

Jackson County Water Distribution System Lead Mapping

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March 2017 Lead Mapping/Reporting Narrative

- Jackson County Water is a public water system comprised of 4 PWS systems. Jackson County Water PWS 4002012 has a ground water source. Water supplied to this PWS is treated at the Jackson County Water Bronx Corner Water Plant. Approximately 5626 connections are on this system.
- Water for PWS 4001603 is a satellite system that has as its source a surface water system. This treated water is purchased from the City of Jackson. Approximately 20 connections are on his system.
- Water for PWS 4001803 is a satellite system that has as its source a ground water system. This treated water is purchased from the Village of Oak Hill. The Village of Oak Hill is a satellite system that purchases treated ground water from the Jackson County Water Company and the Scioto Water Company. Approximately 21 connections are on this system.
- Water for PWS 4001903 is a satellite system that has as its source a ground water system. This treated water is purchased from the Scioto County Water Company. Approximately 27 connections are on this system.

In order to clarify the components of the system, included in this packet is an over-view of the Jackson County Water service area. The satellite PWS systems within our distribution system are noted on the over-all system map. The remainder of the system is PWS 4002012.

We are also enclosing individual maps depicting each individual sampling site with the respective SMP number noted.

- The ages of the portions of our system are represented by the color-coded lines on the overview of our system. These color-coded lines correspond to the date of installation.
- The individual sampling sites for each of the PWS systems are represented in the included OEPA Spreadsheets for Lead and Copper Sample Sites. There are corresponding maps for the locations of each SMP ID.

Narrative:

The probability of the presence of lead plumbing and fixtures, and for that matter, construction dates are extremely difficult to accurately determine for our system. However, for several reasons, we feel that the presence of lead in our water system is highly limited, if not absent entirely. While our system can not make a definitive statement regarding the presence or extent of lead piping and fixtures within the system, due to the nature of a rural water system such as ours, the incidence of lead plumbing is expected to be limited. The original system was

constructed in 1973. At that time, service supplied to residences along the route would have most likely connected to houses having wells prior to that time. These houses would have more than likely connected to the Jackson County Water System using the most common and cost-effective materials at the time, namely PVC or Polyethylene. The most probable source of lead in the system would be leaded solder used in copper plumbing within the building itself.

In light of the fact that the Jackson County Water system consists of approximately 96% PVC and polyethylene, and the remainder Ductile Iron pipe, the JCWC system has no lead fixtures at all. The only lead exposure within the JCWC distribution system would be in the brass and bronze appurtenances. Since the Reduction of Lead in Drinking Water Act, this minimal exposure is being eliminated as new fixtures are installed.

It is practically impossible to determine the lead content of an installed fixture, fitting or pipe. It should be assumed that the manufacture or installation date is the primary indicator of the lead content. Therefore, the characteristics of buildings and piping solder or fixtures would be 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.

Maintenance records and new installation records tend to verify that there is no record of lead service lines being encountered in our system. And regarding the customer's service lines, in most cases, new installations involve the customer installing a new service line to their residence. Jackson County Water distributes a hand-out to new customers explaining the new service process, fixture recommendations and recommending that the customer use 3/4" iron pipe size polyethylene tubing for their service. All new service installations are terminated with 3/4" iron pipe size polyethylene tubing as a "pigtail" for the customer to connect to. Any material or size that varies from this pigtail would involve a more complex and possibly costly connection which makes the use of PEP on the customer's part more likely.

Lead and copper testing throughout our system as outlined in our sampling site plan has confirmed the absence of lead that exceeds the action level in any of our samples.

To further safeguard the Jackson County customers, Jackson County Water has an on-going coupon study within the Bronx Corner Treatment Plant as well as a separate study in the

distribution system to insure the corrosivity of the water is controlled and leaching is prevented. The Jackson County Water system also treats water at the treatment plant with a polyphosphate compound in order to further insure control of lead and copper within the JCWC system.



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GALLIPOLIS

CH&D

DAVID REESE

SARDIS

LC201

LC203

LC205

LC204

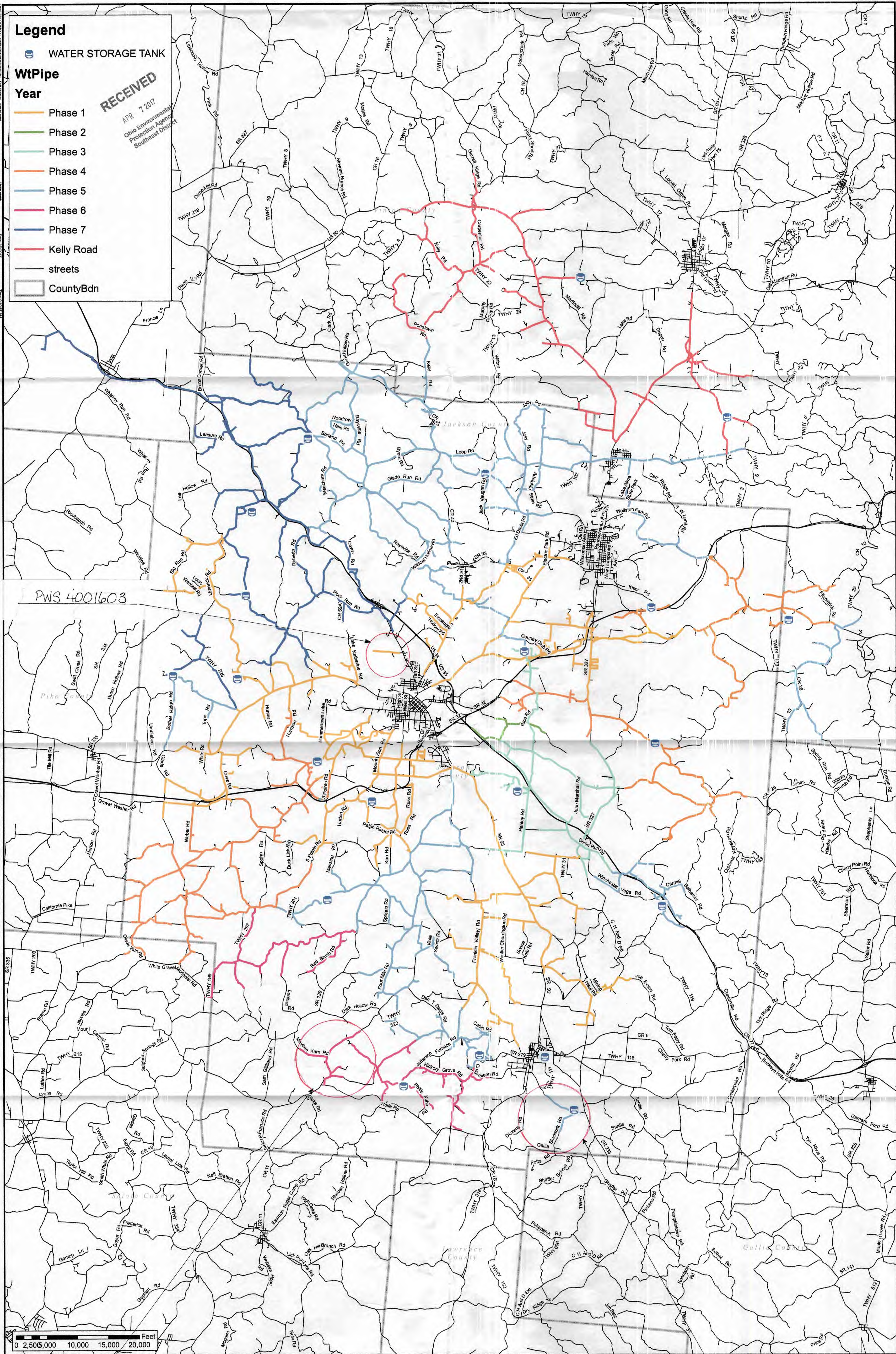
LC202

4001803

Legend

- WATER STORAGE TANK
- WtPipe
- Year
- Phase 1
 - Phase 2
 - Phase 3
 - Phase 4
 - Phase 5
 - Phase 6
 - Phase 7
 - Kelly Road
 - streets
 - CountyBdn

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EXISTING WATERLINES BY CONSTRUCTION PHASE
JACKSON AND VINTON COUNTIES

JACKSON COUNTY WATER COMPANY
JACKSON AND VINTON COUNTIES, OHIO

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