#### **WPP Final Reports**

The Watershed Improvement Branch's NPS Program has provided funding for watershed group staff support since 2014. The original program, known as the Watershed Pilot Program (WPP) is now in Phase II. The intent of WPP is to assist in managing and implementing §319 projects and improve watershed organization sustainability. To qualify for this funding opportunity, the watershed organization must complete an application and meet eligibility requirements.

WPP details are available at: <a href="https://dep.wv.gov/WWE/Programs/nonptsource/WBP/Pages/pilot.aspx">https://dep.wv.gov/WWE/Programs/nonptsource/WBP/Pages/pilot.aspx</a>

Included here are the final reports from each WPP organization in 2022.

| Coal River Group                      | 1  |
|---------------------------------------|----|
| Piney Creek Watershed Association     | 7  |
| Save the Tygart Watershed Association | 19 |



# COAL RIVER GROUP WATERSHED PILOT PROGRAM

# NPS1710

Final Report July 2021 – June 2022

COAL RIVER GROUP PO BOX 363 St. Albans, WV 25177 304-722-3055 <u>coalrivergroup@gmail.com</u>

#### Narrative

The Coal River Group (CRG) has now been a part of the Watershed Pilot Program (WPP) for seven years and it remains a crucial component in the many achievements the group has accomplished. The WPP program has allowed the CRG to establish a grant manager and has provided the important next step for the group to grow to become a financially sustainable river restoration entity.

The grant manager oversees the NPS1724 §319 septic repair grant and other watershed-related grants. They also coordinate outreach and volunteer events such as the Water Festival in April and provided administrative and capacity support for the group and its board members. As a non-profit organization, the CRG relies heavily on its grants, fundraising efforts, and volunteers to thrive. This makes the grant manager's position crucial to keep the group running and guide its volunteer staff on course.

During this 2021-2022 fiscal period, the CRG has had two grant managers. Brody Brown was hired in May and was trained by the previous grant manager, Justin Hunt. In April 2022, Abby Rice stepped in as the new grant manager, under Justin's tutelage and the Chairman Bill Currey's guidance, she has learned to great responsibility the position affords. She continues through the new fiscal year representing the CRG in workshops, outreach programs, and volunteer events while acknowledging the group's mission statement: to preserve and protect the watershed, its history, and develop recreation and tourism for the Coal River Center.

#### **Project updates**

One of the biggest responsibilities of the grant manager is the §319 project. For the CRG, this is a septic remediation project covering the Browns Creek and Angel Fork area to reduce the high counts of fecal coliform flowing from defective septic systems in that area before it reaches the Coal River. In the past twelve months, the CRG has been able to replace 13 septic systems for homeowners (See *Figure 1*). There are currently two active applicants in the process of getting their septic tanks repaired or replaced before the organization's §319 grant ends in September.

The CRG has learned through their primary contractor that projects are harder to complete or take on due to a rise in costs for materials and diminishing resources. Because of this inflation, the CRG requested and confirmed an extension with the WVDEP for the §319 grant until September.

| Location     | # Units | gal/person/<br>day | Conversion | persons/<br>household |          | cfu/100mL | Days of<br>year | Eff  | Load<br>Reduction |
|--------------|---------|--------------------|------------|-----------------------|----------|-----------|-----------------|------|-------------------|
| Total Browns | 14      | 50                 | 3.79E+01   | 2.4                   | 4.54E+03 | 1.00E+04  | 365             | 0.99 | 2.30E+11          |
| 2022 Browns  | 4       | 25                 | 3.79E+01   | 2.4                   | 2.27E+03 | 1.00E+04  | 365             | 0.50 | 1.66E+10          |

Septic Worksheet

CRG plans on continuing its clean water efforts through more septic replacements and a riverbank restoration project. In the meantime, the group's grant manager Abby Rice will meet with the group's contractor and homeowners to go over the process.



Figure 1. Examples of completed septic replacement.



During the late summer and again in the late spring, the grant manager collected water samples along the Coal River for the Stream Partners grant and at the assigned sites along the Browns Creek/Angel Fork tributaries. While collecting samples on Browns Creek Road, she and her assistant spoke with some residents, discussing environmental issues in the area and thanking them for their hard work. Our goal is to reduce the counts by 1.07E+12. After a total of 13 septic replacements within the past twelve months, we have exceeded that goal by double. As shown in Figure 2, one can see the progress on the fecal coliform count.

The highest concentration was found by a trailer park by Wimmerfield Road leading to Browns Creek. Most of the water samples on the lower Coal River in Saint Albans has been below 10 CFU/100mL except for an unexplained spike at the Coal River Center boat launch in June.

|                 | July | August | September | October | April | May  | June |
|-----------------|------|--------|-----------|---------|-------|------|------|
| WVKC-2-A-(0.0)  | 340  | 156    | 112       | 420     | 164   | 380  | 210  |
| WVKC-2-A-(1.8)  | 570  | 90     | 236       | 250     | 164   | 390  | 309  |
| WVKC-2-(1.6)    | 191  | 700    | 400       | 980     | 590   | 2000 | 240  |
| WVKC-2-A-(2.7)  | 210  | 700    | 110       | 800     | 345   | 1800 | 400  |
| WVKC-2A.4-(0.2) | 98   | 1400   | 520       | 9200    | 2300  | 3600 | 6000 |
| WVKC-2-(2.6)    | 164  | 180    | 273       | 320     | 86    | 480  | 200  |
| WVKC-2-(3.7)    | 390  | 216    | 42        | 108     | 58    | 82   | 300  |
| WVKC-2-(4.4)    | 74   | 48     | 52        | 236     | 430   | 2200 | 94   |
| WVKC-2-D-(0.0)  | 260  | 228    | 86        | 54      | 31    | 540  | 480  |
|                 |      |        |           |         |       |      |      |

Figure 2. NPS1724 Browns Creek water sampling results.



|             | July | August | September | October | April | May | June |
|-------------|------|--------|-----------|---------|-------|-----|------|
| CABIN1      | 127  | 100    | 76        | 309     | 236   | 118 | 600  |
| CABIN2      | 155  | 144    | 60        | 200     | 210   | 173 | 1300 |
| LOWERFALLS1 | 127  | 84     | 76        | 290     | 164   | 290 | 78   |
| LOWERFALLS2 | 164  | 86     | 86        | 145     | 154   | 230 | 64   |
| GATEWAY1    | 510  | 228    | 164       | 200     | 220   | 91  | 270  |
| GATEWAY2    | 420  | 148    | 96        | 291     | 109   | 82  | 220  |
| CURREY1     | 136  | 136    | 72        | 236     | 290   | 191 | 182  |
| CURREY2     | 108  | 216    | 84        | 210     | 200   | 145 | 136  |
|             |      |        |           |         |       |     |      |

**Figure 3**. Stream Partners water sampling results on the Lower Coal River.



#### **Outreach and engagement**

In the past twelve months, the CRG has had several community outreach opportunities. In April, Abby Rice held a booth at the St. Albans "Walk on the Wildside" Event at City Park, promoting the CRG's upcoming fundraising event and recruiting new volunteers. Later in June, she attended the Watershed Assessment Branch Training with Environmental Resource Specialist Supervisor Nick Murray to better understand the importance and procedures of water sampling tests. That month, she also represented CRG at the Madison/Boone Resources & Recreation Workshop where she provided input and received feedback from those that lived by the Little Coal River and wanted to improve their recreational and economic development.



#### Fundraising and capacity building



#### **Budget summary**

As the CRG had a transition period to find their new grant manager, fundraising efforts were slowed. In October, Bill Currey and his volunteer crew joined the Saint Albans Chamber of Commerce for their RAILS Train Day Celebration, where he promoted the non-profit organization and the rich history the Coal River has in association with the C&O Railroad. In January, Bill and his volunteers attended the WV Fishing & Hunting Show in Charleston, representing the Coal River Group and the great recreational opportunities it has to offer.

Due to the employee turnover in the past twelve months and the consulting services provided by Justin Hunt, the budget was split between him, Brody Brown, and Abigail Rice. Below is a copy of the budget spreadsheet used in July 2021 and how it was spent through the fiscal year.

|                       |     | Coal Ri   | ver Group                |          |
|-----------------------|-----|-----------|--------------------------|----------|
| W                     | ate | ershed St | aff Pilot Project        |          |
|                       |     | Projec    | t Budget                 |          |
|                       |     |           |                          |          |
| Income                |     |           |                          | Spent    |
| WVDEP                 | Ś   | 22,500    |                          | 22,500   |
| Coal River Group      | \$  |           |                          | 7,500    |
| Total Income          | \$  | 30,000    |                          | 30,000   |
| Expenses              |     |           |                          |          |
| Staff Salary          | \$  | 30,000    |                          | 30,000   |
| Social Security/Medic | \$  | 2,295     | 7.65%                    | 2,295    |
| Federal Unemployme    | \$  | 42        | 1% (6% of first \$7,000) | 42       |
| WV Unemployment T     | \$  | 324       | 2.7% of first \$12,000   | 324      |
| Workers Compensation  | \$  | 800       |                          | 800      |
| Staff training        | \$  | 1,000     |                          | 1,000    |
| Travel                | \$  | 1,850     |                          | 1,850    |
| Paid Vacation (2 wks) | \$  | 1,250     |                          | 1,250    |
| Total Expenses        | \$  | 37,561    |                          | \$37,561 |

#### Key tasks and priorities

- The Grant Manager conducts monthly water sampling in the Brown Creek/Angel Fork Area and on the lower Coal River. There are nine locations in the Browns Creek/Angel Fork area and four locations on the Coal River from the Coal River Center to Saint Albans Gateway Shopping Center. Water samples are taken and sent to a lab to be analyzed for fecal coliform counts. This water sampling allows the Grant Manager to pinpoint locations to target for the septic replacement projects. The goal is to reduce the fecal coliform counts at each sampling location.
- 2. The Grant Manager continues to help CRG volunteers in developing new fundraising ideas and opportunities.
- 3. The Grant Manager is present at monthly board meetings of CRG where he/she informs the board members of upcoming plans, the results of current or past projects, and addresses any questions the board may have.
- 4. The Grant Manager is constantly searching for grant opportunities that align with CRG's mission of cleaning up The Coal River watershed. They will work with the board members to research, apply for, and obtain grants that support the organization's mission statement and vision.

5. The Grant Manager will reach out to communities during Chamber of Commerce meetings, outreach events, in the neighborhoods, and on site and speak on CRG's behalf about the impacts we have in our watershed and educate to help others do the same.

#### Points of contact

1. Bill Currey, Chairman, Coal River Group Board of Directors, <u>bike1currey@gmail.com</u>; (304) 419-4417.

2. Kris Radford, Coal River Group President, Coal River Group Board of Directors, <u>Texascrzd@yahoo.com</u>; (304) 549-1348.

3. Justin Hunt, Coal River Group Consultant, and member on the Board of Directors, jhuntwv@gmail.com; (304) 542-3496

3. Tomi Bergstrom, WVDEP Western Basin Coordinator, <u>Tomi.M.Bergstrom@wv.gov</u>; (304) 926-0499 x 43862

4. Timothy Craddock, §319-Coordinator, WVDEP - Watershed Improvement Branch, <u>Timothy.d.craddock@wv.gov</u>; (304) 926-0499 x 43868



#### NPS 1712 Watershed Association Staff Support Pilot Program -- Year 7

# Annual Report: July 1, 2021 – June 30, 2022



Woodrow Wilson High School Restored Wetland Spring, 2022: Top - Interpretive signage installed at the project using Beckley Area Foundation Community Grant funds. Bottom-Girl Scout Earth Day event at the wetland focused on water and planting woody perennials in and around the site.

Piney Creek Watershed Association P.O. Box 672 Beckley, WV 25802 (304) 228-1680 info@pineycreekwatershed.org

#### 1. Narrative

The Piney Creek Watershed Association (PCWA) completed the seventh year of the Watershed Association Staff Support Pilot Program during the 2021-2022 period. The benefits of this support are reflected in the continued progress that has been made on a number of 319 projects and other educational and community activities in the watershed that will be summarized below. Our successes are also reflected in the continued support received from local governments. We received continued funding of \$20,000 from the City of Beckley, \$5,000 from the Raleigh County Solid Waste Authority and \$1,000 from the Raleigh County Commission. Businesses, individuals, and families continue to support the association with their time and monetary donations. A virtual online auction raised significant operational funds as did a giving Tuesday event during the 2021 holiday season and fundraising activities at our first Earth Day Soiree this spring.

Our board of directors continues to meet monthly to review and guide our endeavors. Phyllis Farley a long-time board member, previous executive director, and life-long advocate for the environment stepped down from the board this year. Her insights, hard work, and dedication will be missed. Corey Lilly stepped down as Executive Director this past year but now serves the Association as a board member.

Funding from the Watershed Pilot Program allowed PCWA to continue support a number of related projects in our watershed. We continue to support trail development and maintenance at the YMCA soccer fields as a means of engaging the public in a way that will lead to increased awareness and appreciation of our natural heritage with a heightened understanding of the need to protect and preserve our local environment and waterways. PCWA has continued the wetland renovation of demonstration wetlands at the Shady Spring Library. A handicap accessible path now leads to the first wetland and accessible elevated garden beds are installed. The small trail system around the pools is still under construction with one of three arched bridges being installed.

PCWA coordinated litter cleanups during the year with the help of numerous volunteers. We continue to have productive partnerships with the West Virginia University Institute of Technology (WVU Tech) and the Beckley Sanitary Board (BSB) in our efforts to monitor the health of our watershed. Monitoring teams composed of PCWA staff and volunteers, WVU Tech faculty and students, and BSB staff continue to visit 21 sites in and around Beckley monthly. PCWA has contracted with Dr. Matthew Williams of WVU Tech to summarize and interpret 3+ years of monitoring data that we have accumulated to date. Funds from an AGO grant allowed expansion of our monitoring effort in the

upper reaches of Piney Creek including the outlying unsewered areas in the vicinities of Sullivan, Fireco, and Whitby.

PCWA continues to participate in the New River Clean Water Alliance. This group of government, non-profit, and industry professionals meets regularly in an effort to study and document water quality in the lower New River drainage with the goal of developing plans and projects to improve water quality in our area.

# 2. General administration and capacity building

Following the departure in August of outgoing part-time, Executive Director, Corey Lilly, Jim Fedders was promoted from Associate Director to the Executive Director position. Jim is responsible for the day-to-day management of the organization with primary duties related to grant management and project oversight. Kate Sopher was hired last fall as a part-time Community Relations Director with responsibility for social media, fundraising and membership development. Kate brings years of experience from the corporate world of marketing and sales and a deep commitment to the environment. We hired Dane Gaiser as a part-time field technician to conduct sampling in the upper watershed, assist with lab analysis, data management and other field related activities. Dane is a recent biology graduate of WVU Tech and was a previous volunteer with PCWA. Our overall capacity continued to increase over the reporting period.

We continue our relationship with the accountant who was hired last year to assist with financial management of the Association. Our books and required filings with the IRS and state government are now up to date.

## 3. Project updates

**NPS 1612 New River Drive**. This project has concluded with the successful revegetation of 0.92 acres of previously barren and erodible land adjacent to Little Whitestick Creek in Beckley. The project entailed bringing in topsoil, seeding with various grasses and pollinator species and strawing the area. The site was fenced off to exclude the off-road vehicle traffic that had caused much of the problem. Interpretive signage has been installed. The effort has paid off with vegetation that continues to develop.



Aerial view of barren area Spring 2021

Ground level view in Fall 2021 showing fenced exclosure with developing ground cover.



*June 2022 view of the successful project showing interpretive signage, fencing, and volunteers who planted a few selected woody shrubs on the site. Grasses and forbs continue to develop and spread within the exclosure.* 

#### NPS 1685 WWHS Stream Restoration.

The wetland at Woodrow Wilson High School (WWHS) has been successfully restored and revegetated following the dewatering of the aging pond and reshaping the basin and drainageway. A Beckley Area Foundation Community Grant funded establishment of an adjacent pollinator garden, interpretive signage, and walking bridges across the drainageway that were built and installed by the ACT carpentry classes.



Faculty, students, and community volunteers assisted in establishing the pollinator garden that was watered occasionally with the help of the Beckley Fire Department.



One of the bridges built and installed by the ACT carpentry class to allow easy pedestrian access from the parking area to the adjacent softball field.



Interpretive signage and ground level view of the wetland in Spring 2022



Girl Scout Earth Day event in Spring 2022 where the scouts learned about water conservation issues and planted trees and livestakes in and around the wetland.

Work will continue during the summer to deal with invasive Japanese Knotweed control and some erosion issues at the head of the wetland. Two talented and hard-working WWHS freshmen, class President Ram Asathambi and Vice-President Thomas Spencer, approached WWHS Principal Powell about an idea for a project to benefit the school. Principal Powell suggested a boardwalk would be a great addition to the wetland to provide easy access to view the site and serve as an outdoor classroom. The students started a fund-raising campaign by notifying local businesses, elected officials, friends, and fellow students of their project. Their campaign so far has raised over \$27,000. USDA-NRCS engineers have developed a conceptual plan for the boardwalk and covered pavilion. Additional funds are being sought from the WV Department of Highways grant fund and other sources.





Conceptual plan for accessible boardwalk and pavilion at the WWHS wetland.

Jim Fedders presented a talk entitled *Wetland Restoration at Woodrow Wilson High School, Beckley, West Virginia* at the 2022 New River Symposium highlighting the progress with this project.

**NPS 1705 Crescent Elementary Storm Water Refit**. PCWA contracted with a local engineering firm to develop preliminary plans for the subsurface drainage system to detain storm water that runs from the parking lot and roof of the school. Initial cost estimates exceed the grant amount but the Beckley Sanitary Board has agreed in principal to cover any cost overruns as needed. At this writing, we are awaiting a 'Right of Entry' agreement between BSB and the Board of Education to allow geotechnical study, test pits, and sewer line tracing to occur on the property. When this work is completed, the final plans can be developed and a project agreement among PCWA, BSB and the Board of Education will need to be finalized. Further delays from any of the partners, contractors, material suppliers, and weather could jeopardize the successful completion of the project.

<u>NPS 1736 Little League Convention Center Stormwater Detention</u>. This project is a phase two extension of the effort to detain storm water runoff from the back parking lot and roof of the Beckley - Raleigh County Convention Center to reduce flooding of the

adjacent Little League Ball Fields. A Right of Entry document was finalized between the Beckley Sanitary Board and the property owner. A geotechnical study was conducted and design plans for this project have been developed. Costs of implementing the planned computer-controlled discharge from the detention pond have risen dramatically since the grant application and exceed the budgeted amount. The Beckley Sanitary Board has recently agreed to contribute any funds needed to meet these cost overruns. It is anticipated that this project will move forward in the coming year.

**NPS 1756 Little Whitestick Plan Development AGO.** This project was completed in September 2021 with the development of the report entitled: *Little Whitestick Creek Subwatershed Plan* by Rebecca LaRochelle and Dr. Matthew Williams. This thorough report highlighted the existing conditions within the Little Whitestick watershed and identified a number of potential projects to reduce sediment and improve stream conditions and flooding issues.

**NPS 1771 Expansion of Monitoring AGO.** We recently concluded this project successfully. We were able to hire a part-time technician to establish and sample five locations in the Upper Piney watershed on a regular basis. This process followed the procedures outlined in the QAPP used for sampling the regular 21 sites in and around the Beckley area. The summary report is now under development.

**<u>2021 319 Proposal for septic repairs.</u>** This project would perform septic repair and maintenance in unsewered communities in the upper reaches of the Piney Creek Watershed. The funding decision is still awaited.

**2022 319 Proposal for septic repairs.** PCWA submitted a new 319 proposal that would continue funding septic system repairs in the headwaters area of Piney Creek. Funding decisions are not expected until next summer.

## 4. Other grant updates

We received a Field of Interest Grant from Beckley Area Foundation to purchase new laptop computers and accessories for the Executive Director and the Community Relations Director. We also received a BAF Community Grant used to purchase camera equipment and a multimeter and other equipment needed to continue our stream monitoring efforts. We have recently applied for two new Field of Interest Grants to fund a 'Trout in the Classroom' project in conjunction with a biology teacher at Woodrow Wilson High School; and a 'Trash Trout' in-stream litter collection apparatus that we hope to deploy in Cranberry Creek if funded.

#### 5. Fundraising

Our new Community Relations Director, Kate Sopher, started in October, just weeks before Giving Tuesday. She created a training for the board and increased the opportunities to donate outside of Facebook and managed to lead us to \$2350 in proceeds from this effort (including a Business Match). In April, we partnered with Weathered Ground Brewery to host an Earth Day Soiree, complete with a Piney Creek beer, music, and watershed education. A Raffle, 50/50, and the addition of 14 new members, garnered us \$1222. Together both efforts provided \$3572 in unrestricted funds for the organization.





The Earth Day Soiree was a huge success that attracted members old and new. We plan to continue and grow this event in the future.

We continue seeking funds from government and quasi-government agencies to fund our activities. As previously mentioned, the City of Beckley will continue their support in

the amount of \$20,000 for FY2022 and the Raleigh County Solid Waste Authority for \$5,000. The Raleigh County Commission will support us with \$1,000 in the coming year.

#### 6. Education and Outreach

As mentioned, a successful Earth Day celebration was held on the campus of the Weathered Ground Brewery near Ghent on April 22. Numerous community members attended to hear live music and enjoy the open-air event. Our Enviroscape was on display and used to demonstrate issues related to non-point-source pollution. Some new members were added to our roles and some old members renewed their memberships at our sign-up table.

On April 23, we sponsored an educational event in conjunction with the Girl Scouts of the Black Diamond Council. Over 35 scouts plus leaders and parents attended the event at the recently restored Woodrow Wilson High School wetland. The scouts circulated through five stations that dealt with non-point pollution, wetlands and the water cycle, leave no trace ethics, invasive species, and planting of large trees, bareroot specimens and livestakes in and around the wetlands. The event was a huge success with many compliments received from parents and leaders as well as the scouts.



PCWA also celebrated Earth Day by coordinating a number of litter cleanups throughout the watershed.



PCWA continues to install pet waste stations throughout the community. The above station was installed on the rail trail in downtown Beckley. A series of other stations have been requested in a residential area adjacent to Piney Creek Gorge. These stations will be installed in the coming weeks.

#### 7. Budget

PCWA used the entire \$22,500 provided by this grant for salary and FICA Match. None of the WPP funds were used this year for travel or training expenses.

| Item                   | Budget Amount | Actual Amount |
|------------------------|---------------|---------------|
| PCWA Salary            | \$20,000.00   | \$20,881.00   |
| PCWA payroll tax match | \$1,530.00    | \$1,619.00    |
| Travel                 | \$470         | 0             |
| Training               | \$500         | 0             |
| TOTAL                  | \$22,500      | \$22,500      |

This grant funded 1044 hours of labor provided by the Executive Director.

#### 8. Points of Contact.

Tom Lemke, Chairman, Board of Directors for Piney Creek Watershed Association, <u>tlemke@suddenlink.net;</u> (304) 763-3260.

Barry Milam, Vice-Chairman, Board of Directors for Piney Creek Watershed Association, <u>barrymilam@hotmail.com</u>; (304) 673-3411.

Teresa Sopher, Secretary/Acting Treasurer, Board of Directors for Piney Creek Watershed Association, <u>fruitpancakes@gmail.com</u>; (304) 222-9444.

Jim Fedders, Executive Director, Piney Creek Watershed Association, jimfedders@pineycreekwatershed.org (304) 673-9530

Jennifer Liddle, Southern Basin Coordinator, <u>Jennifer.D.Liddle@wv.gov</u>; (304) 574-4471

Tim Craddock, NPS Program Coordinator, <u>timothy.d.craddock@wv.gov</u>; (304) 926-0499 x 1040.



SAVE THE TYGART WATERSHED ASSOCIATION INC.

P.O. Box 164, GRAFTON, WV 26354

Save the Tygart Watershed Association Watershed Pilot Program Annual Report 2021-2022 savethetygartwatershed@gmail.com

#### A. Summary

The fourth year of the Watershed Pilot Program has been the most successful for the Save the Tygart Watershed Association Inc. (STTWA) has seen several of its long-term remediation projects near completion, going out to bid in spring 2022. Employees look forward to the completion of the projects on the Left Fork of Little Sandy Creek and the first phase of projects on Roaring Creek in the next fiscal year. STTWA personnel have also completed additional water quality sampling in the Beaver Creek watershed along the Barbour-Randolph County line and have started using this data in a watershed based plan. We have continued to publish our annual newsletters and added a monthly blog to our website. We have also begun baseline water quality monitoring in the headwaters of the Tygart in anticipation of a proposed underground NIOSH facility to be constructed there soon. Finally, in the spring of 2021, STTWA personnel began planning for a Fish and Float Festival celebrating the recreational opportunities in the Tygart Valley River Watershed as well as the water quality remediation work, we do to be held in July 2023 and hope to make it an annual event.

#### B. Major Accomplishments

- 1. We have obtained and AGO grant for additional metals sampling to support the Watershed Based Plan for Beaver Creek Watershed in Barbour County and have begun sampling within the watershed.
- 2. We have obtained WCAP funding to support a previously obtained §319 grant for passive remediation at the North portal site on Roaring Creek and have secured the necessary permits for construction.
- 3. We have worked with DEP personnel to develop plans for a WCAP for the Barlow portal flowing into the Left Fork of Little Sandy Creek.
- 4. We participated in trainings conducted by the Appalachian Regional Commission regarding financial response to Covid-19.
- 5. We have conducted two research projects involving Alderson Broaddus University students to conduct a water quality studies on Beaver Creek watershed as well as an evaluation of soil erosion models in Tygart Valley River subwatersheds.
- 6. We carried obtained AGO funding to expand equipment available for the expansion of their water quality education and water quality monitoring programs.
- 7. We have published one issue of an organizational newsletter to inform our membership and the public of accomplishments and future activities as well as to increase future membership. The newsletter is available in hard copy and electronic formats.

- 8. We have used a \$200,000 grant from the U.S. EPA to enter the WVDEP VRP program. This was a major step toward the cleanup of the site and the construction of an office, laboratory, and education center.
- 9. We organized two trash-a-thon events as a public relations and fundraising opportunities.

C. Routine Activities and Accomplishments.

- 1. We attend monthly STTWA meetings. As of May 2021, meetings have, for the most part, returned to an in-person format. We also attend meetings and/or maintain contact with other local organizations including:
  - All Aboard Grafton
  - WV DEP
  - WV DNR
  - Northern Brownfields Assistance Center
  - WVU Reed College of Media

- Grafton City Council
- Taylor County Economic Development Authority
- Taylor County Commission.
- WVU Water Research Institute
- Barbour County Commission
- 2. We participate in and maintain a database for water quality sampling in the Tygart Valley River watershed.
- 3. We maintain the STTWA website and social media (Facebook Pages).
- 4. We research and apply for appropriate grants for education, cleanup, and sampling in the Tygart Valley River watershed.
- 5. We have developed a relationship with the natural sciences department at Fairmont State University.

#### D. Milestone Accomplishments

The following WPP milestones for 2021-2022 were addressed by the following activities. The Covid-19 Pandemic prevented some of the activities related to these goals.

- Goal 1: Continue Partnerships on existing §319 Projects: Barlow Project
  - STTWA WPP staff worked with DEP personnel on the development of a new alternative to treating Barlow portal effluent. This latest iteration involves treating the Left Fork of Little Sandy that receives Barlow Portal water. The project will be primarily completed by DEP, but STTWA will use 319 grant funds to create an access road to the site. At the completion of fiscal year 2021, this project had gone to bid and will be completed by July 30<sup>th</sup>, 2022.
- Goal 2: Continue Partnerships on existing and future §319 Projects: Roaring Creek
  - WPP staff have continued to work with the WV DEP, WV WRI and Penn Virginia on §319 grant for remediation of the North Portal of Roaring Creek.
  - As of the end of fiscal year 2021, phase one of the North Portal project had gone out to bid and a contractor was selected. Construction will start in July 2022 to be completed in fall 2022.
  - WPP staff have worked with WVWRI personnel to submit two more 319 proposals for work on Roaring Creek remediation at the North Portals and Mars portals.
- Goal 3: Develop a Watershed-Based Plan for Beaver Creek Watershed (additional actions depend on the result of §319 Project Funding)

- In 2021-2022, WPP staff completed the sampling events toward the fulfillment of the AGO grant.
- WPP staff have continued participating in volunteer monitoring efforts and maintaining a database of water quality data.
- STTWA has continued its support of treatment of Beaver Creek outflows with lime sands funded, in part, by the Barbour County Commission.
- WPP staff met with WV DEP environmental personnel and WV DNR personnel in the planning of potential changes to the current treatment program on Beaver Creek.
- Goal 4: Increase opportunities for educational outreach in K-12 and adult populations
  - WPP Staff applied for and obtained external funding to hold a Women on the Water (WOW) workshop designed to connect young women in high school and college with professional women in the environmental science field. The workshop will be held in Fall 2022.
- Goal 5: Expand organizational sustainability through increased membership and community awareness of STTWA mission and activities and funding opportunities.
  - WPP personnel have initiated a monthly blog on their website highlighting water quality issues, remediation actions and recreational opportunities.
  - WPP staff worked to plan the first STTWA Fish and Float festival. This event is designed to highlight recreational opportunities on the water in the Tygart Valley River watershed while spreading the word about water quality issues and STTWA remediation work.
  - WPP staff have published an annual newsletter to inform membership and the public about its activities.
  - WPP staff have worked in cooperation with a licensed remediation specialist to enroll the Carr China site into the WVDEP VRP program. WPP staff has worked to obtain additional funding for redevelopment of the Carr China site.
- Goal 6: Maintain and enhance the watershed monitoring program.
  - WPP staff have continued participating in volunteer monitoring efforts and maintaining a database of water quality data.
  - WPP Staff expanded monitoring to include collection of baseline data in the Tygart Valley River headwaters in anticipation of a proposed underground NIOSH facility.

#### E. Points of Contact

| Name                | Title                          | Phone Number |
|---------------------|--------------------------------|--------------|
| Dr. Kelley Flaherty | Executive Director             | 724-562-7074 |
| Mr. Stan Jennings   | President                      | 304 892 3270 |
| Mr. Jeff Kresch     | Vice President                 | 304 940 1106 |
| Mr. Rodney Moore    | Treasurer                      | 304 376 5597 |
| Dr. Kelley Flaherty | Interim Secretary              | 724-562-7074 |
| Mr. Devin Bokey     | Media and Outreach Coordinator | 304 629 9268 |

#### F. Final thoughts on the 2021-2022 WPP funding period

During the 2021-2022 year, STTWA saw many of its long-term projects approaching fruition. It also experienced some additional growing pains with employee turnover, the loss of an office space and continual adjustment to new working methods post-Covid. That said, having had many important learning opportunities this year, STTWA personnel are ready and willing to tackle additional remediation and education projects in the coming year. We anticipate that the next year will bring exponentially more opportunities for remediation given the funding availability to the state through the infrastructure bill. STTWA feels ready to take advantage of this period of growth.



(A). STTWA members measuring discharge on Beaver Creek.



(B-C). Contractors examining the water emanating from a wet seal during a pre-bid meeting held for the Roaring Creek Remediation project.





(D-E). Sampling water chemistry and macroinvertebrates in the headwaters of the Tygart Valley River to collect baseline data prior to the construction of an underground NIOSH testing facility.