

Risk of Lead Contamination in Bellevue's Drinking Water

5/16/2016

NAV OTAL, UTILITIES DEPARTMENT

How Lead Gets Into Drinking Water

Lead can come from corroding service pipes or fixtures

Acidic water (or water with low mineral content) exacerbates corrosion

Most common source of lead is chrome-plated brass faucets or fixtures with lead solder

Pre-1986 homes are more likely to have lead in pipes, fixtures, and/or solder

Safe Drinking Water Act reduced maximum allowable lead content in pipes, pipe fittings, plumbing fittings, and fixtures in 1986.



Corroded Galvanized Service Pipe

Drinking Water Regulations on Lead

Lead and Copper Rule issued in 1991; revised in 2000 and 2007.

Lead and Copper Rule requires treatment techniques and sampling for lead in drinking water

Action level for lead is 15 ppb (parts per billion)

No Risk of Lead from Water Source

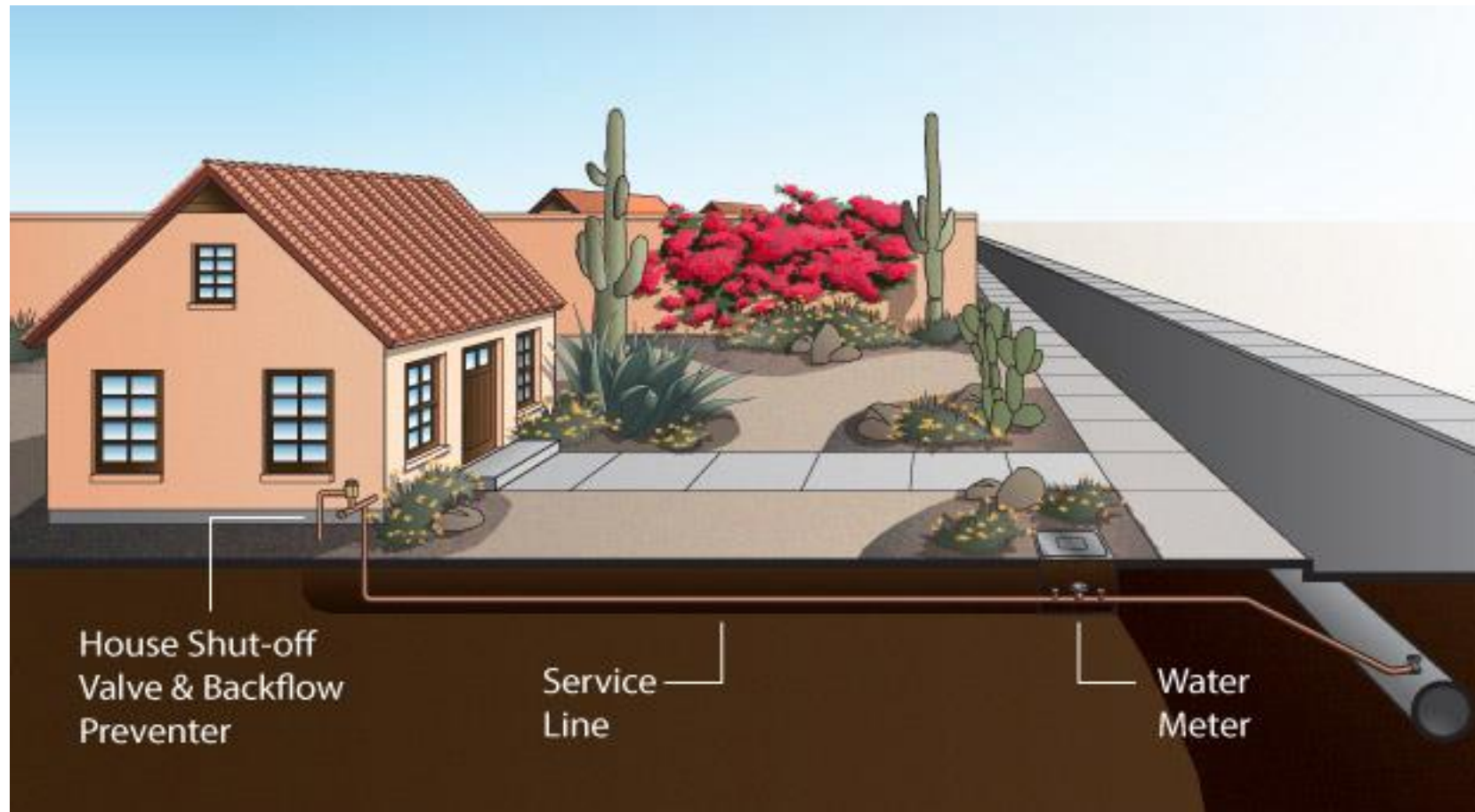


Tolt Watershed



Cedar Watershed

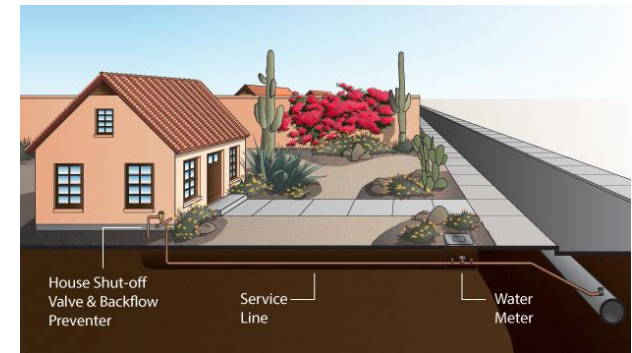
Potential Sources of Lead Contamination in the Drinking Water Distribution System



No Risk of Lead Contamination from Water Mains

No pipes in Bellevue system are older than 1946

Water mains constructed on or after 1946 do not contain lead compounds in contact with the drinking water.



Low Risk of Lead Contamination from Water Services

Galvanized water service lines containing lead were used in Buildings constructed in the 1940s or earlier

Bellevue replaces galvanized water service lines when a property redevelops or as it replaces water mains through its asset management program

We found one property in the last 20+ years that had a gooseneck fitting (common for the pre 1930s period)

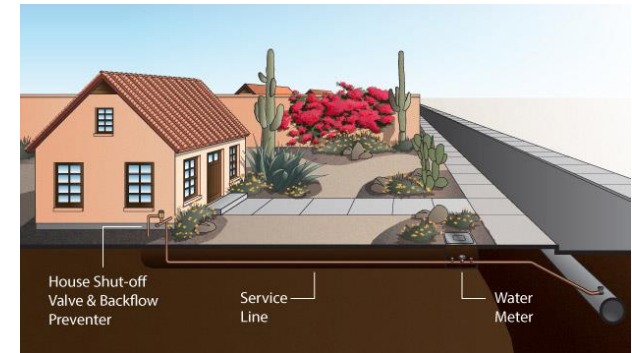
Source water is not corrosive



Low Risk of Lead Contamination from Private Internal Plumbing

Buildings plumbing systems constructed before 1986, may be at risk for lead exposure (lead in solder, brass fixtures, and zinc coatings used on galvanized or copper pipes and fittings)

Source water is not corrosive



Summary of Lead Contamination Risk for Bellevue Water System

Lead Pathway	Water source	Water Pipes and Mains	Service Lines	Buildings Plumbing
Risk of lead contamination for our customers	None	None	Low	Low

Protected water source

Relatively young system

Lead monitoring results for high risk homes meet the established EPA action levels for lead

Lead testing results

Sampling is performed inside homes at the customer's water tap

Performed sampling since early 1990s

Last sampling was performed in 2014

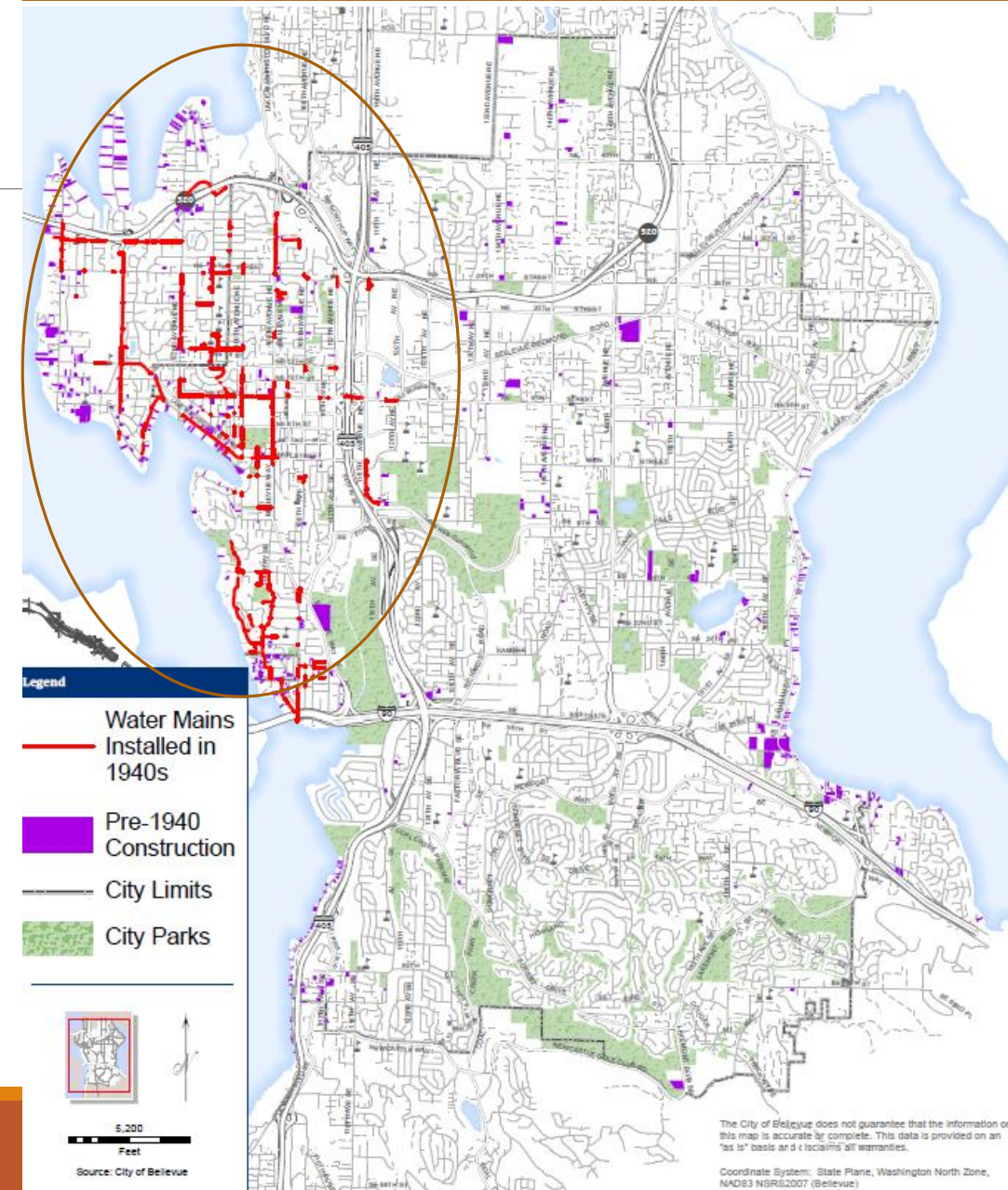
- Out of 50 residences sampled, only one residence's water tested over 15 ppb for lead; cause was internal plumbing



Additional Lead Testing

In May 2016, collect lead samples of the drinking water from approximately 30 older homes in the west operating area.

- Homes built in the 1940s-1950s or earlier
- Verify with the homeowner that they do have galvanized iron pipe



Update on Lead in Bellevue Schools

Utilities contacted Bellevue School District in April 2016 to offer support for lead testing.

Associated Press (AP) contacted Utilities on 5/13/16 and published news story regarding positive lead tests at 13 of 16 Bellevue elementary schools and some middle and high schools.

On 5/13/16, Bellevue School District reported that the test results were from 2005, and all of the problem fixtures have been repaired or replaced.

Bellevue School District has committed to retesting for lead at all schools.

Utilities and Cascade Water Alliance have offered technical assistance with lead testing and analysis.

The screenshot shows a news article from The Seattle Times, dated May 13, 2016. The article is titled "Water in every Bellevue school will be retested" and is written by Donna Gordon Blankinship for The Associated Press. The article reports that the Bellevue School District is retesting water in all its schools more than a decade after finding lead in 13 out of 16 elementary schools. The article mentions that on Friday morning, school officials told The Associated Press the testing found unsafe levels of lead in water from early May. Later Friday, they said that upon further review, they learned the elementary school results were from 2005. A district spokeswoman says she does not know when tests that found lead in the water at middle and high schools were done. School officials have replaced or repaired the troubled

The article is sponsored by Diana Ross. The page also features a CVS pharmacy advertisement and a Northgate Plaza logo.

Communication to Customers

Facebook and Twitter posts on 1/28/16

Blog post in Bellevue Utilities News in March/April 2016

Frequently Asked Questions (FAQs) on Safety and Quality of Bellevue's Water posted to Bellevue's website in March 2016 (See Attachment)

2015 Annual Water Quality Report, to be sent to customers in June 2016 (See Attachment)

Through the Cascade Water Alliance, Utilities is reaching out to **public and private schools** regarding lead testing and actions to prevent lead contamination in our schools.

Tips to Homeowners

Flush out stagnant water in pipes (>6 hours).

Always drink COLD water.

Never make baby formula or other drinks or food for children from the HOT water tap.

Buy low-lead or no-lead fixtures.

Please call Utilities Water Quality Division at 425-452-6192 if you have concerns about lead in your drinking water.

To have your home tested for lead:

- Contact a certified lab near your area; the Washington State Department of Ecology website lists labs certified to test drinking water: <http://www.ecy.wa.gov/programs/eap/labs/index.html>
- Analysis costs range from \$25 to \$50. Please contact the laboratories directly for sample collection procedures and prices

Next Steps

Continue lead testing in Bellevue residences, in compliance with the Safe Drinking Water Act's Lead and Copper Rule.

Continue replacement of galvanized service lines as properties redevelop and/or water mains are replaced due to age or condition.

Perform additional lead testing of homes in the west service area

Continue to work with schools on testing protocols and analysis

QUESTIONS
