

indian hills water district



January 2024 Leak Event Summary & FAQ's

Late in the evening of January 18, 2024, IHWD water operators noticed a drop in the tank levels in Zone 2. This was due to a leak that occurred after thawing, which was a result of extreme low temperatures over an extended period the weekend of January 12th.

The sudden loss of water (approximately 26,000 gal) drained the Zone 2 tanks quickly impacting IHWD's ability to consistently provide potable water to customers. The leak came at a time when the District was already dealing with nitrate filtration issues and reduced well production. IHWD immediately went to Emergency status and notified CDPHE of the situation. A boil water order was activated, which is normal procedure after a system pressure loss. Water deliveries continued and leak detection began early Friday 1/19.

Because we were not able to bring water from Zone 1 to Zone 3 to blend and reduce nitrates, and due to the nitrate filtration issues, Zone 3 lost pressure on Saturday 1/20. To provide water for basic household necessities, we notified CDPHE of our plan to provide water that potentially contained elevated levels of nitrate which is why the nitrate order and consumption warning was issued on Sunday 1/21. Water pressure was restored to most of Zone 3 overnight into Monday 1/22. Pressure was also restored to many Zone 2 customers sporadically during the leak detection process. Several Zone 1 customers at higher elevations lost pressure during the leak detection process as well.

Locating the leak proved to be a big challenge, given the weather conditions. We quickly investigated several promising areas including excavation. Systematically locating valves and isolating sections of the main water lines to test pressure levels, along with enlisting professional excavation and leak detection services, former IHWD Operator aid, and outside help from CRWA and other Districts over 10 days narrowed the search. The leak was found on a customer service line on Sunday 1/28 and the water was shut off to two customers, isolating the leak and signs of system recovery in Zone 2 quickly.

Once the pressure was restored to all but 2 customers, we produced as much water as possible and water deliveries continued to allow us to blend the water again, reduce nitrates, and flush the main lines. BACT samples were sent to the lab and the boil water order was lifted late Wednesday 1/24. Nitrate samples were sent to the lab on 2/1 and results were received on Friday 2/2 showing that nitrates were below the acceptable 10.0 mg/l MCL.

Storage tanks have been gaining and water treatment is functioning. We are still compiling costs associated with this leak incident.

Going Forward: IHWD has had two main priorities in recent years: Evaluating increase in well production yield, and determining a more reliable treatment for nitrates. We have been working with engineering on both projects and the latter is priority #1.

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Q: Whose responsibility is it to locate a leak?

A: The District is responsible for locating a leak on the main distribution lines, but all leaks affect the system, so we look for all leaks including those on a service line.

Q: Where does that responsibility begin?

A: Customers are responsible for their service line beginning at the connection to the main line and for reporting any issues to IHWD.

Q: Who is responsible for paying for a leak on a customer service line.

A: The property owner is responsible for any service line repairs.

Q: Will IHWD reimburse customers for expenses during the service outage?

A: IHWD will not be reimbursing customers for expenses during the service outage. The District recommends customers coordinate with their homeowner's insurance company in case reimbursement is available through their insurance.

Q: Can IHWD merge/be absorbed by another district, like Denver or Evergreen?

A: Typically these negotiations result in a cost being passed onto customers of the existing District, particularly since the District doesn't have that much to offer in return other than water rights in our valley and a some in Turkey Creek and Bear Creek.

Q: What are considered safe nitrate levels?

A: The EPA drinking water standard for nitrate in public water supplies is 10 milligrams per liter (mg/L) of water. The level during the leak was 12.4 mg/l.

Q: Can customers get wells instead of district water?

A: Customers cannot get wells instead of District water. A property is allowed only one water source. The District has first right of refusal of service within District boundaries.

Q: How has development impacted this situation, if at all?

A: This leak was the result of a break on a customer service line, and not directly linked to any development. Of course, if density of homes continues to increase in the valley, the District will need to evaluate drilling new wells or utilizing existing and previously abandoned wells (a project that is already in process). The District does not approve or deny any new building (this is a function of Jefferson County), only whether a tap will be approved or denied. A denial is grounds for a well permit approval.

Q: What are next steps are IHWD taking (lessons learned) to prepare for the next leak/incident?

A: Investigate purchasing leak detection equipment, so we are not dependent on these services. All employees and Directors learned a lot during this leak event including the communication process with CDPHE and customers, and new employees learned the exact location of many valves.

Q: How can I get involved with the water district, are there any board openings coming up?

A: We welcome members of our community to attend our monthly board meetings where we discuss the current state of our operations, financial status, project planning and other interesting topics. There will be three open board seats in Spring 2025, for which there will be an open election on May 6, 2025.