

MOUNTAIN WATERSHED ASSOCIATION

HOME OF THE YOUGHOGHENY RIVERKEEPER™

2021

YEAR IN REVIEW

PROTECTING, PRESERVING, AND RESTORING THE INDIAN CREEK
AND GREATER YOUGHOGHENY RIVER WATERSHEDS



Photo: Michael Liddick

FROM THE DIRECTOR

Dear MWA Members and Supporters,

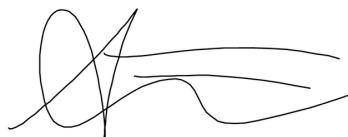
When I reflect on all that MWA has accomplished in the past year, I'm reminded of the distinctive power that our community-based organization has in bringing about necessary, widespread change. Since we started building our foundation twenty-eight years ago, we have taken action to restore the ecosystems we all depend upon while also empowering our neighbors to defend these places from continued exploitation, extraction, and pollution. At the same time, we work to create and maintain accessible avenues for our community to enjoy, cherish, and recreate in the scenic landscapes we protect. Our approach is overarching – not only do we speak up for what we want, but we also put those words into action.

Together, our work means that eastern brook trout and other native species are now flourishing in parts of our watershed – including streams like Poplar Run, which the Fish and Boat Commission has added to its list of Class A Wild Trout Streams after our fish surveys showed a thriving population. The Poplar Run Watershed – a subwatershed of Indian Creek – has a history of devastating impacts from abandoned mine drainage, but our work to remediate these issues over the past two decades has contributed to its revival. Yet, our work to restore the watershed must persist, as discharges from abandoned coal mines need to be treated perpetually to ensure the health of the watershed.

Through our advocacy work, we have provided residents with the resources and tools they need to protect the places they love. Through grassroots organizing, we have delayed the progress of coal mining and oil and gas development, both of which threaten the progress we've made in restoring the watershed. As the effects of climate change continue to be felt near and far, our work to keep carbon in the ground means that we are joining people around the world in taking action to prevent the continued harms of a warming world while we can.

Even while we continue to conserve and advocate for our watersheds, we must also take time to step outside and enjoy the ridges, valleys, and mountains that we call home. Thanks to the dedicated support of our volunteers, staff, and generous donors, we are on track to rehabilitate the largest crossing of Indian Creek – the Steyer Bridge – which is situated along the Indian Creek Valley Trail. Finishing the bridge makes us one step closer to connecting the full 19 miles of trail, and it will also provide access to additional recreational opportunities such as fishing and swimming. During a time when we are seeing a surge in outdoor recreation, we are excited to provide yet another opportunity to soak in the beauty of the Laurel Highlands.

Though I've only been at the helm of MWA for a year now, I am humbled by how much our staff, Board, and volunteers have accomplished in that short time. I am eager to see all we are able to make possible as we continue this work together.



Ashley Funk
Executive Director



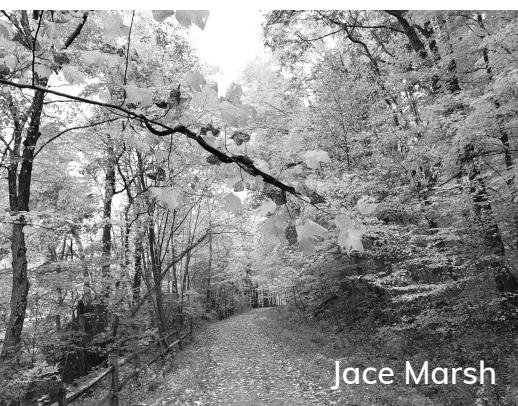
A winter hike in Laurel Hill State Park

SNAPSHOTS OF THE YOUGH

We are always looking to feature our supporters' photos in the annual Lottery Calendar as well as presentations, newsletters, and educational materials.

We are specifically seeking high quality photos of water, plants, animals, and landscape located within Indian Creek and other tributaries of the Youghiogheny River.

Do you have any photos taken in the Youghiogheny River watershed that you would like to share with us? Email Hannah@mtwatershed.com



REMEDIATION

Abandoned mine drainage (AMD) is a major polluter of the Indian Creek watershed. AMD is water that originates in an abandoned mine, some of which haven't been operational since the early 1900s. When this water escapes the mine pool either through an old portal, a seep that becomes active during high flow rain and snow melt events when the mine pool rises, or a blowout in the land due to the destabilization of the wall containing the mine pool. AMD will always be a battle when striving for watershed restoration.

The Melcroft Treatment System viewed from the 1/2 mile walking trail that borders the treatment system.



The Cost of Remediation

Gallentine

Cost to Build in 2003 - \$180,000
Cost to Rebuild in 2008 - \$854,793
Cost to Rehab in 2021 - \$524,416
Unexpected Valve Repair - \$11,850
Cost to Maintain yearly - \$12,200

Removes 97 lbs. of iron, 6 lbs. of aluminum, and 262 lbs. of acid load from mine discharge each year.

Rondell Correal Abandoned Mine Drainage Remediation Project

Cost to Build in 2021 - \$200,000
Cost to Maintain yearly - \$8,500

Prior to treatment, average pH is 2.9 with 70 mg/L of iron 60 mg/L of aluminum. After treatment, pH is 6.8, with 0.1 mg/L of iron and 0.01 mg/L of aluminum. Now we need to develop a full-scale, automated 24-hour treatment system that does not require on-site management.

On the Priority List for Rehabilitation

Melcroft

Cost to Build in 2011 - \$1,118,586
Cost to Maintain yearly - \$23,000

Treats 3 abandoned mine discharges entering Champion Creek

The vertical flow ponds and the collection pond need new, efficient designs that will deter the ponds from getting clogged. The average life of a treatment system is 10 years, which we have surpassed.

Kalp

Cost to Build in 2004 - \$3,400,000
Cost to Rehab in 2012 - \$1,289,750
Cost to Maintain yearly - \$24,000

Treats an acid mine discharge previously responsible for 42% of the acid load and 31% of the iron load impacting Indian Creek

To keep up with the discharge being treated by the system, a redesign and expansion is projected in the next 5 years. The initial pond is too small to handle the discharge volume.

CONSERVATION

Mill Run Streambank Project



Volunteers cut "livestakes" from existing plants. These livestakes will take root and grow, increasing vegetation close to the Mill Run streambank which will in turn hold sediment in place.

Planning for the Future of Conservation

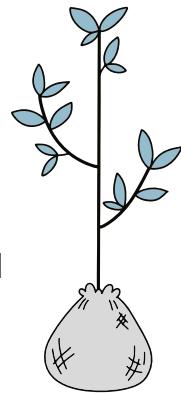
MWA recently released the final version of the Indian Creek River Conservation Plan: The Sequel. This project is three years in the making and has included two rounds of public meetings, key individual interviews, public surveys, and lots of research into the Indian Creek watershed. The end result is a prioritized list of projects that when implemented will improve the Indian Creek watershed community. The completed Plan is currently available on our website.

The Youghiogheny River Conservation Plan: Part 1 Headwaters to Dunbar Creek is still in the research and development phase. We have a public survey on our website that we are asking watershed residents and visitors to fill out. The questions are centered around what resources/activities in the watershed you use/enjoy and what you would like to see for the future of the watershed. To complete the survey, visit www.mtwatershed.com/river-conservation-plans and click the link to the Google Form.

In 2001, the first Indian Creek River Conservation Plan was completed, identifying issues the public felt were important to the watershed. One concern was to further evaluate the health of Mill Run. This tributary to Indian Creek is a high-quality cold water fishery, has naturally reproducing trout, and is stocked by the Fish and Boat Commission, making stream preservation projects here a priority.

In 2021, MWA completed a project to stabilize 1800 feet of streambank located above the Mill Run Reservoir.

We planted nearly 600 livestakes of dogwood and willow, all collected by volunteers, to act as a riparian buffer and deter sediment runoff in the stream. After completion of this project, Western Pennsylvania Conservancy estimates that the sediment load on Mill Run will be reduced by 50 lbs annually.



Happy Trails, Jace!

"I'll be moving on from my place as field technician at MWA. It's been two and a half years full of fun, fulfillment, and growth while tromping through forest and stream.

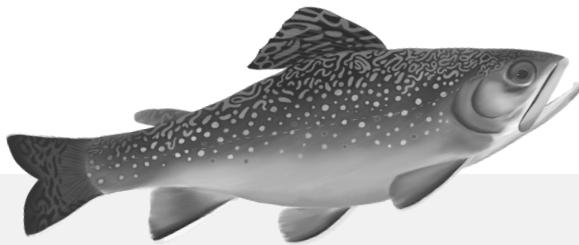
My coworkers and the community I worked in really made a job feel like a home—an amazing thing. THANK YOU!!"
- Jace Marsh

BIODIVERSITY

Mussel Surveys

MWA searched for the presence of native freshwater mussel populations and assessed suitable habitat in Indian Creek, Laurel Hill Creek, and the Middle Youghiogheny River. Our search proved unsuccessful since we found only three shells of deceased cylindrical papershell mussels in Laurel Hill Creek. A Western Pennsylvania Conservancy (WPC) Zoologist believes these non-native mussels were transported in the gills of a fish accidentally washed out of a local pond or Laurel Hill Lake.

WPC indicated several sites with suitable habitat, meaning our area may have had a thriving mussel population before the area became impacted by abandoned mine discharge. Sensitive mussels cannot survive in the pollution. With the success of our water treatment systems, we can consider transplanting species that are historically native to the area.



Brook Trout drawn by Morgan Moran.

Staff from MWA and Western Pennsylvania Conservancy survey for mussels in Indian Creek, as seen from the Steyer Bridge.

Poplar Run Added to Class A Wild Trout Streams List

As a result of MWA's fish shocking surveys in 2020, PA Fish and Boat Commission added Poplar Run to the list.

Poplar Run is also on PA DEP's list of streams to be considered for redesignation as Exceptional Value, a classification given to PA streams with highest quality. These streams are awarded the most protective regulations.

Benthic Macroinvertebrates

Every Spring and Fall, a full week of field work is dedicated to sampling for benthic macroinvertebrates, aquatic insects that are an integral part of the stream food chain.

Although we have other ways of testing water quality to assess the specific amounts of iron, aluminum, manganese, and other pollutants, bioindicators allow us to gauge the health of stream ecosystems downstream from our mine drainage treatment sites.

Because some species of "macros" are sensitive to pollution and impaired streams, the presence of sensitive species is a sign that water quality is good.

In 2021, we collected 36 samples from 18 sites.



A new logo created by Morgan Moran. Illustrated is a stonefly, a stream insect find in clean water.

WATER SAMPLING

Currently Seeking Sampling Volunteers



A past Americorps volunteer collects a water sample for Swimmable Waters

MWA is in the process of developing a training for volunteers who would like to participate in consistent water monitoring from May through September for our Swimmable Waters and Roadside Springs sampling.

Volunteers will be trained on sampling protocol and will be provided with supplies while doing field work. Sampling efforts will occur on a weekly basis for swimmable waters and quarterly for roadside springs.

Does this sound of interest to you? Email Taylor@mtwatershed.com or call our office at 724-455-4200 to let us know you would like to stay in-the-know about our upcoming training.

Roadside Spring Sampling Continues Another Year

In 2020 we asked community members to share locations of frequented roadside springs in the greater Yough Watershed. This year, we started quarterly sampling of 6 roadside springs: Red Dog Road, the Drill on Ore Mine Hill Road, Beck Springs on Jones Mill Run Road, Bando Road, Blue Hole Spring, and the Summit on Route 40. We added Cool Springs Road near Sutersville and the spring on Neals Run Road in Champion in our 3rd quarter sampling. Altogether, we collected 21 spring samples in 2021.

The purest water sampled so far is at Beck Springs and Blue Hole Spring. E. Coli bacteria was found in a couple commonly used springs, which means these springs do not meet EPA drinking water standards. Elevated levels of manganese were found in the Bando Road spring during our 2nd quarter sampling, which surpasses EPA drinking water standards. We found that it's impossible to tell the quality of roadside springs regardless of how commonly it's used or how clean it looks to be. Always do your due diligence before drinking wild water!

The samples we collect at each spring analyze pH, total suspended solids, aluminum, iron, manganese, and fecal coliform among other parameters. Lab results and information about what these results mean for water quality are posted on our website at www.mtwatershed.com/springs. If you have any questions, please email Taylor@mtwatershed.com or call 724-455-4200 ext. 5#.

Is the Water Clean Enough to Swim?

We test 13 popular swimming, wading and paddling spots around the Youghiogheny River and Indian Creek watersheds for E. coli weekly between May 1 and September 30. Be sure to check our website weekly for updates from our Bacteria Sampling. Or visit theswimguide.org.

Text "YoughSwimmableWaters" to 84483
to receive alerts when new water data is available

TRAILS

Kayak Launch Built on Indian Creek

Last year, we were gifted 20.5 acres along Indian Creek and an existing section of the Indian Creek Valley Trail. This land was donated by Tina and Ethan Miller in memory of Willis B. Miller and Mary L. (Swisher) Miller.

We worked closely with the Indian Head Church of God to build a kayak launch at this location. This location on the creek is calm and should serve as an excellent spot for launching and landing. Eventually, we hope to create an Indian Creek Water Trail. Funding for the kayak launch project was provided by the Western Pennsylvania Conservancy.

This project will include a new gravel parking area, new signage, a small footbridge, a stream depth gauge, and a cleared path through the woods to the launch site.

Washouts in the Gorge Lead to Long-term Planning

There were major washouts in the Gorge section of the ICVT when storms and heavy rains pummeled the area in early July. Additional drainage culverts were installed to prevent further erosion, but long term solutions will need to be implemented. Due to the steep hillsides and topography of this section of trail, MWA staff and volunteers are currently strategizing long-term engineering efforts we can utilize to ensure heavy rains don't continue to wash out sections of the Trail in the Indian Creek Gorge. We are consulting an engineer to give us an estimate on the work that will need done. With the help of Springfield Township, we are hopeful further damage will not occur. Designing and installing a solution to this issue is going to require us to raise additional funds - if you'd like to donate to these efforts, please note "Gorge Trail Repairs" when making your contribution.



Trail Tuesdays on the Indian Creek Valley Trail

This past summer our trail-focused Americorps member, Forrest Minteer, started "Trail Tuesdays" as an effort to get people out on the ICVT. The purpose of these hikes was to provide a group setting to walk on the trail and chat, providing company for those who aren't comfortable walking the trail alone or simply enjoy walking with others.

It was a hit! We plan on continuing Trail Tuesdays once the weather warms up, likely starting in May. We will announce the schedule soon.

We have maps available of the Youghiogheny River Water Trail. You can download a PDF copy on our website or you can stop by our office to pick up printed maps. While you're on our website, you can do a virtual tour of the water trail access points at www.mtwatershed.com/yrwt

STEYER BRIDGE PROJECT



A Creek Crossing on the ICVT

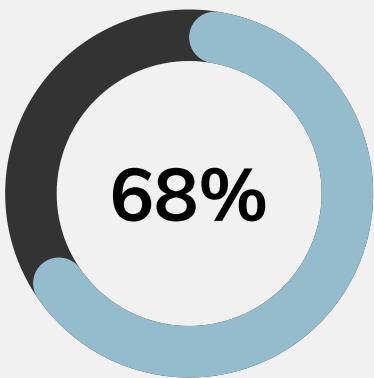
Fundraising efforts to complete the Steyer Bridge project on the Indian Creek Valley Trail have been going at full speed this year. With the help and leadership of our Trail Fundraising Committee, we have raised over \$30,000 from a March Calendar Raffle, our first annual Golf Scramble, a float trip on the Youghiogheny River, a Brunch & Bingo, and generous individual donations.

We have received a \$25,000 grant from the Local Share Account via the Fayette County Redevelopment Authority, a \$75,000 grant from the Allegheny Foundation, and a \$75,000 grant from Colcom Foundation. We successfully fundraised the cost of building the Steyer Bridge. Planning and construction are anticipated to start in Spring 2022.

To complete the project, we'll need:

\$90,000 for bridge decking and safety railings

\$240,000 for drainage, regrading, and a new gravel surface for 6/10th of a mile from Rt. 381



Current Progress: \$205,000 of \$330,000

Learn more and download a map of the Indian Creek Valley Trail:
www.mtwatershed.com/icvt

Questions about the trail?
Contact our Conservation Manager
at 724-455-4200 x #8



In 2022, we will be hosting more trail fundraising events. We hope you will join us!

Mark your calendars for the **2nd Annual Golf Scramble** on Friday, June 17.

Our Trail Fundraising Committee executed a successful series of events in 2021. We are thankful for their dedication and look forward to working with them in 2022.



From left to right: Kelly Kruper, Mary Lou Kuhns, Faith Sartori, and Jeri Lowe.

Join our email list to receive monthly email updates from MWA about trail events and progress.

YOUGH DEFENSE

A Word From the Youghiogheny Riverkeeper

This past year gave us an opportunity to support many areas within the Yough Watershed. Our work included water quality monitoring, advocating for coal impacted communities, developing watershed conservation plans, implementing stream restoration practices, supporting rural places looking to overcome industry buildout, and more. We are proud of these successes. Although environmental victories appear seldom, we know our work has improved the lives of residents, positively impacted communities, held polluters accountable, and improved the quality of water for downstream users.



How YOU Can Help Defend The Yough

Be an active participant in preserving and protecting the greater Youghiogheny River watersheds.

- volunteer for a litter cleanup
- attend a public meeting
- submit a comment letter
- become a water monitoring volunteer

Save These Dates

Casselman River Cleanup

April 30, 2022
Jeffrey's Landing in Meyersdale
from 9am to 2pm

West Newton River Cleanup

May 21, 2022
Cedar Creek Park
from 9am to 2pm

Connellsville River Cleanup

Tentative
Saturday, June 18

Canoes and Rafts are available to use, please RSVP with Eric
Eric@mtwatershed.com
724-455-4200 ext. #

MWA raised \$21,000 at the 2021 Yough Defense Party!

Join us at this year's Yough Defense Party on November 17, 2022.

ADVOCACY

COAL

Mine Expansion Continues Despite Impacts

LCT Energy's 2,886 acre coal mine in Saltlick and Donegal townships is proposing a 1,411 acre expansion that would undermine the PA Turnpike and head into Cook Township and the Loyalhanna watershed. LCT Energy is currently exploring an even larger expansion of an additional 5,000 acres into Cook, Bullskin, and Mount Pleasant Township. Current mining impacts include water loss, home subsidence damage, fugitive dust, and dangerous truck traffic.

Over the past year, DEP has confirmed 7 major subsidence issues in the footprint of the Rustic Ridge Deep Mine in Westmoreland and Fayette counties. The majority of these cases have yet to be resolved, and families are told their homes are still moving - yet LCT Energy continues to mine in their direction.

Neighbors report the damage to some homes cannot be repaired or the repairs exceed the home value. We have provided support and resources to concerned community members and spread awareness about these issues through large mailings, published blogs, and well-attended monthly community meetings.

Additionally, water loss, road dust, truck traffic issues, and coal spills continue. We work to report these issues to the DEP. Since mining started at the Rustic Ridge site, we've responded to a dozen complaints of water loss in the footprint of the mine. In some instances, households were forced to use water from a water buffalo after their wells went dry. We have advocated on behalf of impacted community members as they navigated filing complaints and coordinated with DEP and the company to get their water supplies replaced.

Proposed Strip Mine

A proposed strip mine in Saltlick Township threatens serious impacts to Poplar Run and the quality of life in the surrounding community. Concerned community members have placed yard signs along Poplar Run Rd., White Rd., and Imel Rd.

Monthly community meetings are held for both Rustic Ridge and Jordan mines.
Email MWA Community Organizer, Stacey Magda at Stacey@mtwatershed.com or call 724-455-4200 x 9# to learn how you can get involved.

The activated community has conducted regular outreach to the landowner expressing deep concerns for the community and watershed, none of which have been heard. Still, the mine is being actively pursued by both the landowners and the operator, Albert F. Stiffler, despite ongoing issues at other mines operated by Stiffler and the unified cry of area residents. Join our efforts in protecting water quality and quality of life along Poplar Run, Indian Creek, and the greater Youghiogheny Watershed at our monthly meetings.

Shaw Mine Coal Refuse Site

MWA hosted a meeting about the Shaw Mine, the second largest strip mine in Pennsylvania, where a 131-acre coal refuse site was proposed. The Shaw Mine borders the Casselman River in Meyersdale. MWA reported a dust suppression violation regarding tattered tarps near the tipple/loading area. A violation was issued by the PA Dept. of Environmental Protection. The proposed Shaw Coal Refuse Site application has yet to be approved and compliance issues continue to arise for surrounding related operations. Join us in monitoring this site to help protect the surrounding community, public school infrastructure, and the Casselman River.

ADVOCACY

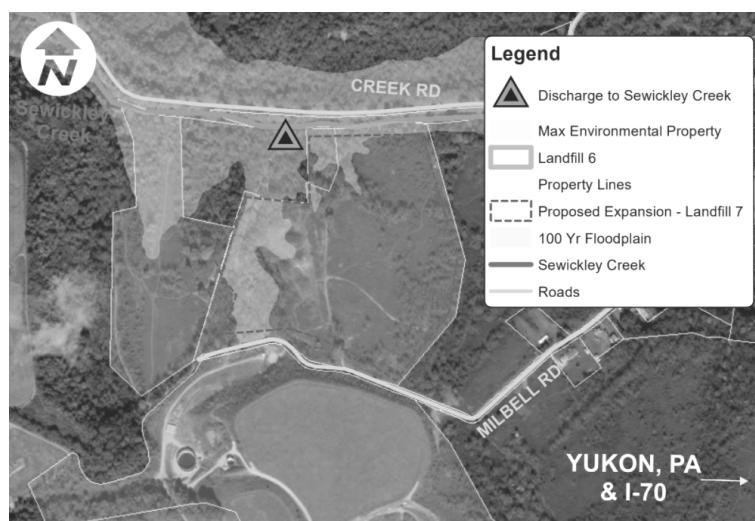
WASTE STREAMS

The Shale Gas Waste Stream - What Is It?

Shale gas development through hydraulic fracturing (fracking) in Western PA has been consistent for over a decade. As the industry continues to expand, they struggle to find ways to dispose of the waste generated, like flowback wastewater. The full chemical composition of this wastewater is not fully understood but studies have shown the wastewater often contains high levels of salt, various organic and inorganic chemicals, biocides, heavy metals, and - most concerningly - radioactive pollutants.

Radioactive contaminants, such as Radium-226 and 228, have been measured in residual waste at levels thousands of times higher than what is acceptable by safe drinking water standards. These contaminants persist in the environment for generations and are known to cause health impacts such as bone cancer. However, no current regulations exist to require the industry to properly track, monitor, and dispose of this radioactive pollution. Often, the waste is trucked through residential neighborhoods and disposed of in municipal landfills that are ill-equipped to handle it, putting the health of our communities at risk. MWA has been working with partner organizations to advocate for our lawmakers to pass legislation that will protect communities from the impacts of radioactive oil and gas waste.

MAX Environmental Seeks Expansion, Leaches Waste Into Sewickley Creek



MAX Environmental, the only RCRA Subtitle C Hazardous facility in PA, is looking to nearly double their capacity in Yukon. MAX accepts oil and gas drilling wastes, electric arc furnace dust, contaminated soils and other highly toxic wastes.

Through independent water sampling, we confirmed MAX discharged pollutants not included in their approved National Pollutant Discharge Elimination System (NPDES) permit. MAX had been operating on a NPDES permit issued in 2005, which did not include arsenic, a heavy metal potentially discharged into Sewickley without DEP approval for over a decade.

After several meetings and discussions with DEP, and after providing four rounds of technical comments on the proposed water pollutant discharge (NPDES) permits, the DEP altered the permit so that it now includes 87 additional waste limits and five new monitoring points than what was originally proposed.

Additionally, the Youghiogheny Riverkeeper has observed foaming, yellow water from MAX's main outfall, which flows directly into Sewickley Creek. Sample results indicated concerning pollutants, including very high levels of arsenic and strontium. The proposed expansion of MAX would put the landfill directly next to Sewickley Creek, a major tributary of the Yough. Some permit materials for the expansion have been released. We are reviewing the materials and organizing with the community to challenge the expansion.

ADVOCACY

Radiation Sampling to Monitor Shale Gas Waste

MWA has collected 76 soil and sediment samples for analysis to detect outfall of radioactive materials from residual waste trucks and landfills that accept oil and gas waste. Samples have been captured in communities where waste is regularly transported through. We have expanded this testing to homes near shale gas waste facilities by sending out mailers with surveys asking if residents would like their land tested.

Several samples have indicated levels of Radium 226, Radium 228, and Lead-210 in both common public areas as well as on private, residential land. The preliminary results from these samples indicate that lead-210, a short term decay product of radioactive radon gas, seems to be accumulating at high concentrations at homes near these shale gas operations. The full analysis of these results is still ongoing, and MWA is committed to continuing this sampling initiative in order to assess the impacts of the industry on the health of our communities.

These local facilities accept toxic waste in Westmoreland and Fayette Counties:

- **Westmoreland Sanitary Landfill, Belle Vernon, PA**
- **Reserved Environmental Services, Mount Pleasant, PA**
- **Greenridge Reclamation Landfill, Scottdale, PA**
- **MAX Environmental Industries, Yukon, PA**
- **Chestnut Valley Landfill, McClellandtown, PA**

To learn more about each landfill, visit our blog post, "Area Landfills Accept Toxic Shale Gas Waste" on the MWA website (www.mtwatershed.com/blog)

Health Survey Assesses Exposure Impacts

Research has shown that contamination from these industries is related to adverse health impacts. Radium exposure is associated with liver, breast and bone cancer. Currently, the PA Department of Health is studying the potential link between shale gas development and the inexplicable spike in rare childhood cancers, like Ewing sarcoma, in Southwestern Pennsylvania.

A mailing was sent out to hundreds of residents near MAX Environmental, Chestnut Valley Landfill, and Reserved Environmental Services, all of which accept high volumes of radioactive shale gas waste. The mailing included a survey to assess health impacts from the facilities. We've received dozens of responses.

This sampling initiative is a grassroots effort targeted at better understanding the outfall of the oil and gas industry waste stream and to armor the community with real data that is often withheld by regulatory agencies.

There is no charge for sampling. If you know of an ideal sampling location, contact Stacey at stacey@mtwatershed.com to set up a sampling date.

ADVOCACY

NATURAL GAS

Invenergy's Allegheny Energy Center

For 5 years, MWA has been challenging the construction of a gas-fired power plant along the Youghiogheny River and the Great Allegheny Passage in Elizabeth Township.

After years of waiting, the draft air permit for this facility has been released and the public hearing was on June 8th, 2021. MWA organized over 200 residents to show up at the hearing and provide testimony. In West Newton and Elizabeth, road signs dotted the streets protesting the power plant after community members designed and deployed a road-sign campaign to continue raising awareness, distributing over 50 road signs in the community. Concerned residents have had 8 Letters to the Editor published in local papers about the potential power plant. Over 200 postcards have been sent to regional decision-makers, encouraging them not to support the power plant. The group has met both in-person and virtually throughout the year and helped canvass about the proposed Allegheny Energy Center in Environmental Justice communities adjacent to the proposed location.

Over the past year, we have continued to coordinate with the Allegheny County Health Department to track Invenergy's pending air permit, which has since been issued. In early October, the air emissions permit for Invenergy's Allegheny Energy Center was approved. Before construction can begin, the company will need to obtain a host agreement, a land use permit, a NPDES permit for water discharge, and possibly a water withdrawal permit – none of which are guaranteed.

On behalf of residents, Mountain Watershed Association, represented by the Environmental Integrity Project, PennFuture, and Clean Air Council, has appealed the air permit decision.

Community Meetings are held around the issue of Invenergy. If you would like to be involved, reach out to MWA Community Organizer, James Cato, at James@mtwatershed.com or 724-455-4200 x 10#.

Pipeline Safety Education

Our team has been providing legal support for statewide organizing efforts to educate residents along Shell Oil's Falcon Pipeline route about safety issues and how they can organize their own communities in response. As part of these efforts, we discovered that Shell is required to conduct a continuing education program to inform residents about safety concerns.

Shell's Falcon Ethane Pipeline is being constructed near you.

Learn how to protect your water and your property.



During construction of a similar pipeline in Pennsylvania, property owners lost their water supplies and experienced other types of property damage. What steps do you need to take to make sure you are protected?

In coordination with allied groups, we plan to employ canvassers that will survey residents on whether or not they've experienced any aspects of the required "education programs" and if not, use the talking points to inform them of what safety information they're legally entitled to and how to request it from Shell.

ADVOCACY

PETROCHEMICAL



Nurdle Patrols

This Fall marked the one-year anniversary of Mountain Watershed Association's "nurdle patrol," an effort to monitor waterways near the yet unfinished Shell cracker plant in Beaver County.

Since launching the seasonal float patrols last year, MWA has learned that nurdles have already tainted our waterways. Common sources of spills may include train loading areas or factory unloading lots. They are likely washed into rivers during heavy rains, sticking to larger debris where they hitch a ride to new shores. We capture them by running our trawl in a specific channel of the river for ten minutes with a plankton net storing any material larger than 300 microns (μm).

Nurdles are pellets used as the building block for nearly all plastic products, but when spilled, they are eaten by fish and leach toxins in the water.

Earlier this year, MWA connected with the Charleston Waterkeeper, Andrew Wunderley, who is involved in a nurdle pollution settlement. After Andrew found, collected, and tracked nurdles spilled from rail lines during loading and shipping, which subsequently blew into the bay, through litigation, a settlement required the facility to clean up the shore and modify material handling practices. He often found egg-like clusters of nurdles on land stuck to the undersides of other floating solids such as sticks or leaves.

Taking Andrew's advice, in the year since launching our first nurdle "float" patrols, MWA has also started monitoring nurdle numbers on the riverbanks. We do this by using an adapted protocol developed by nurdlepatrol.org. This protocol includes using timed sessions and storage in numerated vials for future analysis. Additionally, this sampling method has added to the depth and clarity of our nurdle patrols, which in turn allows it to occur much more frequently. As the cracker plant nears completion, slated for production in 2022, MWA hopes to continue bolstering our rigorous baseline testing to hold the mega-producer accountable in the case of widespread pollution.

Mariner East Receives Criminal Charges

MWA's advocacy contributed to the Attorney General's investigation of the Mariner East Pipeline, which recently resulted in 48 criminal charges against Sunoco.

Mariner East is a pipeline spanning the state of Pennsylvania built for the purpose of exporting ethane overseas for plastics production. In the last year, this pipeline has infamously racked up 48 criminal charges and one felony charge for environmental crimes. Some of its failures include damaging drinking water wells, polluting the Loyalhanna, Raystown, and Marsh Creek lakes, and causing shifting sinkholes that swallowed saplings and ruined public infrastructure. Many of these issues remain unaddressed.

DIRECT SUPPORT FUND

One of the greatest threats to the health of watersheds and quality of life in the Appalachian region is the development of shale gas, coal, and petrochemical infrastructure.

MWA believes local grassroots action is the most effective way to protect the waterways, land, and air we all depend on. To this end, the Direct Support Fund provides small grants to grassroots groups and advocates working toward social change on these issues. The Direct Support Committee includes individuals from the Center for Coalfield Justice, Marcellus Outreach Butler, MWA, Lancaster Against Pipelines, Indigenous Environmental Network, Sierra Club, Center for International Environmental Law, and Buckeye Environmental Network.

Since 2014, the Direct Support Fund has awarded over \$364,000 to 171 grassroots projects. At the beginning of 2022, we're taking a look back on the previous year of Direct Support to share our experiences and invite any individual or small organization with environmental concerns to consider applying at bit.ly/DirectSupportFund.

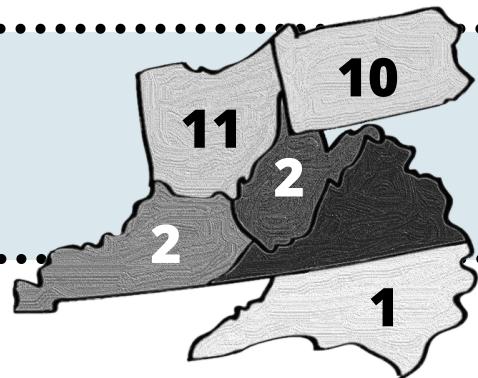
\$118,527

disbursed to



26

projects in 2021



Wondering if your project might qualify?

Here are examples of projects funded last year:

- lead testing
- mailers for surveys
- billboards and advertisements
- radiation sampling equipment
- air and water quality monitors
- public meetings
- yard signs
- multi-day marches
- expert witness fees

Eligibility:

- available to grassroots organizations and individuals
 - organizations with an annual budget around \$10k or less
- projects under \$10,000 are average but larger projects can be considered as well
- projects led by systemically under-represented and under-funded communities – such as Black, Indigenous, POC, rural, and low-income communities – are especially encouraged to apply
- projects must be received by the second Friday of the month for consideration by the Committee on the third Friday of each month

Questions about the application? Contact the Fund's Outreach Coordinator, James Cato, at james@mtwatershed.com or 724-455-4200 x #10.

Thanks to new donors, we can now award funds to projects that organize communities in response to environmental issues like:

- petrochemical buildup
- shale gas development
- coal mining operations
- air pollution
- lead contamination
- climate change legislation

We are incredibly grateful to The Cloud Mountain Foundation, The Plastic Solutions Fund, The Heinz Endowments, The 11th Hour Project, and Earthworks via the Pisces Foundation for making the Direct Support Fund possible.

UPCOMING EVENTS

Casselman Cleanup (Meyersdale)

Saturday, April 30 | 9:00a - 2:00p | Meet @ Jeffrey's Landing

Yough River Cleanup (West Newton)

Saturday, May 21 | 9:00a - 2:00p | Meet @ Cedar Creek Park

2nd Annual Golf Scramble for the Indian Creek Valley Trail

Friday, June 17 | Registration at 12:30p, Tee-off at 1:30p| Middle Creek Golf Course

2022 Watershed Festival

Saturday, September 24 | 10:00a 4:00p | Resh Park in Indian Head, PA

2022 Yough Defense Party

Thursday, November 17 | 2:00p - 10:00p | Falls City Pub in Ohiopyle, PA

Spring Fever Calendar Raffle fundraiser for the Steyer Bridge project

There are two numbers per raffle ticket. Winning numbers for each day are based on the Pennsylvania daily "Pick 3" evening lottery. If the winning ticket number was not sold, the next sequential number will be declared the winner.

You can either purchase raffle tickets on the MWA website or you can swing by our office in Melcroft, PA to purchase in-person and say hello.

After you buy your ticket there is nothing else you need to do! We will keep track of the winning numbers.

From your contact information we gathered at purchase, we will write you a check and mail your earnings to the name and address provided. If you would like the check mailed to a different person/address, please let us know. Prizes will be mailed by May 15, 2022.

If you have any questions, feel free to call 724-455-4200 ext. 5#

**SUPPORT THE TRAIL,
EARN MONEY!**

Benefits the
Steyer Bridge
Project

SPRING FEVER CALENDAR RAFFLE

SGOC LICENSE: 5444

SUN	MON	TUE	WED	THU	FRI	SAT
					1 \$75	2 \$100
3 \$100	4 \$75	5 \$50	6 \$50	7 \$50	8 \$75	9 \$100
10 \$100	11 \$75	12 \$50	13 \$50	14 \$50	15 \$75	16 \$100
17 \$200	18 \$75	19 \$50	20 \$50	21 \$50	22 \$300	23 \$100
24 \$100	25 \$75	26 \$50	27 \$50	28 \$50	29 \$75	30 \$100

FOR MORE
INFORMATION CALL
724-455-4200 EXT 5#

Purchase your tickets online:
bit.ly/SteyerRaffle or call the
office to pickup in-person

\$10 per ticket

MWA STAFF

Ashley Funk, Executive Director

Carla Ruddock, Director of Conservation

Eric Harder, Youghiogheny RIVERKEEPER™

Melissa Marshall, Community Advocate

Stacey Magda, Community Organizer

James Cato, Community Organizer

Taylor Robbins, Conservation & Recreation Manager

Hannah Spencer, Outreach Coordinator

Alicia Martin, Operations Manager

Morgan Moran, AmeriCorps Member



We hope to see you at an event this year!

BECOME A MEMBER

Join the effort to protect, preserve, and restore the Indian Creek and greater Youghiogheny River watersheds!

Name

Address

Phone

Email

Membership Levels

- \$10 | Stream Ally
- \$25 | Stream Friend
- \$60 | Stream Defender
- \$120 | Stream Champion
- \$240 | Stream Hero
- \$600 | Stream Guardian
- \$1,200 | Stream Sustainer

\$

General Donation

You can make a donation or renew your membership on our website OR you can mail a check to
Mountain Watershed Association | PO Box 408 Melcroft, PA 15462

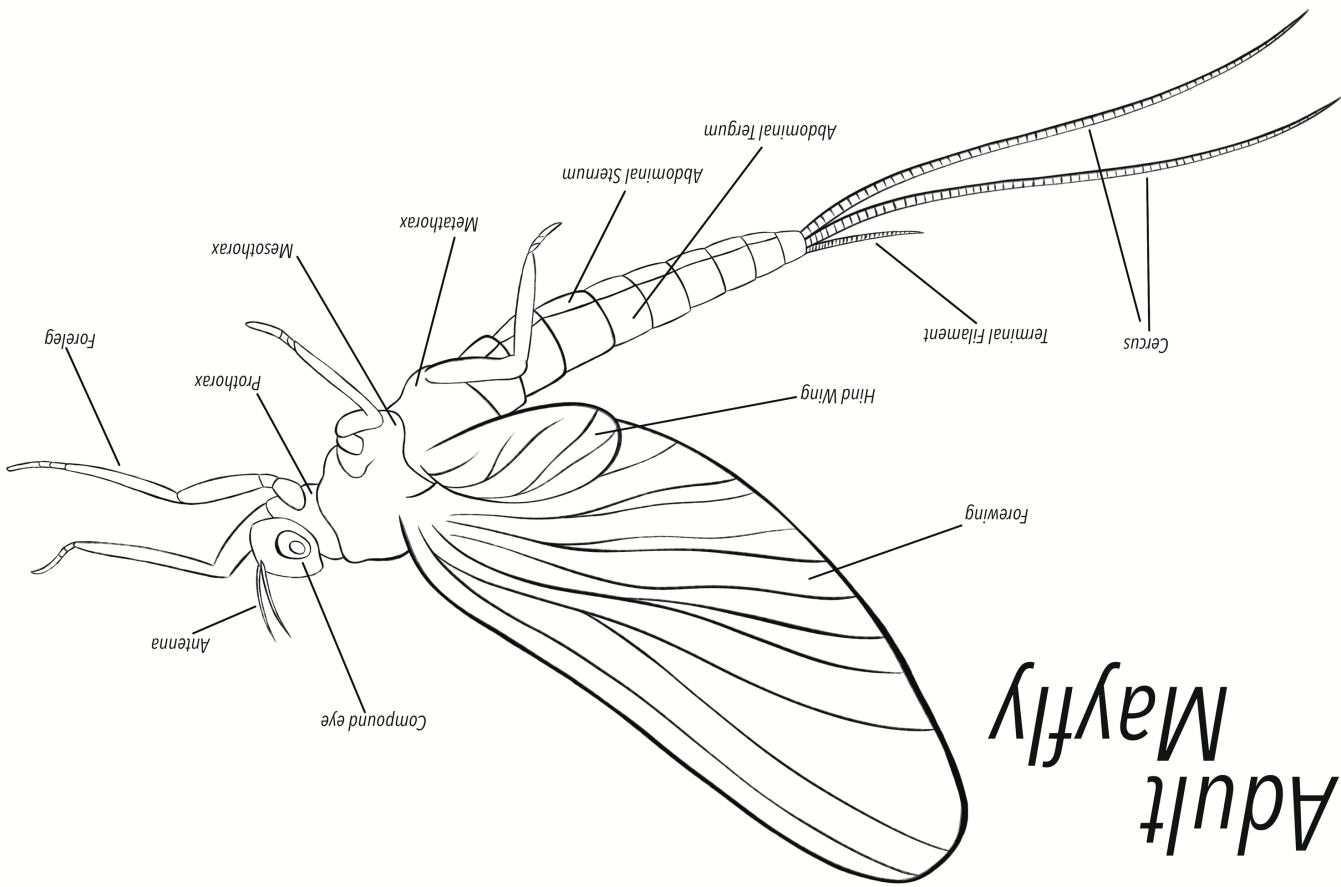
The official registration and financial information of the Mountain Watershed Association, Inc. may be obtained from the Pennsylvania Department of State by calling toll free, within Pennsylvania, 1 (800) 732-0999



**1414-B ICV Road
PO Box 408
Metcalf, PA 15462**

Non-Profit Org.
U.S. POSTAGE
PAID
Metcalf, PA
Permit No. 002

Visit our website: www.mtwatershed.com



**Adult
Mayfly**

Enjoy this coloring page drawn by MWA AmeriCorps, Morgan Moran!