



2 September 2020

Sina Parks
Montgomery County SWCD
2036 E Lebanon Road
Crawfordsville, Indiana 47933

Dear Sina:

Over the past month, we collected base flow samples at our 13 watershed stream sites and the reference site. The following provides an overview of our findings. More details will be provided as we continue to dig into these data and what they mean for the West Fork-Sugar Creek Watershed.

- Nine sites exceeded the nitrate-nitrogen concentration suggested as a target for warmwater wadeable streams by the Ohio EPA (1 mg/L); however, no site exceeded the nitrate-nitrogen concentration at which eutrophication of streams occurs (2 mg/L; Dodds et al). Concentrations ranged from 0.93 mg/L at Site 13 to 2.21 mg/L at Site 9.
- Eight sites exceeded water quality targets for total phosphorus (0.08 mg/L, Dodds et al) at which eutrophication can occur. Concentrations over 0.08 mg/L ranged from 0.11 mg/L at Site 3 and 11 to 0.44 mg/L at Site 9.
- Total suspended solids concentration exceeded targets (15 mg/L) at 2 of 14 sites with concentrations ranging from 5 mg/L at Sites 4 and 5 to 20.6 mg/L at Site 9.
- E. coli concentrations exceeded state standards (235 col/100 ml) at 7 sites with concentrations ranging from 36 col/100 ml at site 12 to 2420 at Sites 4 and 10. Note that this is the top concentration provided by the lab – concentrations may be higher but due to dilution factors, this is the highest concentration that the lab can report.

Over the next few months, we will continue to build the watershed inventory, complete macroinvertebrate and habitat assessments (September or October), review the historic water quality data in more detail and send the final press release in lieu of the first public meeting as conditions allow.

Documentation of in-kind services: The Montgomery SWCD is reviewing water quality data and will deploy the press release, once complete.

Graphics of collected data are included on the next page.

Sincerely,

Sara Peel, CLM



1610 N. Auburn Street
Speedway, IN 46224

Phone (765) 337-9100
E-mail speel@arionconsultants.com
Web www.arionconsultants.com



Arion Consultants, Inc.

