
		541.296.2215
24. Wicks Lab – City of The Dalles	Deanna or Jeff	541.298.2248
25. Edge Analytical – Water Testing	Gretchen Schrock	503.894.2790
26. Ashley Pump	Office	541.296.4700
27. Fred Ashley (Pump Issues)	Cell	541.980.4586
28. Wasco Electric	Office	541.296.2740
29. Locate for excavation	ID #49982	800.332.2344
30. IT Support – Cash Register Supply	Ron Peper	541.544.2098
31. Accountant / Bookkeeper	Dana Billingsley	541.350.2508

IN ALL ABNORMAL SITUATIONS or EMERGENCIES, THE FOLLOWING WILL APPLY:

- District Manager will assess the situation and in his absence, backup operator or Board Chair
- Identify the problem and source of the problem
- Make appropriate notifications and contacts if necessary which include: Board of Directors, County Health Dept., DHS/DWS, Emergency Management Center, system customers
- Seek solutions from District Manager/Operator, Board of Directors, County Health Dept., DHS/DWS, Emergency Management, System Engineers, Repair Contractors, Lab, etc.
- Take Action(s) as Required to Implement Solution
- Monitor and evaluate results
- Provide updated status of system to proper authorities and customers

COORDINATION WITH COUNTY AND STATE EMERGENCY RESPONDERS:

- Should questions arise as to health and safety of customers and water users of BWID due to an emergency or water quality condition, immediate contact and notification is necessary.
- Provide information as detailed as possible including:
 - Identify yourself and relationship to BWID
 - Provide your telephone number
 - Identify who is in charge/contact person of system
 - Describe what was/is affected
 - Describe when it occurred
 - Describe how much of the system has been affected
 - Describe who at County or State level has been contacted
 - If contacting OHA, refer to District ID #41009-09
 - Describe which customers have been contacted – action status: contact, boil notice, water provisions
 - Describe what has been done to address the problem or plan to address the problem and who is carrying it out
 - Estimate the time of expected return to normal operation, if known
 - Request assistance and direction if needed

WATER DELIVERY POTENTIAL ISSUES:

1. **Pressure loss:** Locate source of loss, make adjustments or repairs as needed per standard practice in the field of water management and operations
2. **Leak:** Identify, use systems maps and turn off system (if required) in affected areas, make repairs and disinfection of repairs consistent with standard acceptable practices. If repair can be accomplished hot/live, that is preferred over system area shut down. Disinfect, flush and sample according to circumstances. Return system to normal upon completing all required procedures and testing. Make customer notifications as applicable or as time and emergency conditions permit.
3. **Depletion of source:** Identify reason, adjust system operations or apply conservation plan and customer notification as necessary. Monitor situation; make plans to supply short and long-term water needs if required by contacting neighboring water system(s).
4. **System water production:** Identify reason for low or lack of water production and/or quality. Check source water, reservoir level, incoming/outgoing plant pressures, gauges, print outs and panels, telemetry and SCADA, electrical sources and fuses, HOA and control switches, etc. If problem cannot be identified and repaired following these measures and operations manual,

contact John Carter at Coburn Electric (541.354.1163 or 541.490.8747) for emergency assistance.

WATER QUALITY ISSUES:

1. **Bacteriological contamination:** Follow sampling plan and state rules/guidelines, notification of customers and county/state authorities as necessary. Locate source of contaminate, address problem/remove contaminate, ensure adequate disinfection is present, system flush and resample (follow state sampling/re-sampling guidelines). Request assistance if needed from contact list.
2. **Backflow contamination:** Identify location of contamination and contaminant, shut down affected area if necessary. Customer, state and county notification if applicable. Remove contaminate, flushing of system and testing as needed (lab work as required). Request assistance from list as needed. Ensure proper backflow protection is provided (inspections) before leaving.
3. **System breached from an unknown source,** such as terrorist activity, identify the location and source of contamination and damages/vandalism followed with proper notification of authorities as listed. Implementation of action plan to resolve situation such as flushing and testing, providing alternate water source if needed.
4. **Chemical contamination/releases:** Same as (2) if in water system. If chlorine or other gaseous materials, follow containment procedures and/or emergency release procedures. Contact of hazardous material team or 911 if arrangements have been made for this type of response (include specifics to plan as required). If surface water source contaminations are concerns, additional action outlines may be necessary and contacts such as Department of Transportation, Fish and Wildlife, Corp of Engineers, etc.

EARTHQUAKES

1. Assess the source; pump house, reservoirs and distribution system for damages.
2. Address damages, provide for water to customers and provide notification as necessary.

POWER OUTAGES

1. Contact local power supplier to determine extent/longevity of outage.
2. Assess the reservoir level and monitor. Disinfection monitoring is required and should be provided for by manual means if needed.
3. Start up standby generator should power outage last longer than four (4) hours or beyond storage/system supply capabilities. If emergency generator is inoperable, contact Dave Mueller at Pacific Power Group (360.887.5912) or *Coburn Electric* (541.483.2266).

FLOODS

1. Floods do not have an effect on this system, as it is located above the 100-year flood plain.
2. Should heavy rains affect main line bedding, assess the condition and make repairs as needed following standard practices. Refer to vendor list if additional help is needed. Address Floods as applicable to your system.

VOLCANIC IMPACTS

1. Assess the affected area and provide repairs as needed.
 - a. Should a major event occur, evacuation would be needed and *Wasco County Emergency Management* should be contacted.

FIRE

1. Contact local Fire Dept. at Pine Hollow: Wamic Rural Fire Protection District at 911 or **544.2338**.
2. Assess the affected area and ensure that any main leaks are addressed / repaired.
3. Ensure that water is provided and sufficient pressure is available for fire fighting needs as necessary.

ADVERSE WEATHER CONDITIONS

Wind, snow and storms are a regular occurrence. Preparations for such are routine with seasonal change such as winterizing buildings, meter boxes, etc. Regular monitoring and assessment of the system is required during and after adverse weather conditions.

VANDALISM

1. Assess the vandalism; determine if it is exterior or if breach of the sealed/pressurized system has occurred. Ensure that pump house and plant facilities are secure; check source water, reservoirs and fire hydrants. If such has been damaged or accessed, further determination of physical damage and/or contamination should be addressed and necessary repairs made or action taken. If vandalism to water supply at source or within the system has occurred, determination as to what was done needs to be addressed. If this is suspected, discontinuing supply to customers and notice will be necessary as will contact with County Health Department and Emergency Management. Notification of lab will be needed to begin sampling and testing. Authorities as listed would then direct system flushing and further action.
2. Note that security of the system is a priority at all times and should especially be enforced during an emergency event.

ALTERNATE SOURCES AND CONTACTS

1. BWID operates and maintains four wells with only two wells operable at any given time. If standby wells are brought on line to augment supplies when primary wells are down, if possible, disinfection of well heads should occur at least 18 hours before water is introduced into the system. If conditions do not allow disinfection to occur, notices to boil water must be handed out before untreated water is directed into the system.
2. Contact Wasco County Road Dept. for water hauling needs: 541.506.2640. Additionally, ODOT provides sources and arrangements as an alternate contact: 541.296.2215. The National Guard also provides emergency services and assistance.

BARLOW WATER IMPROVEMENT DISTRICT NOTIFICATION PROCESS FOR CUSTOMERS

1. Follow procedures as outlined in OAR Chapter 333 and as directed by county and state health/compliance officials.
2. Emergency contact of customers will be house to house and telephone calls per billing list. Manager/Operator, Board of Directors, and emergency response volunteers shall initiate contacts providing information and course of action for customers and customer needs.

BARLOW WATER IMPROVEMENT DISTRICT EMERGENCY RESPONSE AND SYSTEM SAFETY

Who to call: I have no water and have paid my bill, or I think I have a water leak but don't know if it is on my side of meter or not: John Herlocker, District Manager/Operator, 544.2920 or 541.993.8995.

When the system must be shut down for repairs, the District Manager/Operator will notify the Chairperson of the Board. The Chairperson shall notify the other Board members and all available resources shall try to notify all residents in the affected area by telephone.

Power outage for extended period of time: The generator at well #4 shall be activated to supply the system with water for household use. The generator can be used to operate Well #4 and if necessary, Well #6 to fill the reservoir.

All well houses shall be locked at all times. Only the District Manager/Operator and Chairperson of the Board shall have keys unless otherwise designated by the Board.

BARLOW WATER IMPROVEMENT DISTRICT WATER TESTING SCHEDULE

Lead & Copper 2017	Rad – Gross Alpha - 2018
Stage 2 DBP – Annually	Rad – Radium 226/228 - 2021
Arsenic – 2012	Rad – Uranium – 2018
OIC – 2021	SOC – 2018
Nitrate – Annually	VOC - 2018
Nitrite - 2024	Xylenes – Annually

BARLOW WATER IMPROVEMENT DISTRICT WATER TESTING SCHEDULE

<u>TEST</u>	<u>INTERVAL</u>
LEAD & COPPER	3 YEARS
RAD-GROSS ALPHA	6 YEARS
STAGE 2 DBP	ANNUALLY
RAD-RADIUM 226/228	9 YEARS
ARSENIC	3 YEARS
RAD-URANIUM	9 YEARS
OIC	9 YEARS
SOC	3 YEARS
NITRATE	ANNUALLY
VOC	3 YEARS
XYLENES	ANNUALLY
NITRITE	9 YEARS
COLIFORM	MONTHLY

BARLOW WATER IMPROVEMENT DISTRICT VENDOR LIST

Delco Excavation	541.980.8844
Mike Hunt Construction	541.544.2111

Cougar Excavation	541.993.0398
Little Rock Construction	541.544.2288
Lucianos Tree Removal	541.993.0436
Edge Analytical	541.639.8425
City of The Dalles Water	541.296.5401
Univar Portland	503.222.1721
Consolidated Pipe Supply	541.279.3636
Ferguson Waterworks	503.240.6747
Pacific Service Supply	503.647.5869
Wicks Lab	541.298.2248

BARLOW WATER IMPROVEMENT DISTRICT COLIFORM TESTING PROGRAM

The coliform samples shall be taken each month and delivered to the Wicks Water Treatment Lab in The Dalles. Samples must be refrigerated once collected and when delivered, payment is required and remember to pick up the next sample container.

The testing will be from one of nine (9) sites available, alternating sites from the north shore to the south shore from month to month.

The tests shall be delivered to The Wicks Water Quality Lab within six (6) hours of collection time.