SALTWATER INTRUSION

Private Water Well FAQ

SOUTHEAST LOUISIANA READY

Due to prolonged drought in the northern river basins, the water levels of the lower Mississippi River are extremely low, allowing salt water from the Gulf of Mexico to come upstream. This phenomenon, known as saltwater intrusion, can affect local water supplies because many water systems in south Louisiana rely on fresh water from the Mississippi River.

The Louisiana Department of Health (LDH), along with regional, state and federal partners, is actively monitoring the situation and conducting water quality testing and analysis to provide regular updates to the general public and healthcare providers about impacts to water systems and necessary precautions.

When or if your public water system is affected, a saltwater advisory, or "High Sodium Water Advisory" will be issued, along with the proper precautions and actions needed for your area.

We encourage residents of the Southeast Louisiana parishes affected by the saltwater intrusion to stay informed by signing up for their local text alert systems. Visit **emergency.la.gov/saltwater** to get the latest updates on the saltwater intrusion in Southeast Louisiana.

Private Water Wells and Saltwater Intrusion

As of October 2023, the saltwater intrusion threat has been minimized throughout Southeast Louisiana, with many parishes no longer expecting impacts and previously affected parishes, such as Plaquemines, no longer under High Sodium Water Advisories. Due to these improvements, **there is minimal risk of immediate impact to local private water wells**, although some wells are susceptible to more gradual saltwater intrusion of the aquifers they draw from.[1]

The Louisiana Department of Natural Resources' (DNR) water well **registry** contains active, domestic wells across southeast Louisiana parishes.[2] Out of an abundance of caution, LDH's **Private Well Owner Network** has prepared the following information as a guide to stakeholders in the event of a High Sodium Water Advisory. LDH does not regulate private water wells. Well owners are responsible for all sampling and maintenance of their water well. Should homeowners with private wells desire to test their drinking water, they can use the public safe drinking water standards as guidelines to ensure drinking water quality.

What is chloride and how does it get into my private well?

Chlorides are widely distributed in nature as salts of sodium, potassium and calcium. Chloride occurs naturally in groundwater but is found in greater concentrations where seawater and run-off from road salts can make their way into water sources. Chlorides and bacteria may also enter a private well from a faulty on-site septic tank.

What level of chloride should I be concerned about?

The U.S. Environmental Protection Agency (EPA) established a secondary maximum contaminant drinking water level of 250 milligrams per liter (mg/L) for chloride for public water supply systems.[3] The National Secondary Drinking Water Standard is a non-enforceable guideline regarding contaminants that may cause cosmetic or aesthetic effects in drinking water.

How can chloride affect my health?

Chloride may be noticeable by a salty taste, as it is commonly distributed as sodium in water. EPA recommends that drinking water sodium not exceed 20 mg/L for individuals following a low-sodium diet.[4] Sodium can negatively affect individuals with kidney disease or high blood pressure, dialysis patients, infants and pregnant women. The health effects of drinking saltwater are associated with cardiovascular diseases, diarrhea and abdominal pain.[5] Contact your primary care provider regarding your specific health risks.

How do I test for chloride in my private well?

A certified laboratory should be used to test well water for chloride. It's important to note that chloride can corrode plumbing and fixtures, potentially leaching metals, like lead, into the drinking water. Consider testing for both simultaneously to save resources. A list of LDH-certified chemistry laboratories and analytes is available here. Individuals can contact the Louisiana Private Well Initiative Program at 888-273-2070 for assistance.

What if my private water well chloride levels are high?

Use bottled water for drinking, cooking, ice, formula and juice preparation for infants and children. Provide bottled water or some other fresh water source for pets. Consider a treatment system to reduce the levels of chloride in your private well. It is important to recognize that chloride cannot be removed through boiling or conventional filtration like Brita filters or other common household store-bought water filters.

Please visit the Water Quality Association[6] to find a certified water treatment professional and learn more about product treatment options.

Can I use private well water with elevated chloride levels for irrigation purposes?

Private wells are commonly used for irrigation. However, given the situation, please review advice provided by the Louisiana State University AgCenter regarding saltwater impacts to plants and livestock.

Can elevated levels of chloride damage my private well, plumbing or appliances?

Over time, high levels of chloride in water can cause damage to plumbing, appliances and cooling systems that use water, and water heaters. Please refer to equipment manufacturers and service providers for guidance. Elevated levels of chloride may also cause corrosion and shorten the life of pumps and other private well components. The Louisiana Department of Natural Resources maintains a listing of licensed private well professionals to assist with inspection and repair needs.

How can I prevent saltwater intrusion in my private water well?

Private well owners may employ several strategies to prevent saltwater intrusion into their wells. First and foremost is stepping down water consumption to allow aquifer recharge. This means reducing watering lawns, installing low-flow fixtures and appliances, and trying rainwater collection for non-potable use.[8] Contact a licensed well driller to properly decommission abandoned wells according to **DNR regulations**.[9]

Where can I receive future updates and information regarding available resources?

Please monitor the Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) **website** for the latest information and saltwater intrusion updates.

REFERENCES

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