

2021 River Park Neighborhood Groundwater Assessment Summary

Background

Each year, Marion County Public Health Department selects several neighborhoods to perform groundwater assessments as an opportunity to gather information and educate homeowners on well care. The River Park neighborhood was selected this year because of its proximity to White River, relatively shallow well depths, and lack of data.

Survey Results

A total of 48 properties were selected for this survey and invitation letters were mailed out. Of the 48 homes, 4 were found to be vacant. 10 homes were sampled of the remaining 44, resulting in a 23% response rate.

Sampling Results

Bacteria

E. coli bacteria were not found in any samples but total coliform bacteria were present in wells at 7 properties, or 70% of samples. Coliform bacteria are used as an indicator, meaning that while its presence does not cause illness there could potentially be other disease-causing organisms in the water. Chlorination instructions were sent out with the lab reports and follow-up inspections were scheduled.

VOCs

No volatile organic compounds were found above detection limits in any of the samples taken.

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). However, Nitrates were detected in 9 wells at low levels ranging from 0.8 parts per million (ppm) to 2.7 ppm, with the geometric mean being 1.3 ppm. The MCL for Nitrates is 10 ppm.

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. No metals were detected above the MCL.

Conclusions

This survey found coliform bacteria in 70% of samples and low levels of nitrates in 90% of samples. Coliform bacteria are very common but River Park neighborhood has a higher than average rate for Marion County wells. River Park also had a slightly higher than average level of Nitrates compared to the Marion County average. High levels of Nitrates can pose serious health problems for pregnant women and infants under 6 months old. Nitrates are mainly used as fertilizers, but sources also include leaking septic tanks (sewage), animal feedlots, and erosion of natural deposits. It is recommended that well owners have their water tested annually. For a free test, please call MCPHD's Water Quality Department at 317-221-2266.

Survey Area for River Park Groundwater Assessment



Survey Area

Homes Surveyed

