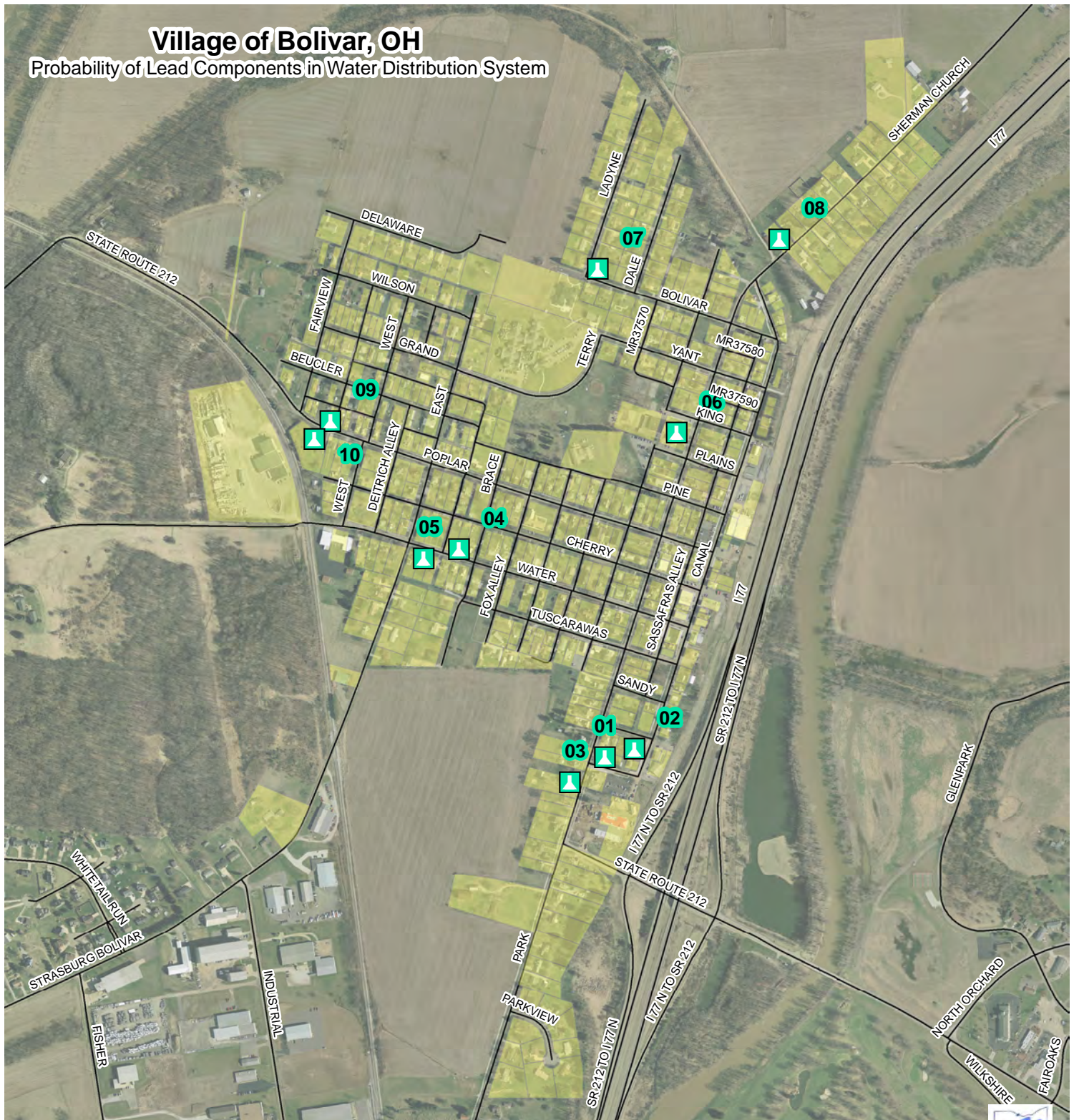


Village of Bolivar, OH

Probability of Lead Components in Water Distribution System



0 0.125 0.25 0.5 Miles



Bolivar Lead & Copper Sampling Sites



Bolivar Water Service Area

Created for use by The Village of Bolivar
By RCAP GIS Team
February 1, 2017



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.

Coordinate System:
NAD 1983 StatePlane Ohio North FIPS 3401 Feet
Data Sources:

Village of Bolivar, Tuscarawas County Auditor, RCAP GIS Team,
ESRI, OGRIP, OSIP, TIGER Lines

STATION ID	ADDRESS	STATION ID	ADDRESS
1	SOUTH PARK AVE 365	6	NORTH PARK AVE 216
2	SOUTH PARK AVE 432	7	LADYNE 509
3	LAWRENCE ST 140	8	SHERMAN CHURCH 12110
4	WATER STREET 317	9	POPLAR 553
5	WATER STREET 348	10	POPLAR 540



Village of Bolivar (PWS 7900212) Public Water System Lead (Pb) Components

Prepared February 2017

To comply with Section 6109.21 of the Ohio Revised Code, enacted in September 2016, the Village of Bolivar in Tuscarawas County, Ohio has created the following report and attached map to identify known and potential components of its public water system that contain lead (Pb).

RCAP staff and the Village of Bolivar Water Department met on January 26th, 2017 to review a map of the service area. Few applicable historical maintenance, and operational records were available to be consulted along with limited as-built construction maps. In addition, an operator with extensive experience and knowledge of the system was present to provide the best knowledge of the system. Existing mapping and historical maintenance knowledge are the base of the institutional memory for the water distribution system. Lead component findings were identified by Bolivar water operators and recorded in a GIS database.

Service Lines and Ownership

The Village of Bolivar Water Department distributes water to 496 parcels. The Village owns and maintains service lines from the water distribution mains up to the curb stops for each water customer. The remainder of each service line from the curb stop to the building is the responsibility of the property owner.

Since the earliest construction of the water system in 1939-1942, it has been standard procedure for the water system operators to use 1" copper (or, more recently, 1" PVC) from the tapping saddle on the main up to the curb stop. It is recommended that property owners install copper or plastic for private water service lines, but there are no official regulations to legally enforce this within the village. While copper, PVC, steel, and galvanized pipe have been used for private lines, lead pipe has never been found in this water distribution system. Experienced operators currently in charge of maintaining the water distribution system have done repair work in all areas of the village, and never uncovered a private service line made of lead. It is common to replace faulty copper or galvanized service lines, but a lead line has never been observed. Based on institutional knowledge and available maintenance records, the Village of Bolivar considers the chances of existence of lead service lines to be negligible.

Distribution System

The Village of Bolivar produces treated ground water and distributes potable water through approximately 8.4 miles of water main lines. Since the original construction between 1939 and 1995, no major sections have been replaced, only emergency repairs made when necessary. Within the distribution system, the

ductile iron pipe installed between 1939 and 1942 is known to utilize lead components in the joints. The entire system is made up of ductile iron pipe, with a few small sections of 1" and 1 1/2" copper. The portions of the system that contain leaded joints makes up about 81% of all water mains. Few of these joints have been replaced as emergency repairs in response to break events.

Water Meters & Indoor Plumbing

Water meters at each customer location may be as old as 20 years and may contain more than 8% lead. Meters installed after 1998 may contain up to 8% lead. Meters installed after 2014 will have less than 0.25% lead.

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.

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.

Probability of Lead Pipe, Solder and Fittings of Buildings		
Building Plumbing Materials	# Parcels	% of Parcels
Age of Structures on Parcel Unknown	122	24.6%
≤ 8.0% Lead Solder or Plumbing Material (1998 – 2013)	14	2.8%
≤ 0.25% Lead Solder or Plumbing Material (2014 - present)	358	72.2%
0% - 100% (1830 – 1997)	2	0.4%

The Village of Bolivar does have any local laws or regulations that ban the use lead before state or federal statutes. Only 2 properties are known to have structures built after 1/1/2014, and therefore nearly all buildings in the village may have some lead in the solder or fixtures.

Customer Self-Reporting

The information on this map regarding privately owned service lines is based on the limited information from the water system staff and Tuscarawas County building and parcel data. Property owners are encouraged to inspect their own service lines entering the building if these are in anyway exposed, and notify the Village of Bolivar Village Administrator if they have determined whether or not a lead service line exists. Please contact the Water Billing Clerk by calling 330-874-3717 or visiting the main office at 117 Canal Street, Bolivar, Ohio, 44612. A representative from the water department will contact you to confirm and update this information for the next map release.

Contacts and Resources

If you have questions about known and potential lead components within the Village of Bolivar Public Water System, please contact:

Water Department Office

117 Canal Street, Bolivar, Ohio, 44612

Phone 330-874-3717

For more information about lead service lines and their removal, we recommend the following resources:

- **The Lead Service Line Replacement Collaborative**
<http://www.lslr-collaborative.org/resources-for-concerned-consumers.html>
- **Ohio EPA 'Learn About Lead' page**
<http://epa.ohio.gov/pic/lead.aspx>
- **US EPA Lead in Drinking Water Information Page**
<https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>

Village of Bolivar Public Water Distribution System Lead Components and Lead Service Lines Map

The following map(s) does not verify the presence of lead in any of the lines or structures shown. This map only shows the probable or possible locations based on the year that the structure was built, historical maintenance and operation records, and customer or utility staff verification.

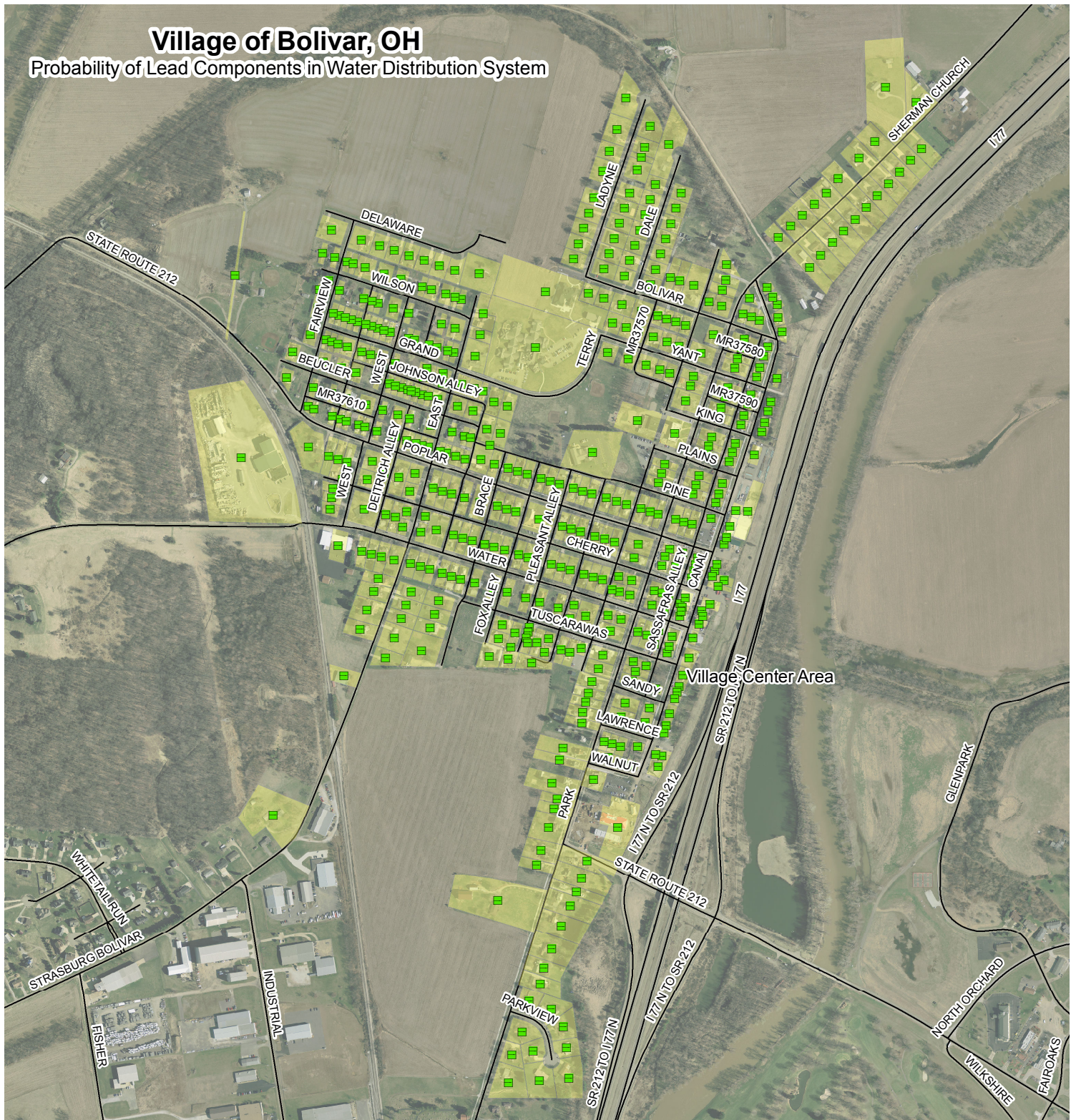
This map is not intended for design engineering, surveying, or construction purposes. Information and data contained or accessed within this map emanates from various public and private sources and may contain errors and omissions

All data, information and documentation within this map are provided "as is" without warranty of any kind, either expressed or implied. The suitability of the data and information contained in this map is not guaranteed, and the user assumes all risk for such uses. WSOS Community Action and its employees, affiliates, agents and licensors cannot and do not warrant the accuracy, completeness, non-infringement, merchantability or fitness of any information contained within this map.

GIS Data Sources: OGRIP, OSIP, Tuscarawas County Auditor, RCAP GIS. Datum/Projection: NAD 1983 Ohio State Plane North (ft) Date: 2/1/2016

Village of Bolivar, OH

Probability of Lead Components in Water Distribution System



0 0.125 0.25 0.5 Miles

Symbol representing single service line

Public Ownership of Line
Private

Material of Service Line

Lead
Non-Lead
No Information

Bolivar Water Service Area

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**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)

David L. Franks

Signature of Responsible Person

3-2-17

Date

PWS NAME: BOLIVAR VILLAGE
PWS ID: OH 7900212
COUNTY: THOS.

DAVID L. FRANKS VILLAGE ADMINISTRATOR
Printed Name and Title of Responsible Person

For Ohio EPA use only:

Date Verification Rec'd: _____