

RE: BOWLING GREEN CITY
Report
Drinking Water Program
Wood County
PWS ID: OH8700311



City of Bowling Green - Office of Municipal Utilities

304 North Church Street
Bowling Green, Ohio 43402

Phone: (419) 354-6246
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March 7, 2017

Justin Bowerman
Ohio Environmental Protection Agency - Northwest District Office
Division of Drinking and Ground Waters
347 North Dunbridge Rd
Bowling Green, OH 43402

Re: Water Service Line Mapping Submittal per ORC 6109.121
PWS name: Bowling Green City Water System
PWS ID number: OH8700311

Dear Mr. Bowerman,

Please find the submittal as required by ORC 6109.121 for the City of Bowling Green. Included is the following information.

1. Water Service Line Material map
2. Written narrative describing buildings served by the water system
3. Lead and Copper Sample Monitoring Point Spreadsheet

The information included in this submittal will also be forwarded to the Ohio Department of Health and the Ohio Department of Jobs and Family Services.

Please let me know if you require additional information.

Respectfully,
CITY OF BOWLING GREEN, OHIO

A handwritten signature in blue ink, appearing to read "Brian P. O'Connell".

Brian P. O'Connell, P.E.
Utilities Director

RECEIVED

MAR 07 2017

DDAGW - NWDO

cc: Chad Johnson
Mike Fields
Mike Johnson
Jason Heyman
file

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CITY OF BOWLING GREEN - OFFICE OF MUNICIPAL UTILITIES

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To: Ohio EPA, NWDO, Division of Drinking and Ground Waters
 From: Brian P. O'Connell, Utilities Director
 Subject: Lead Mapping Submittal per ORC 6109.121
 Date: March 7, 2017

1. Water Service Line Material Map

Per ORC 6109.121, the City of Bowling Green has undertaken an extensive review of the available water service line material data and prepared the attached map. As required, it identifies water service pipe material based on the responsibility for maintenance of the water service line. The City is responsible for the water service line from the water main to the curb stop valve. The Owner is responsible for the water service line from the curb stop valve to the building. To create the map, we reviewed water service records that document pipe material type. Additionally, the City of Bowling Green Board of Public Utilities created policy #3013 in 1967 which required all water service lines to be copper. Also, many years ago, the City replaced known lead water service lines that were the City's responsibility. As indicated on the map, there are no known lead service lines in the City; however some service line materials are unknown. We will continue to update our GIS system with information from our water service records to identify the unknown material services.

The map follows the guidance from Ohio EPA to use a particular color code for the following water service line materials:

City water service line	Owner water service line
1. Non-lead	1. Non-lead
2. Unknown	2. Unknown
3. Lead	3. Lead

2. Buildings served by Bowling Green City Water System

Per ORC 6109.121, the City is required to submit a narrative of the buildings served by the City water system and identify characteristics of buildings served by the system that may contain lead piping, solder, or fixtures. The City of Bowling Green does not regulate, inspect, or monitor any plumbing or fixtures inside of buildings. Internal plumbing materials are determined by the State of Ohio Plumbing Code at the time the plumbing

work is completed. Therefore, the City has no records that identify any plumbing materials inside of a building.

According to Ohio EPA guidance, the construction date of the structure is to be the primary indicator of the potential for lead in plumbing materials. In 1986, the Safe Drinking Water Act (SDWA) was amended to ban the use of lead solder which contains more than 0.2% lead. According to Ohio EPA, the lead ban became effective in the Ohio Plumbing Code in 1998 and "lead free" was defined as having less than 8.0% lead. The definition of "lead free" was further amended in 2014 as having less than 0.25% lead in the wetted surface material.

The following years and criteria were used for the descriptions of building plumbing characteristics served in the City.

- Pre-1998 - potential for copper pipes with lead solder and plumbing fixtures containing more than 8.0% lead
- 1999 to 2014 - potential for plumbing fixtures containing less than 8.0% lead
- 2015 to Current - potential for plumbing fixtures containing less than 0.25% lead

After reviewing building records at the Wood County Auditor, the following number of buildings were determined to be in the City based on the criteria listed above.

Building Date	No. of Buildings	Percentage
Pre-1998	4,730	83.6%
1999 to 2014	1,011	15.7%
2015 to Current	49	0.7%
Total	6,458	100%

The Pre-1998 buildings are the majority of buildings in the City at 83.6%. Buildings constructed after 1998 tend to be located on the outer perimeter of the City; which would be expected as newer development typically occurs on previously undeveloped agricultural property near the edge of the City. It is impossible to know if any internal plumbing in older buildings has been changed or modified with newer plumbing materials.

The City's water treatment process reduces the potential for lead to leach into drinking water from plumbing materials. The water treatment plant optimizes corrosion control water quality parameters to minimize potential issues with lead in the drinking water. Additionally, the anti-corrosion chemical, orthophosphate is added in the treatment process to further reduce the potential for lead issues.

The City is required to perform Lead and Copper Monitoring (LCM) per the Ohio Administrative Code 3745-81-86. Tier 1 LCM sample sites are defined as single family homes constructed after 1982 and have copper pipes with lead solder or are served by a lead water service line. As a result of the proactive measures taken during the treatment process, results from the LCM samples are typically below the Ohio EPA limit of 15 parts per billion with most results being non-detect and no lead violations from the Ohio EPA.

3. Lead and Copper Sample Monitoring Point Spreadsheet

Per ORC 6109.121, the City is required to submit a list of Lead and Copper Monitoring sampling sites. The Ohio EPA has provided a template spreadsheet that was used to complete the list. A copy of the list is included with this report.

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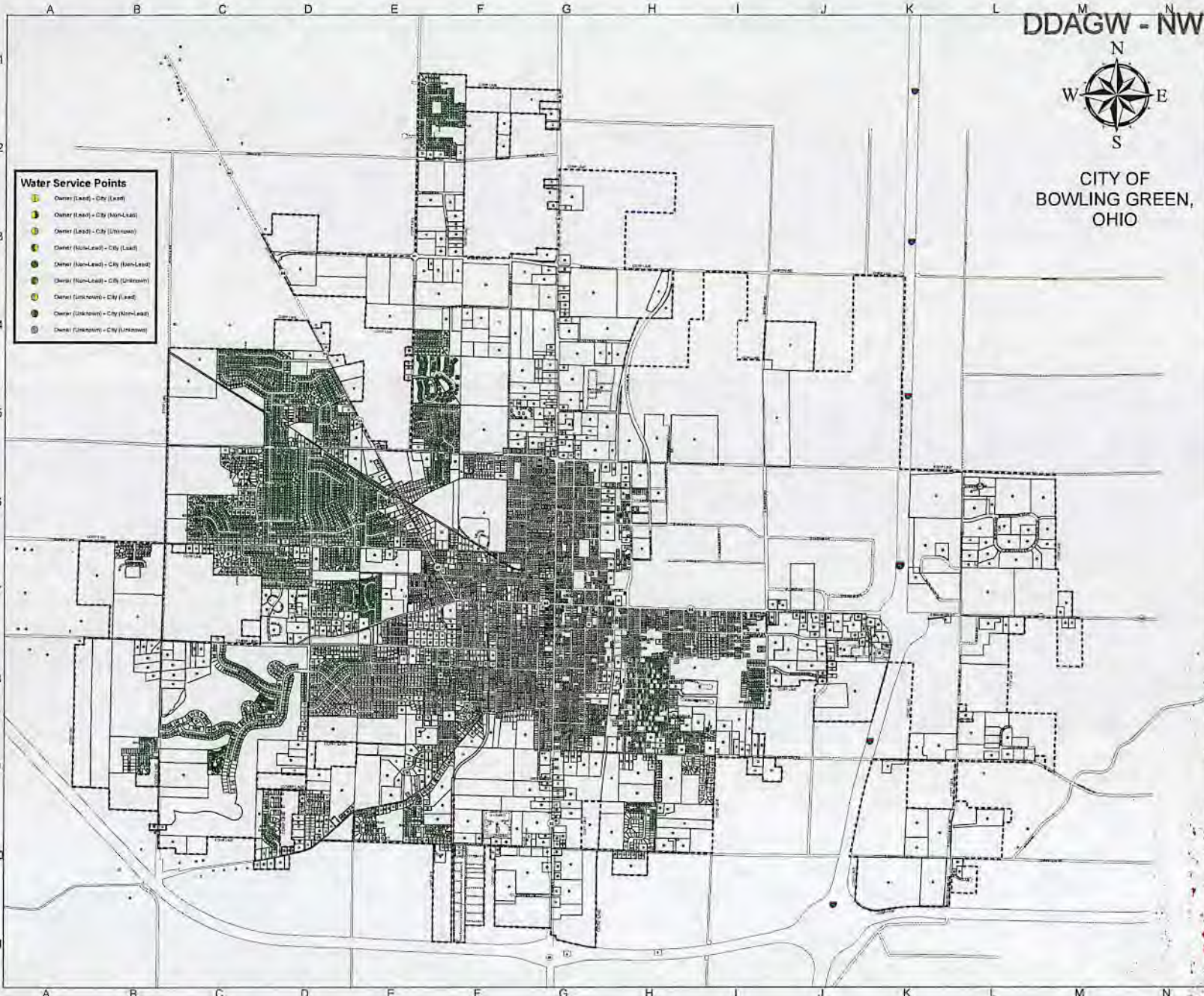
MAR 07 2017

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CITY OF BOWLING GREEN, OHIO

- Water Service Points**
- 1 Owner (Lead) - City (Lead)
 - 2 Owner (Lead) - City (Non-Lead)
 - 3 Owner (Lead) - City (Unknown)
 - 4 Owner (Non-Lead) - City (Lead)
 - 5 Owner (Non-Lead) - City (Non-Lead)
 - 6 Owner (Non-Lead) - City (Unknown)
 - 7 Owner (Unknown) - City (Lead)
 - 8 Owner (Unknown) - City (Non-Lead)
 - 9 Owner (Unknown) - City (Unknown)



1	2	3	4	5	6	7	8	9	10	11
1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10	10
11	11	11	11	11	11	11	11	11	11	11