62 and Cooper Road Neighborhood Groundwater Assessment Summary

Background

In order to evaluate water quality trends in this neighborhood, over 400 properties were surveyed. Historically, several properties had been sampled and showed elevated arsenic above the drinking water standard, which is 10 parts per billion (ppb). The boundaries for this well survey were 62nd St to the north, Michigan Rd to the east, 57th St to the south, and railroad track to the west, see attached Map.

Survey Results

Postcards offering free well testing were sent to over 400 properties. Out of those properties, 25 of them responded and were sampled, resulting in a 6% response rate.

Sampling Results

Bacteria
Coliform bacteria were present in 14 households, or 56% of samples taken. Chlorination guidelines were sent out with the lab reports and follow up inspections were scheduled.

VOCs
Trace amount of Volatile Organic Compounds were found in a couple of households at levels below maximum contaminant levels (EPA Save Drinking Water Standards). One household indicated trace amount of benzene and toluene.

Anions
Well samples were tested for the following anions: Chloride, Fluoride, Nitrates, Nitrites, Phosphates, and Sulfates. All anions were below the Maximum Contaminant Levels (MCLs).

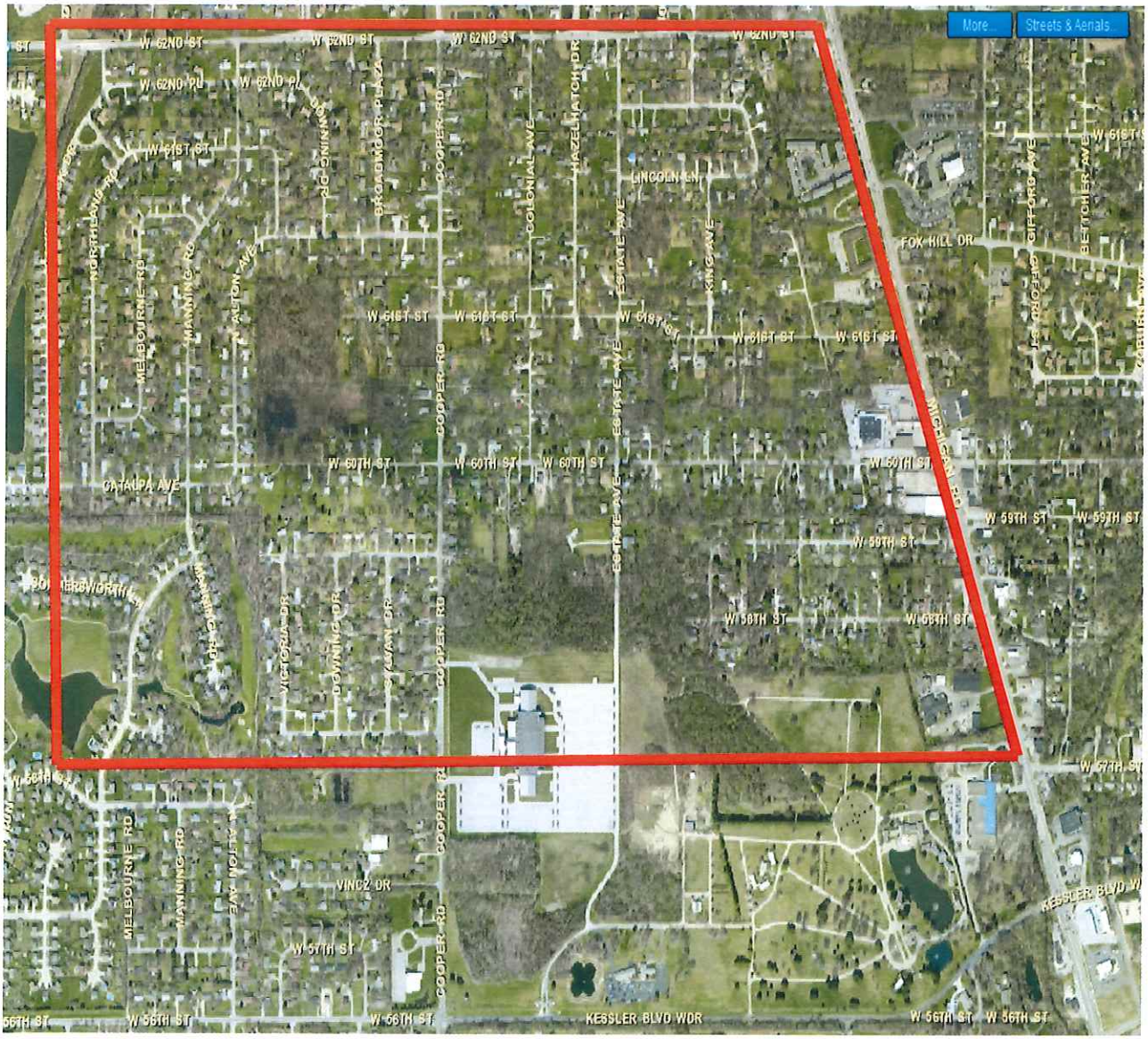
Metals
Samples were analyzed for the following metals: Arsenic, Barium, Boron, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Selenium, Thallium, and Zinc.

Out of 25 samples, 19 of them contained arsenic in the water. And of those nineteen households, eight of them contained arsenic above the EPA save drinking water standard which is 10 parts per billion (ppb). The arsenic results ranged from 2.8 ppb to 42 ppb, with the average being 14.5 ppb.

Approximately 54% of the properties contain iron above the EPA secondary drinking standard which is 300 ppb.

Conclusion

The primary contaminant of concern, arsenic, was detected as was expected in the surrounding area. The presence of arsenic is the result of the naturally occurring process from the earth crust. There were also three properties with trace amount of benzene, toluene and styrene which are possibly introduced through cross contamination. The other main contaminant found was total coliform bacteria, which was consistent with other well surveys.



62nd St and Cooper Rd Well Survey Project