

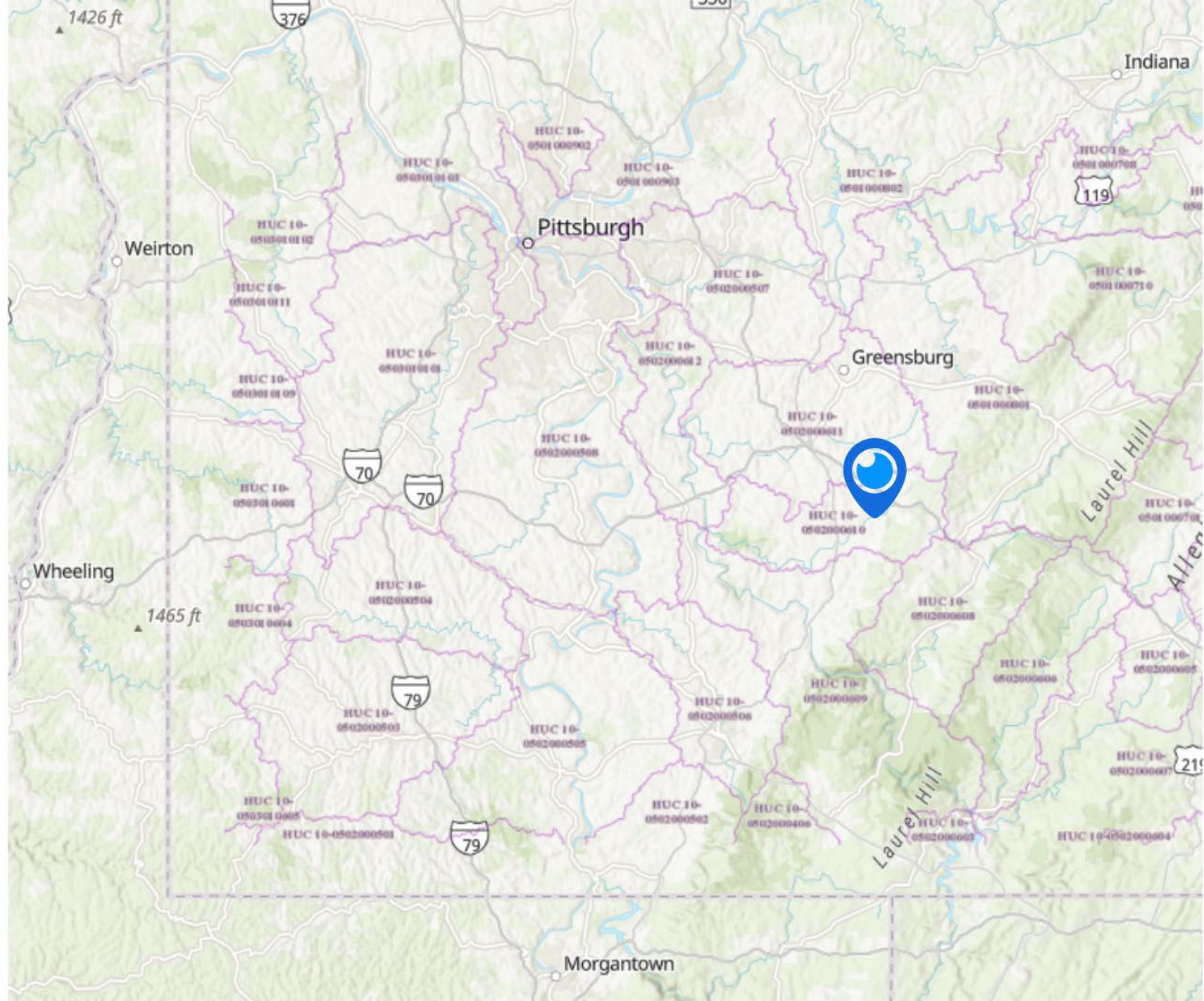
Jacobs Creek Watershed Association



WATER QUALITY SAMPLING
3RQ VIRTUAL ROUNDTABLE SERIES

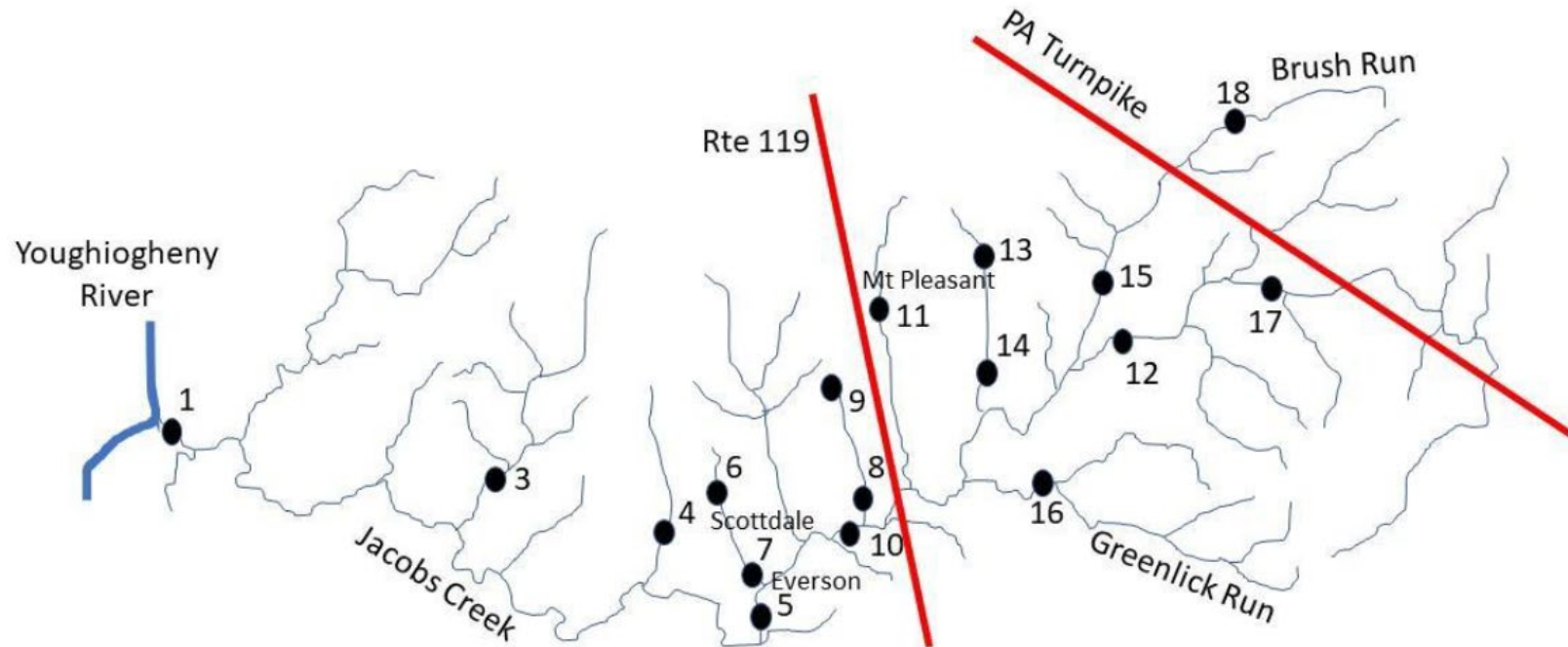
Jacobs Creek Watershed Association

Non-profit organization dedicated to the conservation of our natural resources, rehabilitation of the creek and watershed, environmental education and recreation.



Monthly Water Quality Sampling


- GOAL
 - Create a record/baseline of water quality changes throughout the year
- 17 sampling sites
- Some impaired by
 - Acid Mine Drainage
 - Agriculture
 - Erosion
- Use YSI Probe for onsite data
 - pH, temp, DO, conductivity, turbidity
- Grab Samples
 - Alkalinity, nitrates, phosphates, manganese, sulfates, aluminum, iron, TDS
- WATERS
 - Easily create data charts
 - Publicly accessible data map



Conservation/Rehabilitation

- Stormwater management
 - Southmoreland High School
 - Rain garden
 - Shop N Save Parking Lot
 - Porous pavement, rain gardens
- Cook's Way
 - Stream bank vegetation, rain gardens, porous pavement
- Rt 31
 - Green infrastructure sidewalks
- Riparian Buffers
 - West Overton Museum, Yinzer Valley Farms
- AMD treatment design
 - West Overton Museum

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State of the Watershed



CONSERVATION

Jacobs Creek Watershed Association

CONSERVATION

Projects Committee

OPEN State/Fed grants #: **8**

Completed grants 1999 to date: **\$2,797,740**

Current open funding: **\$1,319,721**


Completed State/Fed grants #: **17**

First Acid Mine Drainage (AMD) treatment design grant awarded

Abandoned mine drainage is water that is polluted from contact with mining activity and normally associated with coal mining. It is a common form of water pollution in areas where mining took place in the past, acid mine drainage, AMD, being the most prevalent. There are over 14 known AMD discharges in our watershed, and JCWA was finally awarded a 319 grant to address 3 discharges located on UNT-3 at West Overton Village.

The awarded grant will allow JCWA to hire a consultant to design an AMD treatment system for UNT-3 which is a small tributary of Jacobs Creek. After the design is finalized, JCWA will apply for a construction grant to see that the design can be constructed which will then increase the water quality of the stream and our watershed.

That is not the only project happening at West Overton Village though. JCWA has moved into the construction phase of installing a Riparian Buffer along UNT-3 as well. A riparian buffer is a vegetated area near a stream which helps filter out pollutants, reduces sediment and provides shade. Invasive species are in the process of being removed and new native vegetation will be planted next year.



Total stormwater managed in 2020:

30,750,300

gallons

Total acres managed by our systems:

30 or **4%**

TOTAL stormwater managed per storm (1" inch rain storm):

813,500 gallons

or

767,100 gallons in Scottdale

46,400 gallons in Mt. Pleasant

From the Ridge to the River...
Page 7

Other on-going projects

Southmoreland High School Rain Garden



This year, JCWA was awarded a grant to construct the final phase of the Southmoreland High School Green Infrastructure Design in Alverton, PA. A rain garden will be installed near the maintenance building to help reduce stormwater runoff. In previous phases, 2 porous parking lots and 1 rain garden were installed in the upper and lower parking lots of the high school.

Shop N Save Parking Lot



Bids were advertised to start construction of the Shop N Save Parking Lot project in the Mount Pleasant Borough. Rain gardens will be installed to reduce stormwater runoff. An estimated 9.9 lbs. of sediment per hectare per 2.5 cm of rain for a 1 day rain event will be removed from the area after the project is completed or 396.3 lbs. per year.

Cook's Way



A design was drafted to install green infrastructure along Shupe Run near the Mt Pleasant Coal and Coke Trail entrance. The green infrastructure design currently includes planting native vegetation along the stream bank, installing rain gardens and expanding the parking lot with porous pavement to reduce stormwater runoff.

Recreation

- Pop Up Paddling
 - Use our kayaks for free
- Sojourn
 - Float down Jacobs Creek
- Fishing Derby
- Clean Ups
 - Tire clean up, adopt a highway, ORSANCO, Creek Falls
- River Gauge
 - Data logger keeps track of water level of paddlers

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State of the Watershed

Jacobs Creek Watershed Association
RECREATION
Recreation Committee

Families gather despite low water levels for 3rd Annual Family Friendly Float Day on Jacobs Creek. Thank you to PA Organization for Watersheds and Rivers and local businesses for providing supporting funds.

From the Ridge to the River...
Page 11

Local fisherman catches 118 fish during Virtual Fishing Derby

Top, left: Tanner of Somerset caught 118 fish through out a 2 week period winning an All Day Adventure Pass to 7 Springs Mountain Resort and more. **Top, right:** Ricky of Scottsdale won the children's category catching a total of 16 fish during the derby.

Pop Up Paddling Improvements

JCWA is moving full speed ahead to prepare for next year's Pop Up Paddling program. JCWA received a Revitalize Westmoreland grant to purchase a shipping container to store our paddling equipment in. The container is located at Chestnut Ridge Park, Acme PA and will be the new permanent Pop Up Paddling location. We are excited to better utilize the under appreciated and beautiful lake.

JCWA's Pop Up Paddling fleet is also being expanded through a Pennsylvania Environmental Council grant which will allow us to purchase 1 new kayak, versa board, 2 canoes and 5 paddles.

Education

- Tot Time/Nature Explorers
 - Science camp for 2-9 year old's
- In School Creek Connections
 - Water quality lab
- Build Your Own Watershed
 - Watershed diorama activity
- Scholarship
 - \$1,000 high school senior
- Bluebird Boxes
 - Build Earth Day bird boxes

Page 4 State of the Watershed

Jacobs Creek Watershed Association
EDUCATION

DISTRICTS: 3
TOTAL EVENTS: 27
TOTAL KIDS: 1,839
ONLINE VIEWS: 1,262

Science Camp shifts to at-home
JCWA offered its 5th Annual Tot Time and Nature Explorer's camp for children, this year, from the comfort of their own homes. While we could not gather together in person due to the pandemic, that didn't stop JCWA and the Fayette Conservation District from bringing environmental education to the group of 2-9 year olds. JCWA put together and handed out kits that had everything the kids needed for camp inside. Tot Time learned about senses and how to use their senses in nature while Nature Explorers explored botany and different types of native and exotic plants. Thank you to Chevron and the Community Foundation of Fayette County for funding this program.

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From the Ridge to the River...

Community bids online to raise education funds
Local businesses and community members donated to JCWA's first Virtual Silent Auction to raise money for education programs. Thanks to them and everyone who made bids, we raised the money needed to support education programs throughout the watershed.

Bringing the watershed to the classroom

Top, left: Mt Pleasant Junior High students build their own watershed model. **Top, right:** Southmoreland High School students find Copepod in Greenlick Lake water sample. **Bottom, left:** Southmoreland graduate, Jacob Levendosky, was awarded JCWA's \$1,000 Education Scholarship to help him pursue a degree in BioTechnology. **Bottom, right:** JCWA Program Coordinator, Taylor Robbins, greets visitors at Yough Int. Middle School Science Fair booth.

Jacobs Creek
Watershed Association



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Full State of the Watershed:

<https://www.jacobscreekwatershed.org/state-of-the-watershed/>

