



Emergency Drinking Water Facilities Guidelines

The Oregon Health Authority (OHA) Drinking Water Service (DWS) developed this guidance to help Public Water System (PWS) operators and staff understand state regulations regarding alternative drinking water facility use in any emergency. Emergency situations vary and the PWS should make every effort to comply with all regulations to provide safe water, but circumstances may require less than ideal actions, and the PWS should provide the best quality water as possible and be prepared to communicate any additional public health protection measures to customers.

OHA DWS's role during an emergency

OHA DWS regulates and enforces drinking water standards for over 3,300 PWSs throughout Oregon, serving more than 4.5 million people. DWS reviews monitoring results, advises follow up after detections, inspects drinking water facilities, evaluates treatment, and provides technical assistance to water systems. During an emergency, OHA DWS:

- Works with state and federal agencies including Oregon Emergency Management, Oregon Water Resources Department, Department of Environmental Quality, the Governor's Office, and other state, local, or county agencies on impacts to PWSs.
- Works with technical assistance providers, Oregon Water/Wastewater Agency Response Network (ORWARN), and other organizations to provide assistance and/or resources.
- Provides public notice advisory templates, translations, and technical assistance to PWSs.
- Educates PWSs, operators, and consumers to ensure or restore safe and reliable drinking water.

Drinking water hauling guidelines

If a PWS source is not able to be used, a PWS may choose to have water from another PWS trucked in and transferred into a PWS storage tank and through the distribution system. Although hauling water for drinking purposes is not regulated in Oregon, DWS has developed guidelines to help haulers and PWSs ensure the delivery of safe drinking water. DWS strongly recommends using a PWS for the water supply. See [drinking water hauling guidelines](#).

Emergency drinking water system facilities: sources

Newly connected sources

Usage of additional emergency sources such as groundwater wells, springs, and surface water sources via the existing PWS infrastructure (treatment system, distribution system piping, and storage) requires review and approval prior to use. If the



emergency is such that this is not possible, PWSs should [contact DWS](#) if they intend to hook up additional infrastructure to the existing infrastructure without going through the plan review process and be aware that a water advisory may be needed.

Other considerations and steps to take for new drinking water sources:

- Ensure the groundwater well or spring has a valid well log, adequate water rights, and meets [current construction standards](#).
- Sources may be subject to microbial contamination (total coliform, E. coli), or elevated levels of nitrate or arsenic. Before serving water from an emergency ground water source, test for these three acute contaminants. Routine sampling is required for groundwater sources and treatment may be necessary. Develop a sampling plan and include steps to take during a bacteria or chemical detection over the Maximum Contaminant Level (MCL). Contact DWS for additional questions regarding what testing is required for the source.
- If testing of coliform and nitrate cannot be completed prior to serving to the public (using an unapproved source), then a [water advisory](#) should be issued (boil or do-not-drink).
- See [plan review requirements for new wells at existing public water systems](#).
- Notify DWS if unapproved emergency sources are used.

Temporary interties

Temporary interties or connections to other existing nearby public water systems may be utilized in an emergency or help meet customer demand when experiencing low water supply. Interties or connections to other water systems must be approved and requires going through plan review. Contact [DWS plan review](#) for more information.

Existing emergency groundwater sources

Existing emergency groundwater sources already connected to the water systems may be used during or after an emergency. Additional steps may be needed such as inspecting sources, operational controls, treatment systems, along with shock chlorinating wells, and flushing of the system is necessary to ensure the safety of the water. See [start up tips for groundwater wells](#).

Emergency drinking water system facilities: treatment and distribution

New or temporary water filtration, treatment, or storage facilities connected to the existing water system during or after an emergency are allowed. PWSs should [contact DWS](#) if they intend to hook up additional infrastructure to the existing infrastructure without going through the plan review process and be aware that a water advisory may be needed. Construction standards must be followed regardless of when the modification was made, ensure all wetted components are NSF Standard 61 or equivalent for drinking water use. [Contact DWS plan review](#) for more information.



Portable treatment or distribution trailers

If safe water is not able to be delivered through the distribution system piping, emergency water treatment (using a local source of water) or distribution system trailers (hailed potable water) could be utilized to treat and deliver water to customers. These trailer systems are not regulated by DWS and do not require going through the plan review process. The following precautions should be taken when utilizing these unapproved systems:

- Ensure proper filtration of surface water supplies.
- Proper disinfection of the water.
- All equipment coming into contact with water is NSF Standard 61 or equivalent.
- Consider issuing a water advisory for customers using water from these systems.

Review checklist: ideal actions to take for new and existing emergency sources (Contact DWS or issue a boil or do-not-drink advisory if these actions cannot be implemented)					
New Emergency Sources Not Connected to the PWS	Completed		Existing Emergency Sources Connected to the PWS	Completed	
	Yes	No		Yes	No
If source is not already approved, go through the plan review process	<input type="checkbox"/>	<input type="checkbox"/>	Inspect all components of the source and treatment system	<input type="checkbox"/>	<input type="checkbox"/>
Flush the source by opening valves, hydrants, or blow offs	<input type="checkbox"/>	<input type="checkbox"/>	Activate and conduct an initial flush of the source	<input type="checkbox"/>	<input type="checkbox"/>
Shock chlorinate and disinfect the source	<input type="checkbox"/>	<input type="checkbox"/>	Shock chlorinate and disinfect the source	<input type="checkbox"/>	<input type="checkbox"/>
Flush the chlorinated water once the proper disinfection sitting time has passed	<input type="checkbox"/>	<input type="checkbox"/>	Flush the chlorinated water once the proper disinfection sitting time has passed	<input type="checkbox"/>	<input type="checkbox"/>
Test the source for acute contaminants (coliform, arsenic, and nitrate) and respond to unsatisfactory sample results	<input type="checkbox"/>	<input type="checkbox"/>	Test the source for acute contaminants (coliform, arsenic, and nitrate) and respond to unsatisfactory sample results	<input type="checkbox"/>	<input type="checkbox"/>
Conduct on-going monitoring while serving water	<input type="checkbox"/>	<input type="checkbox"/>	Conduct on-going monitoring while serving water	<input type="checkbox"/>	<input type="checkbox"/>

For more information, visit www.healthoregon.org/dws.
You can also call Drinking Water Services at 971-673-0405 or email Info.DrinkingWater@odhsoha.oregon.gov.