Stream
Team
2022

What is Stream Team?!

- Citizen Science program – we use regular people to collect real scientific data
- Students are trained on stream ecology and data collection methods
- We will visit many outdoor locations to learn about the environment
- We will choose ONE stream to 'adopt' and collect data from
- This is a VERY hands-on program – you will be in the creek, you will get your hands dirty, you will touch critters, you will be outside as much as possible!
- This program is relatively new across the state… there are a few other counties that have Stream Teams, but we hope there are more in the future!

Schedule – Meetings are on Thursdays from 5-7 p.m.

Meetings will be scheduled according to weather and available resources.

- March 10 – Herpetology – Boone County Nature Center
- March 24 – Herpetology – either Middle Creek or Conservancy Park
- April 7
- April 28   } Visit different streams to learn about aspects of stream ecology
- May 12
- May 26
- June 9   } Data collection at our adopted stream/Community Service project
- June 23
- July 7
- July 28   Celebration day!

- Can't remember where the next meeting is? What do you need to know before each meeting? How do I contact the staff?

http://bccdky.org/stream-team/

How is the Data used?

- Previous citizen science data can be found here:
  - https://kgs.uky.edu/wwky/main.htm

- Our data is used by researchers and watershed planning coordinators at University of Kentucky and Kentucky Division of Water
  - Last year's Stream Team Data is available here:

    https://kygs.maps.arcgis.com/apps/webappviewer/index.html?id=2a929f196e554e20964c8f333415bafe
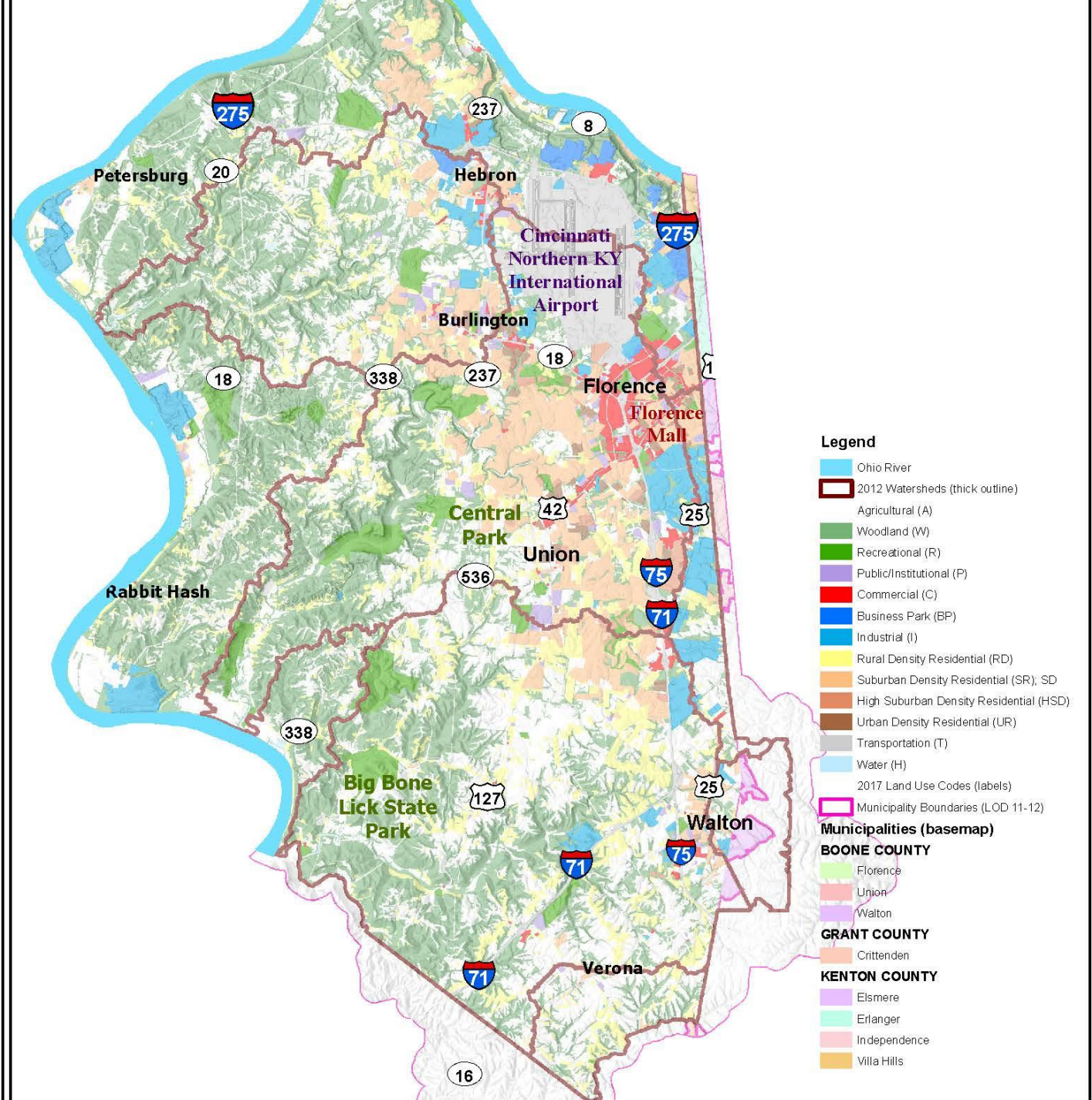
Icebreaker

- What makes up a stream ecosystem? How do the following play a role in stream ecology:
    - Water
    - Precipitation
    - Salamanders
    - Dead logs/leaves
    - Rocks
    - Fish
    - Great Blue Heron

    - People
    - Oxygen
    - Sunlight
    - Insect larva
    - Trees
    - Algae
    - Soil

What is a watershed?

A watershed is an area of land where all the water drains into a central body of water

The maroon boundaries in this map show the major watersheds in Boone County. They are all a part of a larger watershed: The Ohio River. How do you think land use impacts the rivers in each watershed?

Legend

Ohio River
2012 Watersheds (thick outline)
Agricultural (A)
Woodland (W)
Recreational (R)
Public/Institutional (P)
Commercial (C)
Business Park (BP)
Industrial (I)
Rural Density Residential (RD)
Suburban Density Residential (SR); SD
High Suburban Density Residential (HSD)
Urban Density Residential (UR)
Transportation (T)
Water (H)
2017 Land Use Codes (labels)
Municipality Boundaries (LOD 11-12)
Municipalities (basemap)
BOONE COUNTY
Florence
Union
Walton
GRANT COUNTY
Crittenden
KENTON COUNTY
Elsmere
Erlanger
Independence
Villa Hills

Adopt a Stream!

- Option #1
  Middle Creek

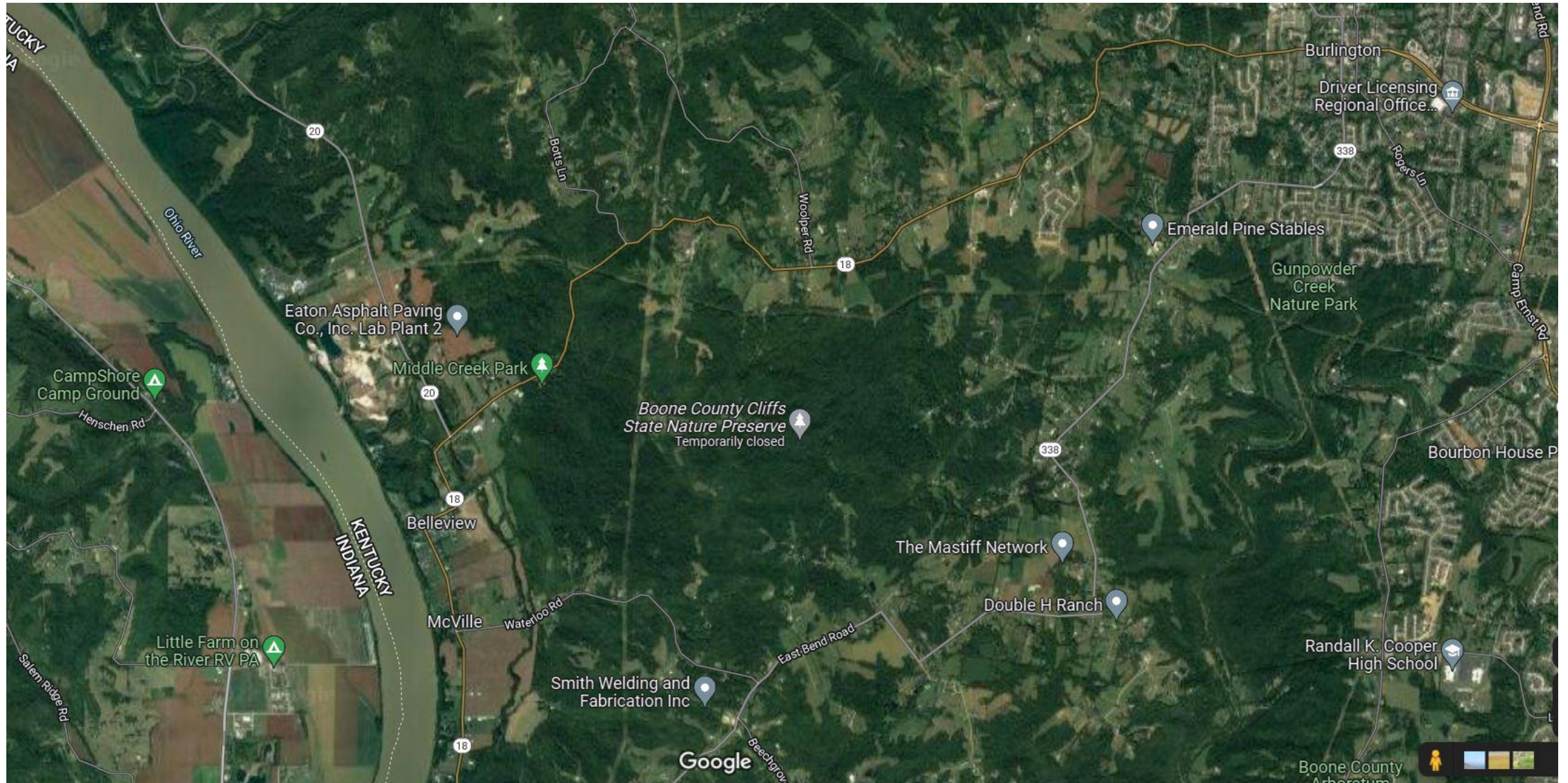- Option #1
  Middle Creek
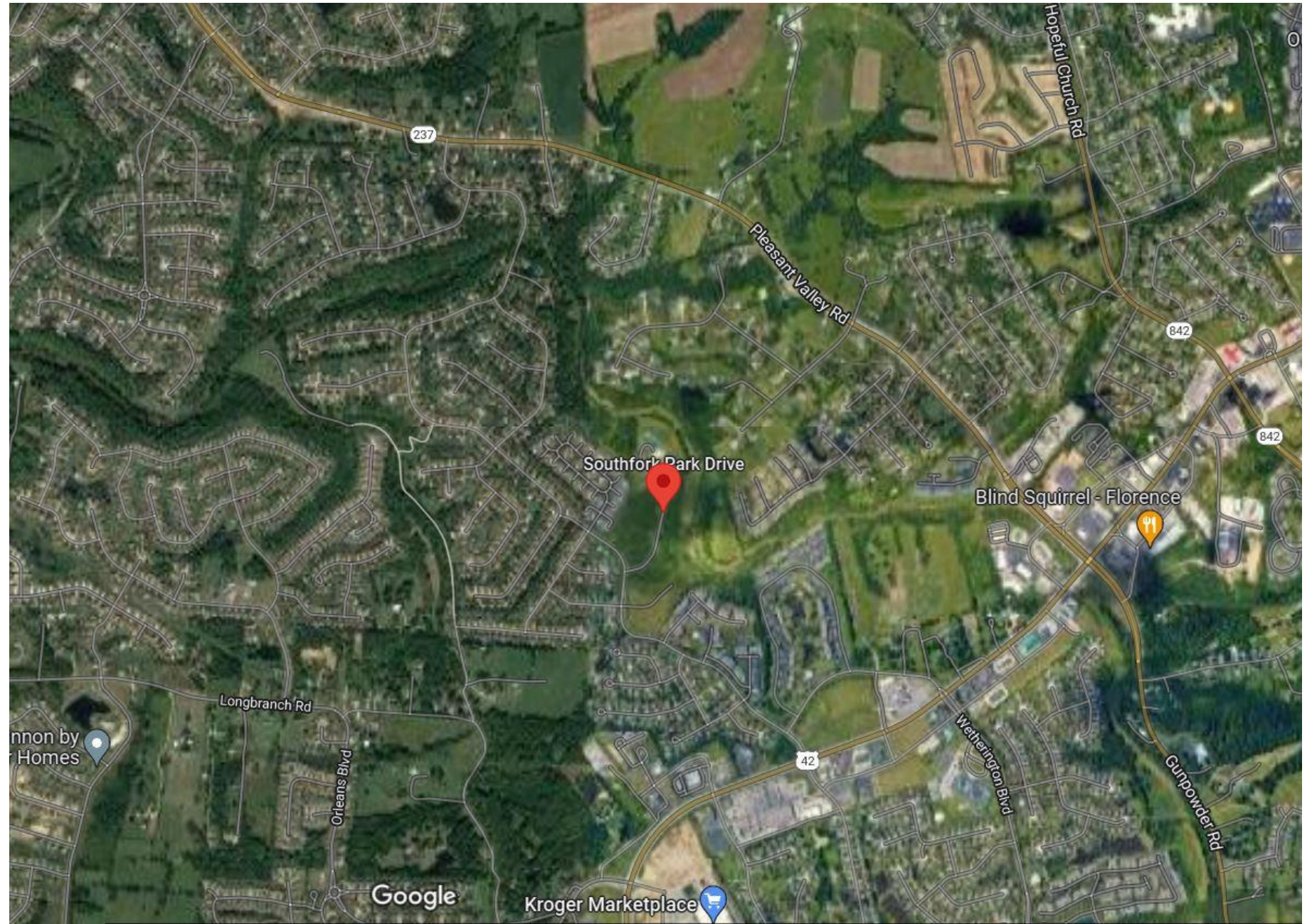
Option #1: Middle Creek

Option #2
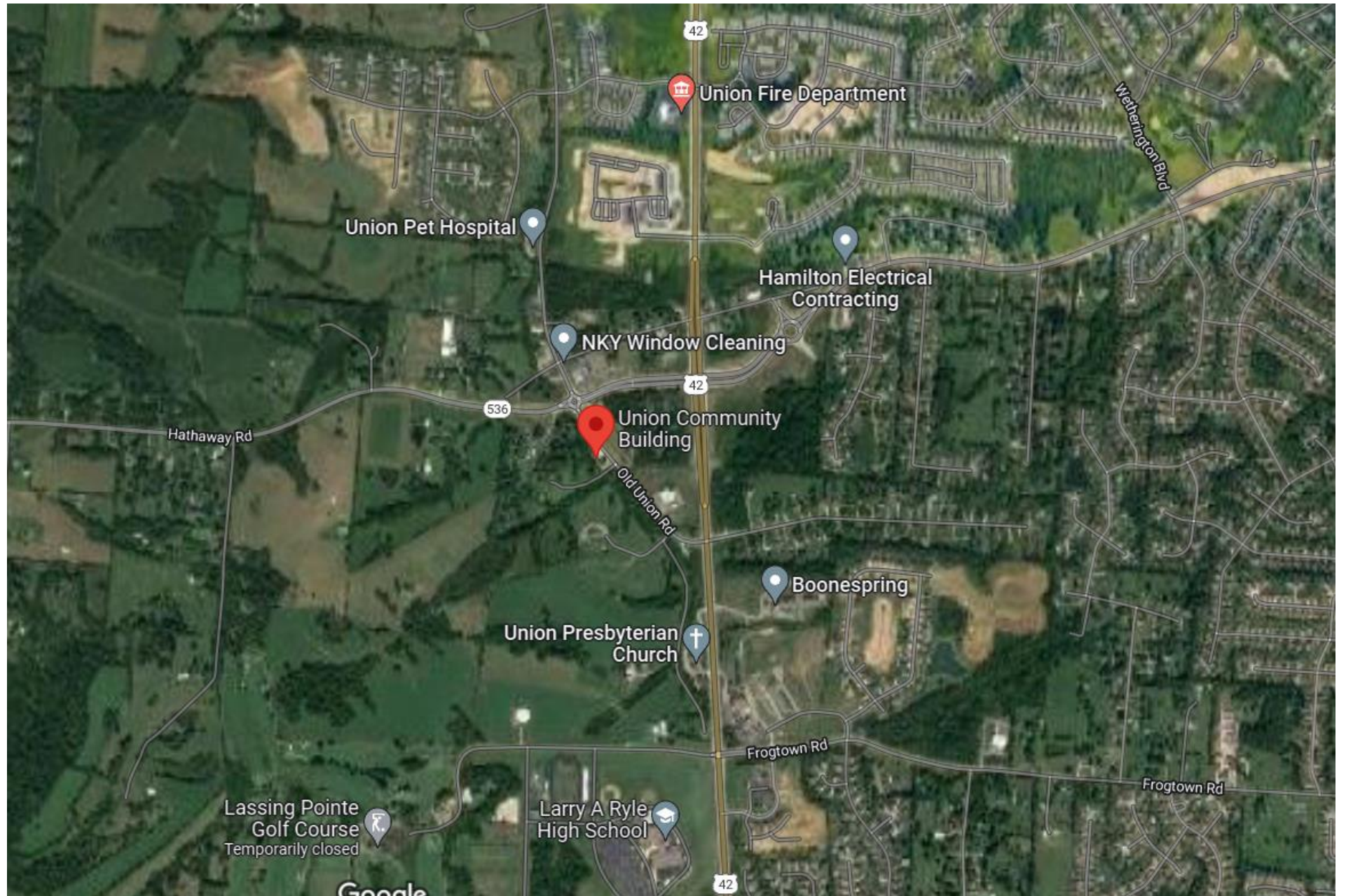# South Fork

Option #2
South Fork

Option #2
South Fork

Option #3
Fowler's
Creek
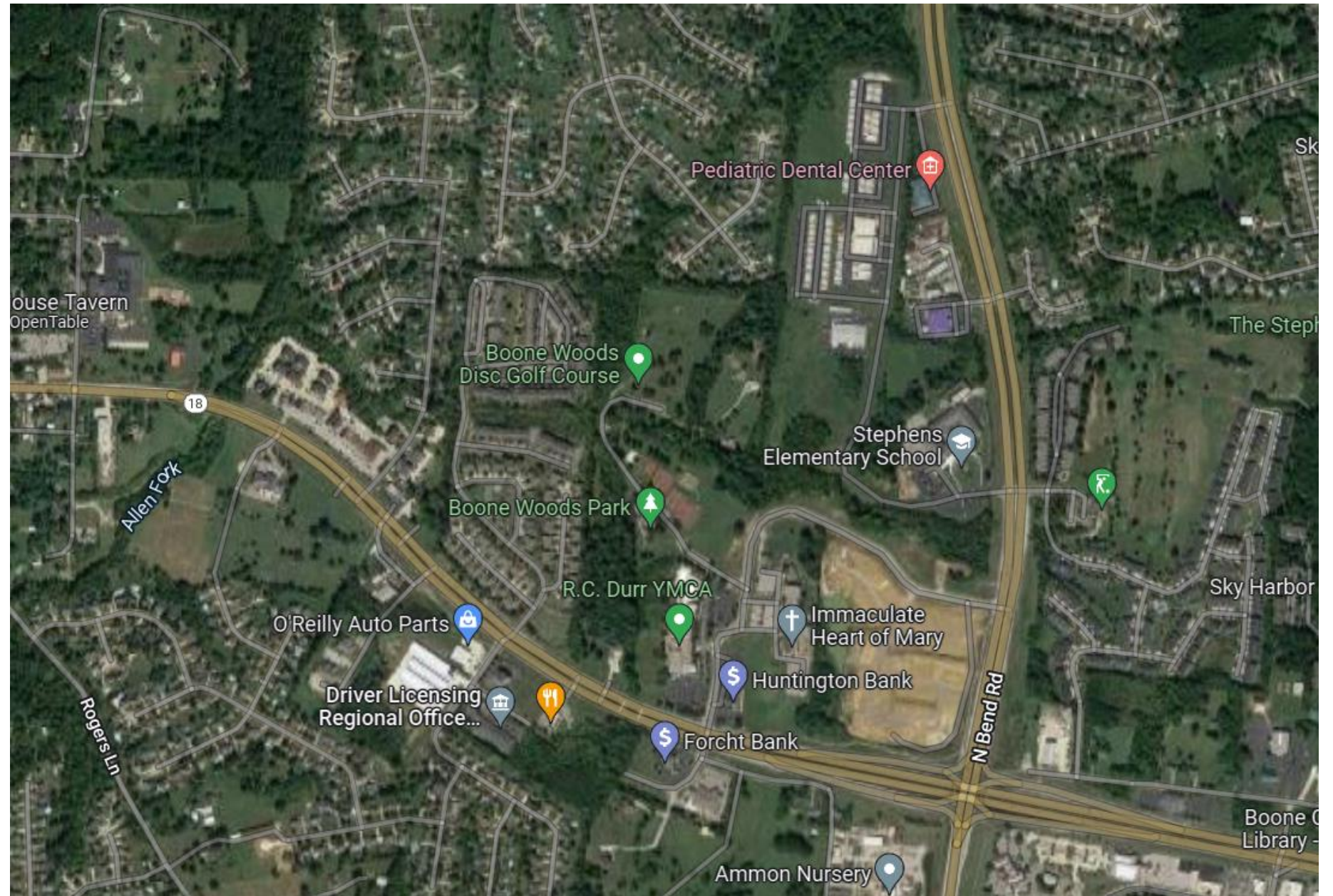
Option #3 Fowler's Creek

Option #4
Boone
Woods

Option #4
Boone
Woods

Option #4
Boone
Woods

Overview of Data Collection Methods

- Chemical Measurements
  - pH
  - Dissolved Oxygen (DO)
- Physical Measurements
  - Turbidity
  - Temperature
- Biological Measurements
  - Macroinvertebrates

Community Service Project

Ideas????

This program will be implemented by YOU, the students!

Outside community partners and volunteers are welcome

Brainstorm:

Litter clean up, tree planting, making educational signs…

Next Meeting

- Thursday, March 10
  - 5-7 p.m.
  - Boone County Nature Center (9101 Camp Ernst Rd, Union, KY 41091).
  - Bring mud boots!

http://bccdky.org/stream-team-2022/