

Understanding Lead in Drinking Water

As a licensed public water system, the City of Stow takes great pride in ensuring the quality of its water. All U.S. water operators are required to comply with the Safe Drinking Water Act, including the Lead and Copper Rule. The City of Stow has been conducting the required thirty (30) lead samples since the beginning of EPA mandated testing in 1992. Samples are taken from established sites in the system and conducted on a triennial (three year) basis. All results have consistently been well below the EPA limits.

Lead is a common, natural element that is found throughout the environment. It is also used in many commercial products. Exposure to lead can be harmful and a buildup in the body can cause brain or kidney damage, or interfere with red blood cell production. At greatest risk are infants, young children, and pregnant women. For those individuals, the use of a water filter, designed to remove lead, is recommended.

The water distribution system in the City of Stow begins at its two pumping stations. From there, a series of main lines convey the water throughout the city. Smaller service lines are then tapped into the larger mains to supply water to a particular property. These service lines are divided into two sides; the city-owned side, from the main to a curb stop shut off valve, and the customer side, from the curb stop into the home or business. The customer side also includes all interior plumbing.

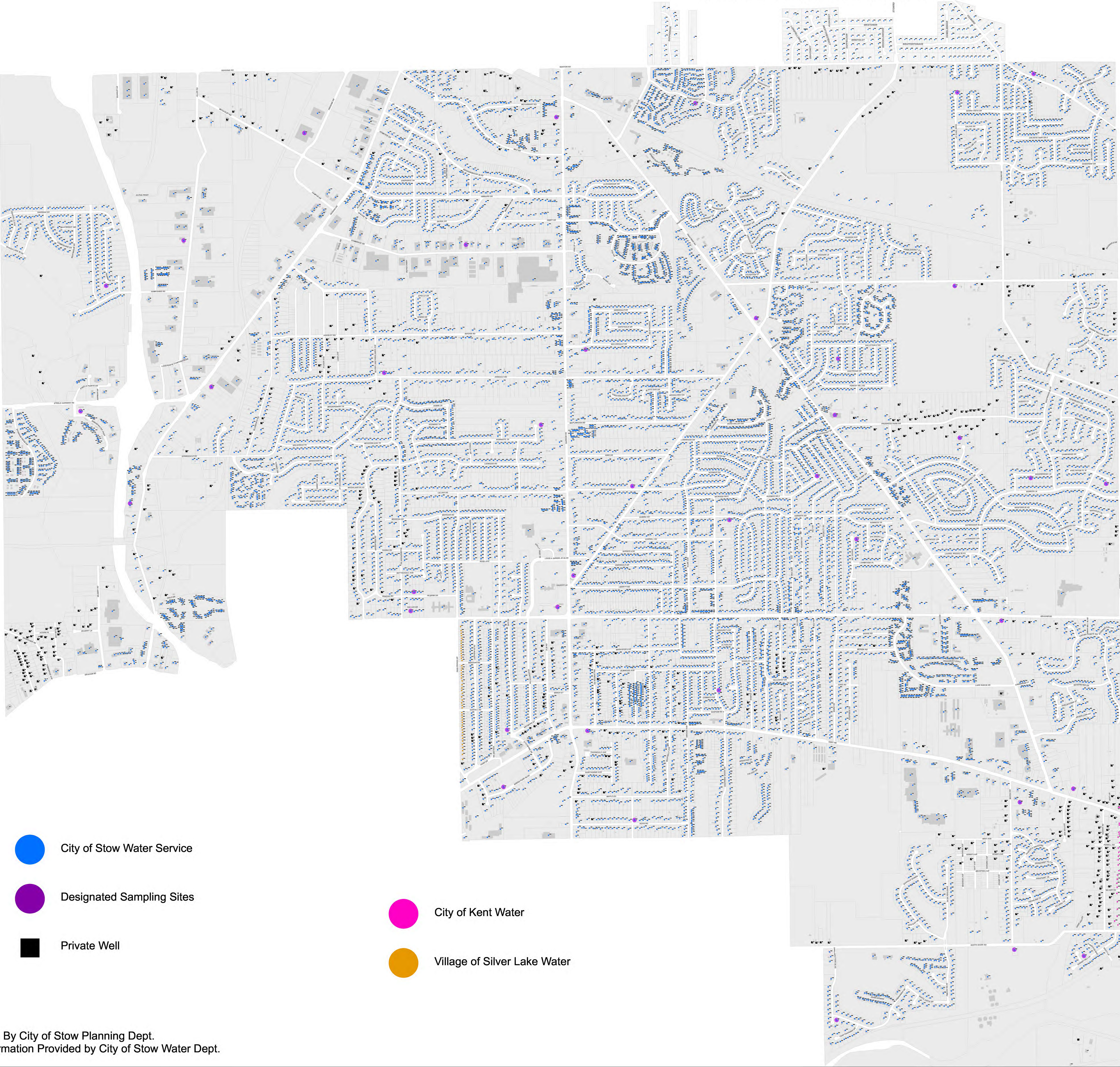
The City of Stow does not treat its water; instead, it is purchased bulk from the City of Akron. The City of Akron maintains a state-of-the-art treatment facility which includes a comprehensive corrosion control program. For over thirty years they have added a corrosion inhibitor, called *zinc orthophosphate*, which creates a coating on the inside of the pipes. This coating serves as a barrier between the water and pipes and fixtures. It serves to prevent conditions such as lead leaching into the water, as water sits idle in lines. There is no detectable lead in the treated water that leaves the City of Akron Water Treatment Plant or in the water delivered to your home through the distribution system.

Beginning in the early 1950's, the use of lead in water service piping was abandoned in favor of using copper pipe. The City of Stow water system, from the mid 1950's until the late 1970's, was under the ownership/control of the City of Akron. From the late 1970's until late 2001, the system was under the ownership/control of Summit County. The City of Stow purchased and took control of the system in November of 2001. Throughout its existence, all available records indicate no use of lead in any service piping installed in the system.

Lead can enter your plumbing system in other ways, namely interior piping and fixtures. Per EPA guidelines: **"Buildings in Ohio built prior to 1998, or that use plumbing material or solder manufactured before 1998, may have materials with greater than 8% lead and are at a higher risk of contributing lead to the drinking water than materials manufactured after 1998. In addition, buildings built and plumbing materials manufactured after 2014 were required to have less than 0.25% lead by weight and have the lowest risk for contributing lead to the drinking water. It should be noted however that, although prohibited, some use of leaded solder or leaded components may have occurred after the prohibitions became effective."**

The likelihood of lead leaching from fixtures, pipes, and joints, and entering the drinking water, rises when water sits in plumbing for long periods of time, such as overnight or during workday hours. There are several ways you can reduce your exposure to lead in your water. The most effective way is to run your tap for at least 60 seconds if it has not been used in six hours or more. You will know the water is from the city's mainline as it will feel colder after running. This assures the pipes are flushed. Keeping faucet aerators clean, at least every few months, also assures any particles from pipes or solder are removed.

Lead dissolves more easily in hot water so it is best to cook, drink, or make baby formula with cold water. Boiling will not remove lead from water. Periodic flushing of your hot water tank is also recommended. A final suggestion would be to check the grounding wire of your home electrical service. Grounding in this way may cause pipes to corrode more. Check with a licensed electrician to see if this can be relocated.



**VERIFICATION FORM FOR COMMUNITY PUBLIC WATER SYSTEMS
CLAIMING NO LEAD SERVICE LINES**

The owner or operator of all community public water systems must identify and map areas of their distribution system that are known or are likely to contain lead service lines. Systems must submit a copy of the applicable map to the Ohio Department of Health and the Ohio Department of Job and Family Services. Systems must also submit a report to the director containing at least both of the following: (1) The applicable map with narrative, and (2) A list of sampling locations used to collect samples as required by Ohio Revised Code (ORC) Section 6109.121 and any rules adopted thereunder, including contact information for the owner and occupant of each sampling site.

Should a water system determine no lead service lines exist in their distribution system, they must provide information stating they reviewed, at the minimum, historical permit records and local ordinances, distribution maintenance records and information pertaining to installation dates or materials for all services lines. This information must be verified below.

I HEREBY CERTIFY THAT THE FOLLOWING METHOD(S) WERE USED TO DETERMINE NO LEAD SERVICE LINES EXIST IN THIS WATER SYSTEM'S DISTRIBUTION SYSTEM, AS REQUIRED BY ORC 6109.121(F):

LEAD SERVICE LINE VERIFICATION

This PWS states they have no lead service lines and has reviewed the following information (select one or more of the following):

- ☒ Historical permit records and/or local ordinances
- ☒ Distribution maintenance records (i.e. meter replacement, waterline break repairs)
- ☒ Information pertaining to installation dates for all service lines (i.e. after 1986 when lead services lines were banned)
- ☐ Service line material of all service lines is known (i.e. all service lines are known to be PVC)

Kathy Vaughn 3-28-17
Signature of Responsible Person Date

KATHY VAUGHN, SUPERINTENDENT
Printed Name and Title of Responsible Person

PWS NAME: STON PUBLIC WATER
PWS ID: OH 7704503
COUNTY: SUMMIT

For Ohio EPA use only

Date Verification Rec'd:

RECEIVED
MAR 28 2017

RECEIVED
MAR 29 2017