

# Chartiers Creek Streambank Restoration Project at Houston Borough, PA



Virginia McAnulty, Upper Chartiers Creek Watershed Association

[chartierscreekwa@pawccd.org](mailto:chartierscreekwa@pawccd.org)



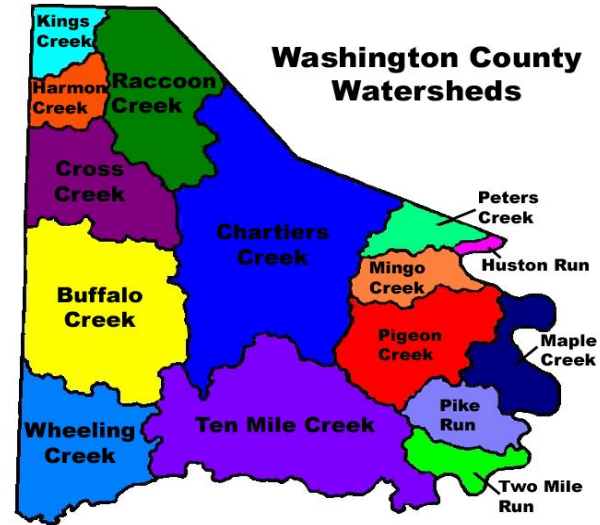
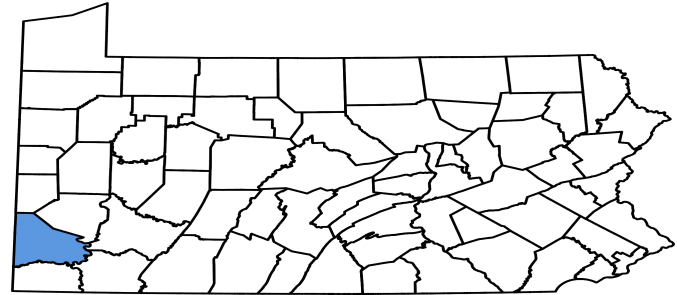
## Upper Chartiers Creek Watershed Association

- ❖ Established 1999
- ❖ All Volunteer Organization
- ❖ Monitors Streams
- ❖ Promote Good Water Conservation Practices
- ❖ Conduct Educational and Recreational Events
- ❖ Under umbrella of Washington County Watershed Alliance 501 C(3)
  - Our Fiscal agent
  - Helps Coordinate Our Conservation e
  - Efforts



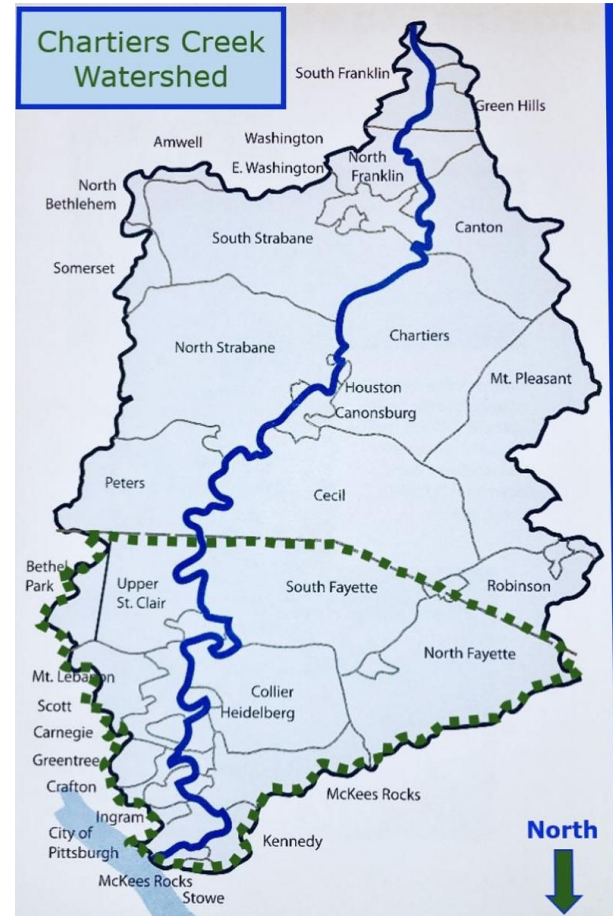
# Houston Borough

- ❖ Southwest Region of PA
- ❖ Washington County
- ❖ One of 37 municipalities that fall within the Chartiers Creek Watershed
- ❖ Population: approx. 1200
- ❖ Total area: 0.4 square miles



# Chartiers Creek

- ❖ Headwaters near Washington, PA
- ❖ Approx. 48 miles total length
- ❖ Meets the Ohio River 3 miles west of the Point at Pittsburgh
- ❖ Watershed: Drains approximately 277 square miles southwest of Pittsburgh, PA





# Why this Location?

- ❖ Erosion Control is a component of the UCCWA's
  - Water Management Plan
  - River's Conservation Plan
- ❖ Existing Water Monitoring site of the Upper Chartiers Creek Watershed Association
- ❖ Houston Borough Council:  
Enthusiastic about improving creek access for recreational use by their community members.





Approximately 1,035 feet of the left bank owned by Houston Borough

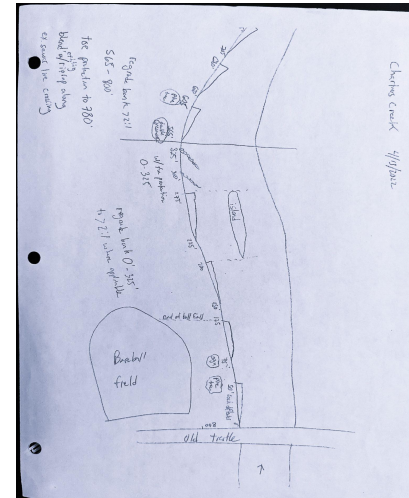


# Getting Started

UCCWA water monitoring volunteers noticed the erosion over a period of years

- Volunteers Contacted Houston Borough Mayor and Council Members
- Contacted WCCD and WCWA for advice
- WCCD watershed staff reached out to an engineer who created a (very) preliminary plan and sample budget.

WCCD staff informally contacted CNX to request a meeting regarding the project but interest was not returned at that time.



# 3RQ/GAPS

The 3RQ GAPS program came to the attention of the WCWA/ UCCWA volunteers

- data collection
- professional analysis and report
- bolster future funding applications

Rachel Spirnak from the West Virginia Water Institute

- Created erosion data collection plan
- met and trained volunteers at the project site
- Monthly data collection is ongoing up to one year (April 2024)

Houston Ball Field Erosion Pin Study  
Field Data Sheet

Name: Gary  
Date: 6/15/23 Time: 5:30  
Current weather: clear & sunny  
Notes on previous weather/precipitation: 4/13 overnight rain  
Trip Photo Numbers:   
Representative subsection photos taken? ☒ Yes  
Any signs of damage or disturbance to pins? no  
Any perceptible changes in the site? no

**Pin Measurements**  
Using the caliper, measure from the top of the pin to the bank surface along the downstream side of the pin (parallel to the stream) until light contact is made with the soil surface. Record to the highest level of precision. Reset pins to Original Exposed Length after photos and measurements are taken.  
Make a note of pins with changes of less than 10 mm; do not reset pins with changes of less than 10 mm. Make a note of pins buried due to sediment deposition; do not reset buried pins. Mark the Reset Length as N/A in tables below for pins that are not reset.

Pin Subsection A

Pin #	Original exposed length (mm)	Measurement (mm)	Reset length (mm)	Notes (pin buried, changed <10 cm, etc.)
1	40	41.9	—	no change
2	40	43.8	—	"
3	30	31.3	—	"
4	40	41.17	—	"
5	40	38.81	—	"
6	30	36.42	—	"

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# Thank you to our Project Partners



Washington County Watershed  
Alliance



Upper Chartiers Creek Watershed  
Association



Houston Borough Council

Washington County Conservation  
District



West Virginia Water Research  
Institute/3RQ /GAPS support



Questions, thoughts or ideas? Please contact us through social media or email.



Facebook at

<https://www.facebook.com/upperchartierscreek/>



Instagram Handle:

<https://www.instagram.com/upperchartierswatershed/>

Email: [chartierscreekwa@pawccd.org](mailto:chartierscreekwa@pawccd.org)

<https://www.wcwalliance.org/uccwa>