Talking points for protection of Marietta Public Water System Well Field

Background:

* Marietta’s public drinking water comes from seven wells in Indian Acres Park, just north of the Washington County Fairgrounds.
* The wells pump from a shallow aquifer, overlain by a relatively thin—30-feet deep—protective layer of moderately permeable soil that provides minimal protection from contamination.
* According to the from Drinking Water Source Protection Report for the City of Marietta Public Water System, prepared by the Ohio EPA in September 2015, potential contaminant sources include “recreational sources: … related to these uses are the presence of vehicles and the potential for leakage or spillage of automotive fluids – fuel, oil, antifreeze, etc.”
* Atop the well field are the ball fields of Indian Acres park. The ball fields themselves are of insignificant potential contamination to the aquifer, even when they are busy.

Vehicles should not be permitted to park on the well fields.

* Vehicles parking on the well field contribute to soil compaction, damaging the filtration properties of the thin barrier of soil above the aquifer.
* Trucks and other heavy vehicles, especially, should be prohibited from parking on the well field, especially city-owned vehicles.
* Under no circumstances should vehicles park under the drip line of trees in the greenspace. Soil health inside a tree’s dripline is critical to healthy trees.
* Parking on the pavement protects our aquifer from direct contamination from potentially leaky vehicles.

Solutions

* The park provides a huge paved parking lot for the boat launch, and another one nearby for the aquatic center.
* If people are at the park to exercise and recreate, why should they mind walking a few extra feet required to park on the paved parking lot?
* City employees should understand the sensitivity of the well fields and the park’s trees, and actively seek to protect them.
* The well fields should be fenced to prevent parking on them.
* “No Parking” signs should be posted along with signs providing an explanation of the sensitive nature of these well fields, the aquifer, and the thin layer of filtering soil above it.
* Police should be assigned to parking enforcement at the park when use is high, such as during baseball season.

Information from Drinking Water Source Protection Report for the City of Marietta Public Water System, dated September 2015. Read the report for yourself at:

<http://wwwapp.epa.ohio.gov/gis/swpa/OH8400412.pdf>

It is an 8-page report, with four additional pages of appendix A. Attached to it is a 1998 report titled “Wellhead Protection Plan for the City of Marietta; Wellhead Delineation.” It is a 10-page report, with many additional pages of tables and maps.

From the most recent report: “This system operates 7 wells that pump approximately 2,500,000 gallons of water per day from a sand and gravel aquifer (water-rich zone) within the Muskingum River Valley buried alluvial aquifer system. The aquifer is covered by approximately 30 feet of moderate permeability material, which provides minimal protection from contamination. Depth to water in this aquifer is approximately 25 feet below the ground surface.”

“The City of Marietta’s source of drinking water has a high susceptibility to contamination because of:

• the shallow depth (less than 30 feet below ground surface) of the aquifer,

• the presence of a relatively thin protective layer of soil material overlying the aquifer,

• the previous detection of organic contaminants (e.g., PCE) in some portions of the aquifer,

• and the presence of significant potential contaminant sources in the protection area.”

“The risk of future contamination can be minimized by implementing appropriate protective measures.”

Potential Contaminant Sources include “Recreational Sources: The contaminant sources related to these uses are the presence of vehicles and the potential for leakage or spillage of automotive fluids – fuel, oil, antifreeze, etc.”

Page 7 of the report is a map showing the location of Marietta’s wells and the well protection area.