Project Progress – May, 2021

Upper Medway Creek (north London)

Site:
A 100-acre farm in row crops with a tiled field. It has a small barn that is used for wintering 20 head of beef cattle. The test site is at the northeast corner of the property where a single tile delivers water through the small pasture to Medway Creek.

Partners:
Upper Thames River Conservation Authority (UTRCA) will be responsible for the site and the Thames River PRC will provide research and weather data support.

Research description:
A capsule containing a combination of crushed stone and slag (leftover material from smelting metal) will be inserted into the tile to capture phosphorus (P) from the water that flows out.

Water will be sampled before insertion, and the UTRCA will take samples at regular intervals, and especially after major rain events.

Measurements:
Pounds of P removed will be the metric and calculated using data on total P and dissolved P to determine the technology's efficiency. The capsule will be removed annually and analyzed as a biosolid.

Progress:

Various tile insert sizes up to 36 inches were installed. The beef operation received a dairy liquid manure application. Throughout 2020, the site experienced severe dry conditions limiting water flow. Water quality is now being monitored through the 20-21 winter/spring and will be reported in the final report.