

The slide features a light gray background with decorative white line-art leaf motifs in each corner. The top-left and top-right corners have clusters of several elongated, pointed leaves. The bottom-left and bottom-right corners have a single, larger, more complex leaf shape with multiple lobes. The central text is in a black serif font.

# Overview of Beck Creek and Bachman Run

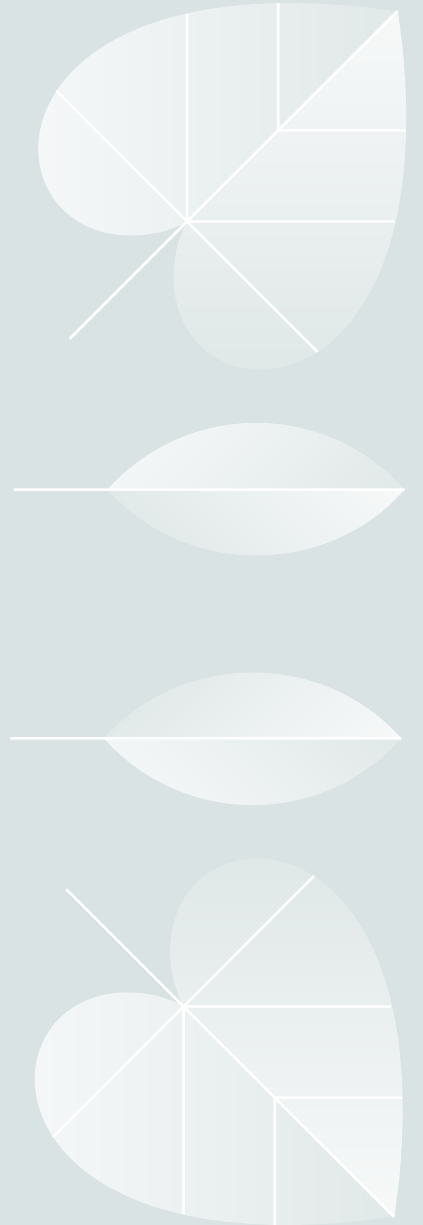
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HANNAH HORENGIC & BEN MITCHELL

# Overview of Project

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- 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 County Conservation District
  - Verified Best Management Practices (BMPs)



# Materials



- Surveyor Tape Measures
  - 100'
  - 300'
- Survey Rod
- Metal Ruler
- Clinometer
- Reconnaissance Surveys
- Information & Training Packet
- Macroinvertebrate Identification



# Beck Creek

51,340 FEET





# Notable Areas

## Reach 13

- Narrow but deep section of stream in need of significant maintenance
- Renters note landlord drives heavy machinery along stream; tire ruts found along bank
- Grass cut very short with debris and sediment accumulating in stream
- Effects seen downstream



Concrete bridge and clear-cut banks



Extreme erosion (70%) serves as source of silt and debris



# Notable Areas

## Reach 19

- Man-made lake with exposed piping and sharp, exposed banks
- Periods of total drought
- Areas of clear-cut grass and subsequent moderate bank erosion
- Landowner suggested possibility of a dam upstream





# Notable Areas

## Reach 20 & 21

- Reach 20 loses flow for 1/3 of the reach.
- Reach 21 has several large freshwater springs that return flow to the stream.

Reach 20



Reach 21





# Notable Areas

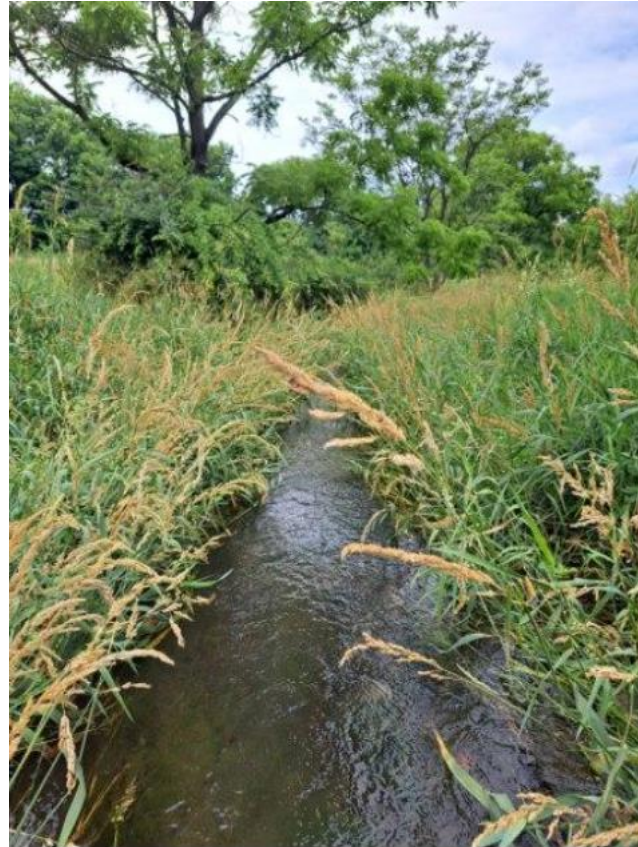
## Reach 23 & 25

- Aggradation in channel
- Grass growing into channel
- Minimal buffer on reach 25

Reach 23



Reach 25

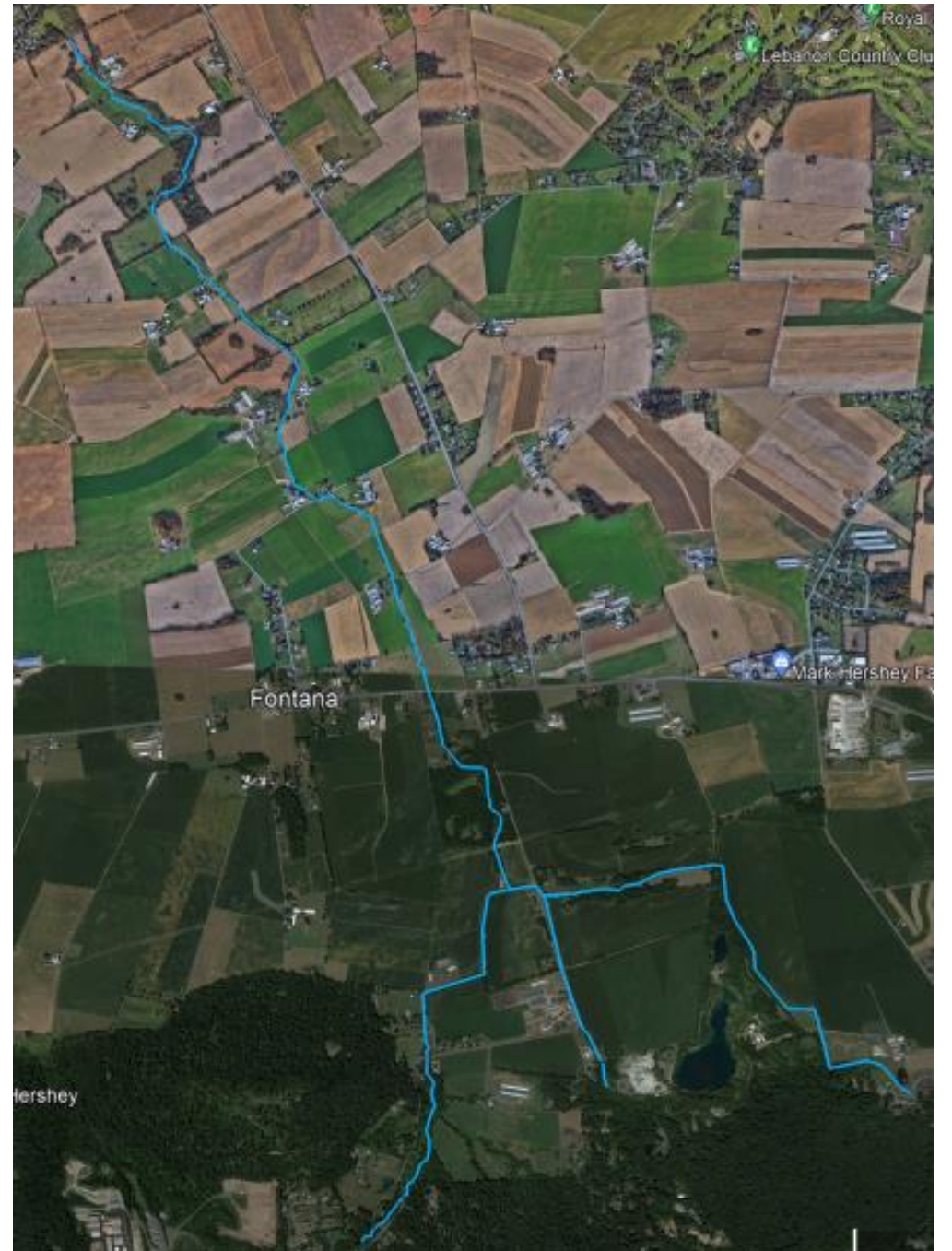






# Bachman Run

36,954 FEET





# Notable Areas East Fork

- Reach 1
  - Significant portion of dry streambed
  - Unshaded, grassy, and mown banks
- Reach 5
  - Drained lake; wetland-like and spring fed
  - Debris and runoff from cattle
  - Landowner concerned about stream and environment health over recent years

5



1

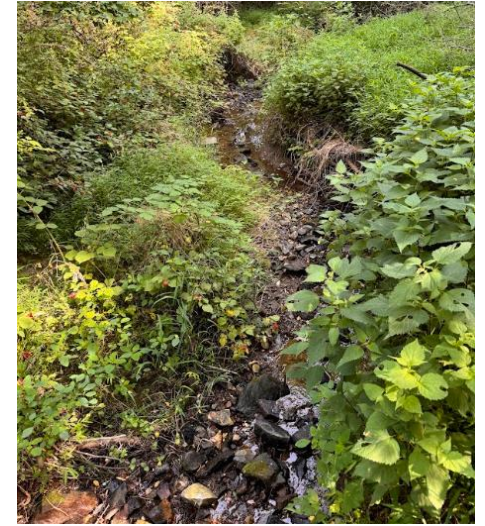




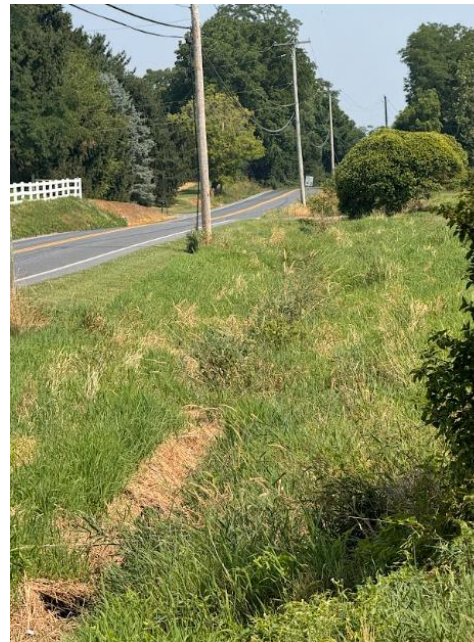
# Notable Areas Middle Fork

- Reach 1
  - Localized bank erosion
  - Blocked culvert
- Reach 3 & 4
  - No flow or low flow
- Reach 5
  - Flow returns
  - Some bank erosion towards the end of the reach

Reach 1



Reach 4



Reach 5





# Notable Areas West Fork

- Reach 1
  - Localized bank erosion
  - Undercut banks
- Reach 6
  - Small headcut
  - Bank erosion
  - Mowed up to bank



Reach 1



Reach 6





# Notable Areas

## Main Stem

- Reach 2
  - Severe cliffside erosion threatening adjacent property
  - Trout hatcheries owned and operated by Fish & Wildlife
- Reach 3
  - Lengthy rip-rapped section with waterfalls that act as sediment filtration



Reach 2



Reach 3



Reach 3

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

