



# Overview of Gingrich Run, Killinger Creek, and Snitz Creek

Hannah Horengic & Ilyssa Mclaughlin



# Overview of Project

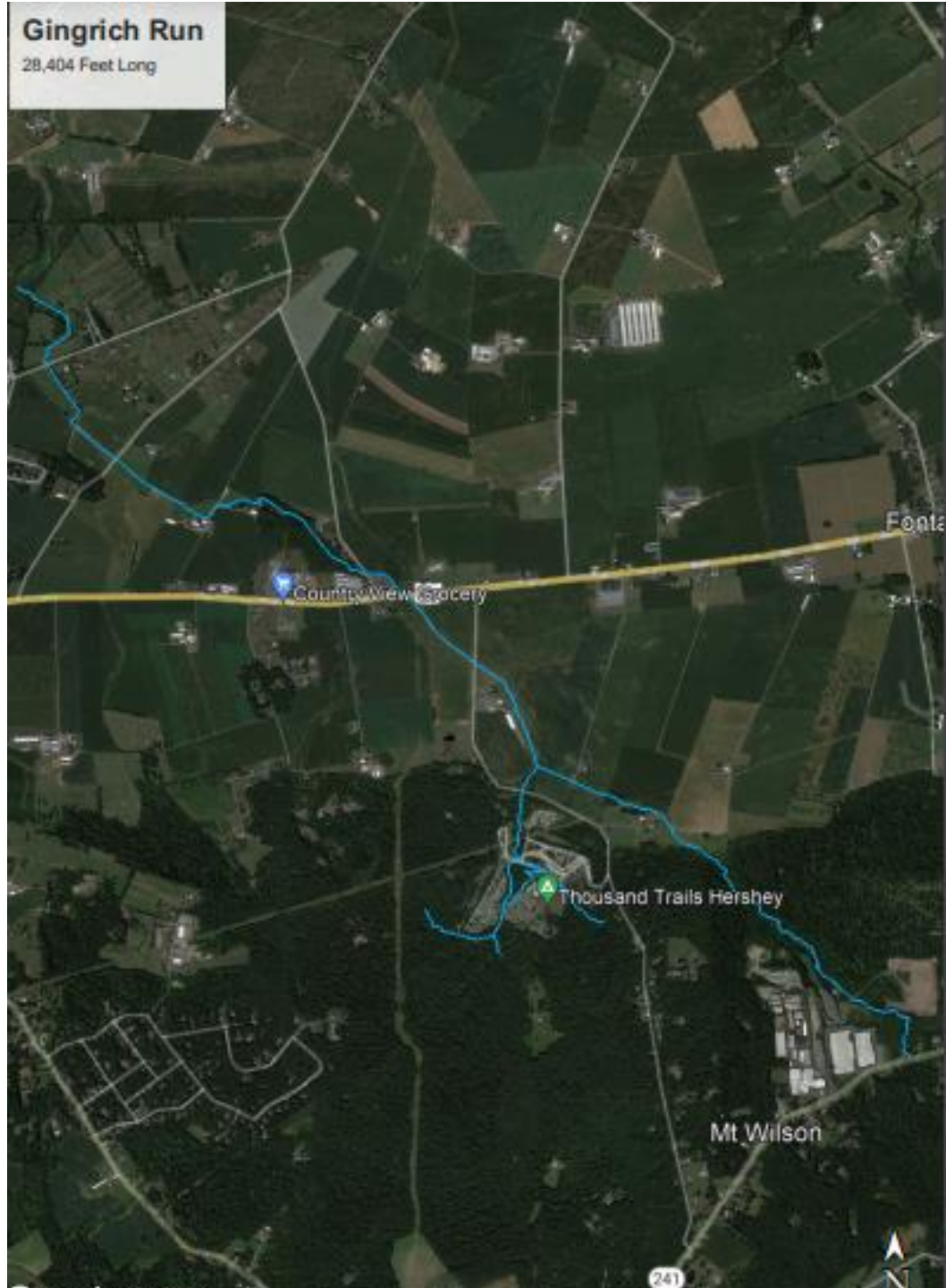
- ▶ Stream Morphology - QWA
  - ▶ Trained by Rocky Powell to recognize and document streambank and streambed erosion and record it on reconnaissance survey forms
  - ▶ Documented with pictures
- ▶ Lebanon Valley Conservancy
  - ▶ Best Management Practices (BMPs)



# Materials

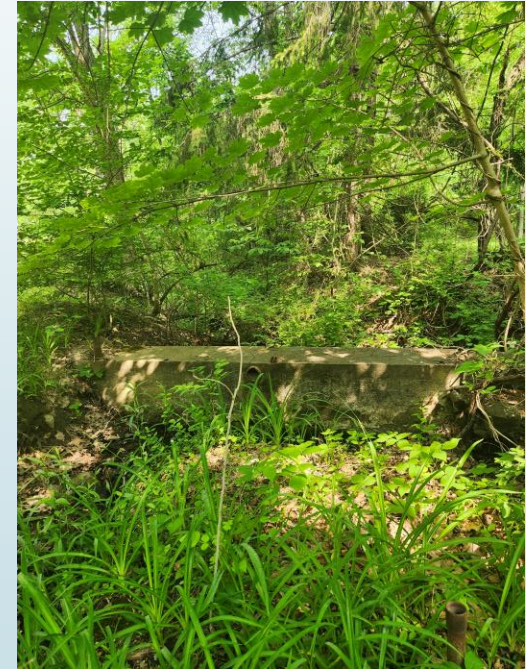
- ▶ Surveyor Tape Measures
  - ▶ 100'
  - ▶ 300'
  - ▶ Stake
- ▶ Survey Rod
- ▶ Reconnaissance Surveys
- ▶ Information Packet
  - ▶ Macroinvertebrate Identification

# Gingrich Run



# Notable Areas

- ▶ Reach 1A
  - ▶ Extreme streambank and streambed erosion
    - ▶ Deep Gully Erosion
  - ▶ Breached concrete dam
- ▶ Reaches 2C,
  - ▶ Livestock access to creek
  - ▶ Bank erosion

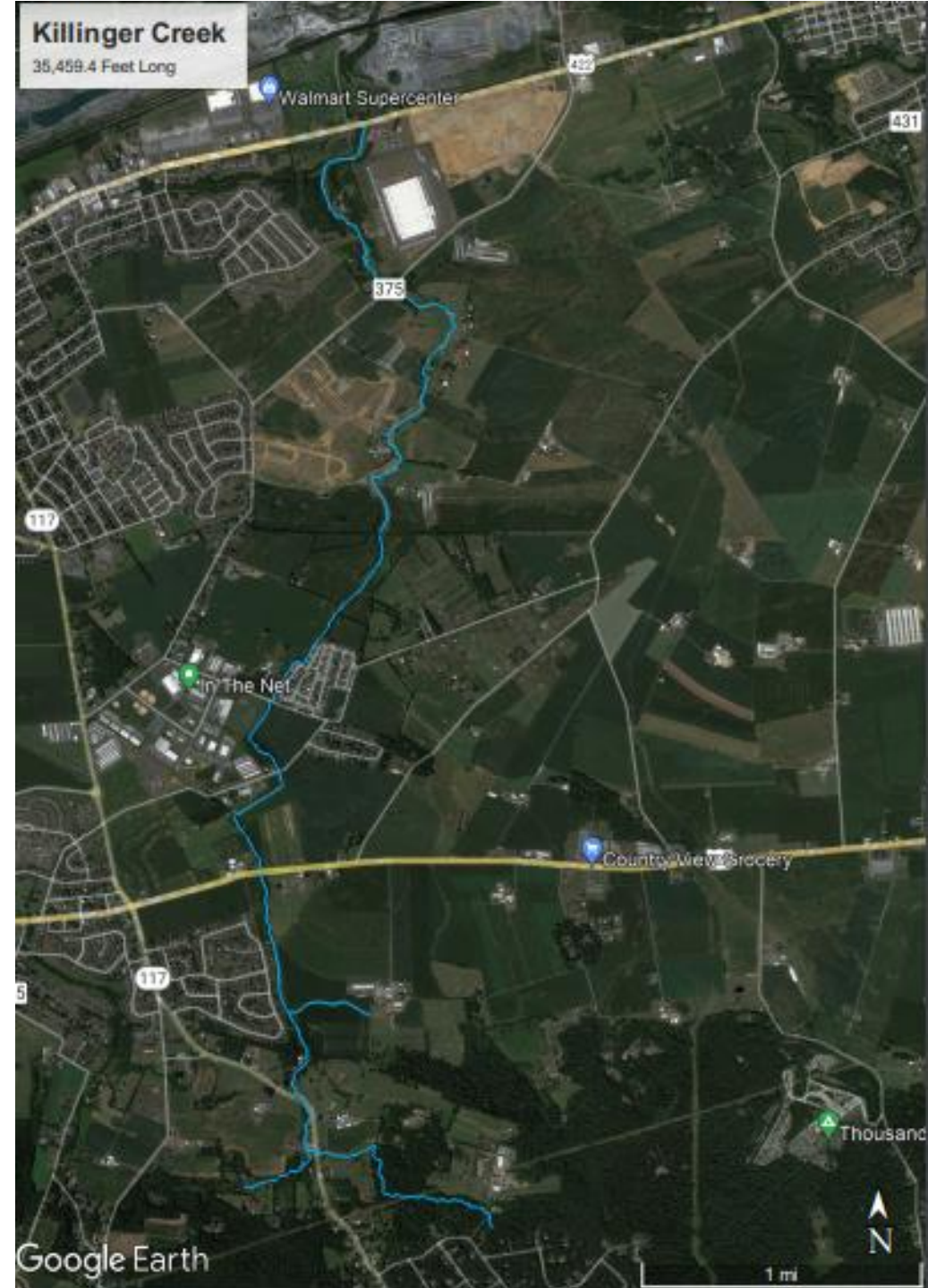


# Notable Areas

- ▶ Reach 2D
  - ▶ Earthen berms installed in 2017
  - ▶ Extreme bank erosion
  - ▶ Lateral & midchannel bars
- ▶ Reaches 5, 6, 7
  - ▶ No flow observed due to sinkholes
    - ▶ Locals concerned
  - ▶ Streambank Erosion



# Killinger Creek



# Notable Areas

- Reach 1A
  - Extremely high bank heights on eroding banks on bends
  - Rest of stream in good condition
- Reach 1B, & 2C – Same Landowner
  - Cattle have access to creek



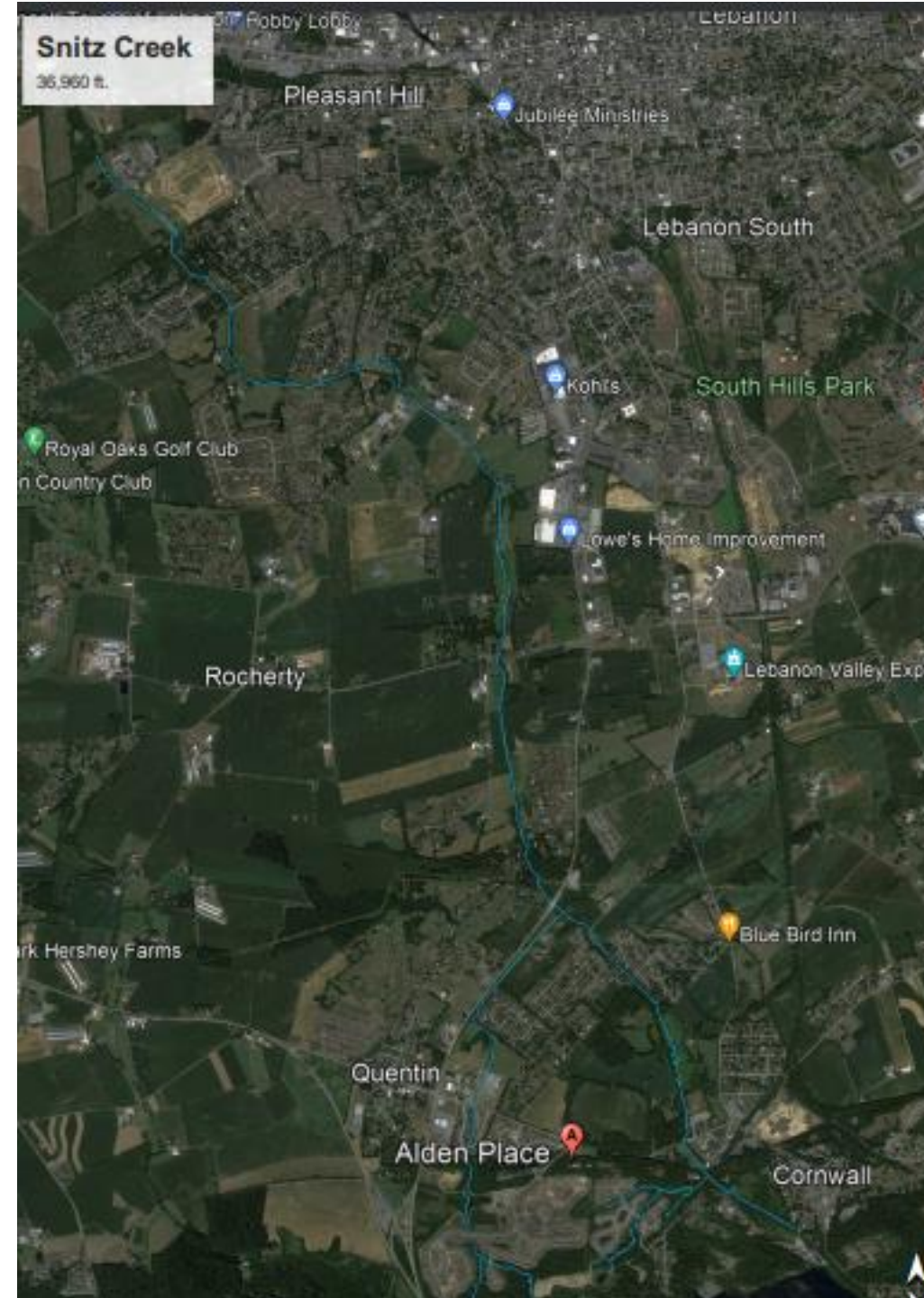


# Notable Areas

- ▶ Reach 4C
  - ▶ Township water treatment discharge went into creek
    - ▶ Smell of chlorine and bubbles were observed
- ▶ Reach 7B & 8
  - ▶ Concrete flumes with holes and broken sections
  - ▶ Large sinkhole that consumes stream



# Snitz Creek



# Notable Areas

- Reach 7
  - Large, fallen trees blocking channel and causing diversions
  - Numerous jams and large mid-channel bars with eroding banks
- Reach 11A & 11B
  - Severe bank erosion with a failing dam and active headcuts



# Notable Areas


- ▶ Reaches 13B, 14, 15
  - ▶ Eroding banks along majority of these reaches
  - ▶ Frequent leaning and fallen trees creates blockages
  - ▶ Failing abandoned bridge collapsing into channel



# Notable Areas

- ▶ Reaches 19-22
  - ▶ Unstable banks with erosion on 75-80% of each reach
  - ▶ Undercut banks
  - ▶ Dams, stonewalls and water withdraw structures
  - ▶ Livestock impacts





We would like to extend our gratitude to the Quittapahilla Watershed Association for this opportunity, as well as to the Lebanon Valley Conservation Office, and the Lebanon Valley Conservancy for their help and involvement.