

o back to topographic maps of Nanticoke from the 1900s, and to the south of the Hanover Section is a stream flowing from the Hanover Reservoir, named Espy Run. Unfortunately, when Earth Conservancy (EC) purchased the land in 1994, those maps were the only evidence of the waterway: Mining activity at the Bliss colliery had forced the stream underground through a void. Any remaining channel was filled with sediment and prone to loss of flow. The massive culm banks covering the site exacerbated the hydrological and environmental issues. (continued next page)





Espy Run, has been a priority of EC's since the beginning. Several early studies provided recommendations, chief among them reconstructing impaired stream channels, which would not only restore flow, but also prevent production of acid mine drainage downstream. In 2016, EC received a \$200,000 Brownfields Cleanup grant from the US Environmental Protection Agency (USEPA) to reconstruct 1,000LF of channel. In the ensuing years, USEPA awarded another \$887,500 to the project, and the PA Department of Environmental Protection (PADEP) awarded over \$1 million. In total, 6,245LF of channel was constructed, much of it using natural channel design. An impermeable clay liner (12,500cy) and rip-rap (8,775sy) prevents loss of flow underground. A dam was also breached and, as work was completed, 1,550 trees were planted to create a riparian buffer. EC also self-funded channel cleaning and a culvert replacement downstream to ensure new flows could be accommodated.

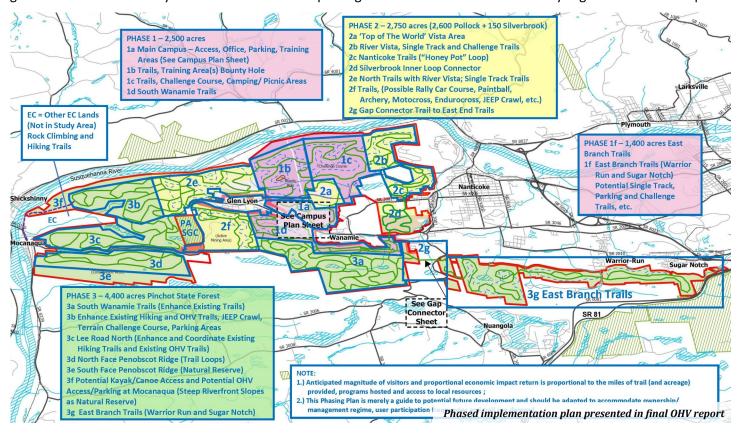
Repairing the Nanticoke Creek watershed, which includes



Finally, on a below-freezing day in December 2022, contractors removed the dirt berm that had separated Espy Run from its new channel. With EC staff and project partners looking on, water quickly started pooling, and then meandering and burbling down the hillside. It was unquestionably a momentous occasion, made even better by knowing the forested headwaters above — also on EC property — were in the process of being transferred into the PA State Forest System through ongoing work with North Branch Land Trust and the PA Department of Conservation and Natural Resources (PADCNR). The project, combined with the redevelopment of Bliss Bank, is a perfect example of EC's mission of environmental and economic revitalization.

NEWPORT TOWNSHIP OHV FEASIBILITY STUDY

Despite a surprise November snowstorm, over 40 people turned out for a public meeting at Luzerne County Community College to discuss findings from EC's study for an off-highway vehicle (OHV) recreation area in Newport Township. Attendees had a chance to speak with representatives from EC, LAIRD, WAR Landscape Architecture, and the Institute; and to review and comment on the final draft. There was general consensus as to the area's suitability for OHV riding; the value of all the outdoor recreation resources in the area; and the positive economic impact a facility could generate. Unsettled, however, was who would move the project forward. The study was funded by a PADCNR All-Terrain Vehicle grant under its Community Conservation Partnerships Program. Visit www.earthconservancy.org to view the full report.



Askam AMD Treatment System Reassessment | Thanks to a Growing Greener award from PADEP, EC was able to reassess its aging AMD treatment system at the Askam borehole. Completed by Tetra Tech, the study evaluated the system's processing ability and capacity, and made recommendations for improvements to the site and system to treat the discharge. Additional financial support was provided by a grant from ARIPPA.

Solar Feasibility Study | Based on increasing interest from developers, EC worked with LaBella Associates to assess ±6,000 acres of its remaining land for large-scale solar development. Several properties showed potential; more could be made suitable with reclamation. Moving forward with development, however, currently is stymied by legislative and regulatory hurdles. The study was supported by the Appalachian Regional Commission (ARC).

Housing Market Study | Funded through regionally-directed technical assistance by USEPA, EC sought to better understand the housing market in the Lower South Valley with the aim of encouraging residential development on its reclaimed properties. Both population and economic data confirmed a growing need for affordable housing, especially in light of the region's significantly older housing stock.

Hanover 7A Progress continued on the planning initiative to develop a public recreation area on the former mine-scarred site, including additional meetings by the steering committee and a public meeting. Amenities such as walking trails and playing fields were ranked highly. The final development plan, which will include several park design alternatives, will be released in 2023. The project was supported by funding from PADCNR.

EC's Board of Directors has undergone many changes over the past several years, beginning with the departure of members Fr. John Ryan, PhD, CSC, and Kathy Pape, Esq., in 2021. Also departing was Mark van Loon, Esq., who had served as EC's counsel with Rosenn, Jenkins, & Greenwald since 1994. And in 2022, after 24 years with EC's board – 12 of which were as chair – John McCarthy, Jr. stepped down. During his tenure, EC accomplished much; his insight, expertise, and leadership were invaluable to that success. In thanks, EC presented him with an original watercolor of the Susquehanna River at Mocanaqua by local artist Sue Hand. Succeeding McCarthy as chair is Kelly Ciravolo, Esq., of Anzalone Law Offices. Also elected were Thomas Lawson, PE, as vice-chair; Joseph Frank, Jr., as Treasurer; and Daryl Pawlush as Secretary. Additionally, EC welcomed two new members in 2021/22: Rev. Thomas Looney, PhD, CSC, President of King's College; and Michael Hirthler, founder and CIO of Jacobi Wealth Management. We are thrilled to have them join us, and look forward to the energy and experience they will bring to the EC team.





EC Testifies to PA Senate CERD Committee

In September, EC's Terry Ostrowski addressed the PA Senate Committee on Community, Economic, & Recreational Development (CERD) on the role of coal refuse recovery in EC's work. Removal of waste coal not only readies the land for reclamation; it also adds to local energy production through cogeneration. Over 20 million tons of material have been removed from EC sites; 570 acres of land were addressed. On projects like Preston, Huber, Loomis, and Bliss, this proved a critical first step to eventual redevelopment.

Inclusive Playground Opens

It was a picture-perfect day in October for a ribbon-cutting, celebrating Wilkes-Barre's new special needs playground in Kirby Park. Bright and welcoming – as attested to by the smiles and bustle of attendees – the playground includes 11 pieces of ADA-compliant equipment. EC was pleased to support the project in 2021 with a \$100,000 donation. As Terry Ostrowski noted, "The children's laughter is what really makes it worth it."



As featured in our cover story, the restoration of Espy Run unquestionably was a highlight of 2022. The stream had been diverted into old mine strippings by the coal companies in the early 1950s. The project not only reconnected the stream's headwaters to its lower reaches by reconstructing over 6,000LF of new channel; but also removed a small failing dam, restored a riparian buffer by planting of +1,500 saplings, repaired/replaced undersized culverts on Luzerne County Community College's campus, and prevented water from infiltrating into the underground mine pools. Prior to the project,

But there were other successes in 2022. I'm pleased to share that EC:

that water would resurface as AMD at our Askam facility.

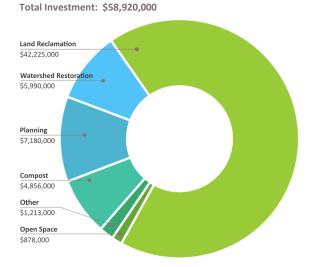
- Completed its much-anticipated Feasibility Study for an OHV park in Newport Township. Additional planning studies underway included a solar feasibility study for EC lands, an evaluation of the Askam AMD treatment facility, and a housing market study for the Lower South Valley.
- Saw redevelopment of the former Bliss Bank by Northpoint Development, on which 1.7 million square feet of logistics space was constructed. The first 500,000sF building is occupied by Safelite AutoGlass and R.C. Moore Trucking. Two other ribbon cuttings were held on what had been EC's Hanover 9 site in Hanover Township.
- Continued our investment in local parks and recreation with a land donation to Ashley Borough to expand Miners Memorial Park. The added area includes an old mine slope entrance that will be improved by the Huber Breaker Preservation Society. EC also made a financial donation to Newport Township for improvements to their municipal recreation park.

There's much more in the works for 2023. I look forward to sharing our progress with you.

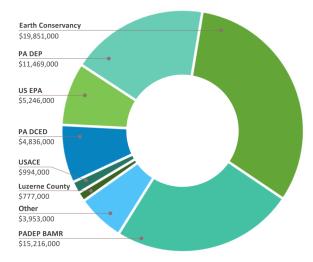
EC is a 501(c)(3) nonprofit dedicated to addressing the legacy impacts of anthracite mining in northeastern Pennsylvania. EC seeks to lead our communities in the reclamation of mine-scarred lands and streams, returning strong economic, environmental, and social value to the region by creating a well-planned, vibrant valley, protected by green ridgetops. To this end, EC develops sustainable land-use plans; leads reclamation efforts of damaged minelands and watersheds, and guides their reuse; commits to provide 10,000 acres for recreation and open space; partners with local communities to achieve our mission; and educates the community on our work.

Financial statements are audited annually by an independent accounting firm. Overviews of EC's project expenses and funding sources since inception are provided in the charts below.

Project Expenses through 2022



Sources of Funding through 2022



Financial Overview

ENVIRONMENTAL WORKFORCE TRAINING PROGRAM

2022 marked the fifth and final year of EC's Environmental Workforce Training (EWT) Program. Developed through a partnership with Penn State Wilkes-Barre and the region's four workforce development boards, the program sought to bring attention to local environmental problems and to cultivate a skilled workforce to help in addressing them. In total, 74 individuals graduated from the program, many of whom went on to find jobs in the environmental sector, working with engineering firms, testing laboratories, utilities, nonprofits, and even the PA Game Commission and PADEP. Others chose to continue their education at the college level. The professional – and often personal – journeys of participants has been inspiring to watch, and EC and its many community and corporate partners are incredibly proud to have been a part of them. The EWT Program was supported through major grants by USEPA and ARC, and additional funding from the PPL Foundation and the Robert H. Spitz Foundation.











2,030 acres reclaimed



8,677 green acres preserved

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Earth Conservancy is a nonprofit, 501(c)(3) corporation and is dedicated to conducting its affairs in compliance with all applicable local, state, and federal laws, regulations, and fiduciary responsibilities. Board meetings are open to the public and are held on a quarterly basis at 8AM at Earth Conservancy's offices, 101 South Main Street, Ashley, PA 18706. Call the office at 570.823.3445 for meeting dates and times.

