



MEMORANDUM

TO: Rob Bincsik, John Young

FROM: Ed Tharp, Flint FAST Start Deputy Program Manager

SUBJECT: City of Flint Water Service Line Inventory

DATE: August 14, 2018

CC: Alan Wong, Mike Winegard, Darby Nedig, Tietricha Thomas, Merenda Rutledge

The following summarizes the Service Line Inventory recommendation based on the current information that is available:

There are approximately 28,400 services within the City of Flint. Approximately 400+/- are believed to be able to be determined as specifically copper/copper lines because of City records and information. This leaves a total of approximately 28,000 potential addresses that may need to be evaluated regarding the service line material.

To date, with Phases I through IV, 8,833 service lines have been investigated.

Phase V has currently completed 4,286 explorations as of August 10, 2018. Ultimately, Phase V will investigate a minimum of 6,000 service lines during 2018.

In summary,

- Total service lines 28,400
- Eliminated by City Records -400
- Investigated Phase I-IV -8,833
- To be investigated in Phase V -6,000
- Service Lines Remaining to be investigated after Phase V 13,167

Therefore, based on the best estimate, AECOM would suggest that there are approximately an additional 13,200 service lines within the City of Flint that may need investigation.

Based on the 2018 experience, the quantity or percentage of lead service lines have been decreasing significantly while the copper to copper line have increased correspondingly. This is because the remaining addresses being investigated are newer homes as opposed to those in the core or center of the City. Consequently, approximately ninety (90) percent of the remaining addresses are expected to be copper to copper lines. This means that of the lines remaining approximately 1,320 are expected to be lead service lines and 11,880 are expected to be copper service lines.

The work done to date indicates that there were 6,228 service lines replaced (non-copper lines) out of the total of 8,833 lines investigated in Phases 1-IV, or slightly more than seventy (70) percent of the investigations in Phases I-IV were found to be non-copper. During Phase V through August 10, 2018, there have been 668 service lines replaced (non-copper lines) out of the 4,286 that have been investigated, or slightly over fifteen (15) percent of the investigations in Phase V indicated non-copper lines.

An estimate of the total number of investigations remaining after August 10, 2018 as well as the estimated of non-copper lines that may need to be replaced is summarized below:

	<u>Investigations</u>	<u>Non-copper</u>
• Total service lines yet to be investigated in Phase V	1,714	-----
• Anticipated non-copper Phase V lines yet to be replaced (15%)	-----	257
• Total of service lines remaining to be investigated after Phase V	13,200	-----
• Anticipated non-copper lines after Phase V (10%)	-----	<u>1,320</u>
Remaining Totals	14,914	1,577