



SAN CONNECTIONS

SUMMER 2024

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Upcoming SAN Workgroup Meetings

Abandoned Mine Drainage Workgroup Meeting

Tuesday, October 8th, 10am - 12pm
Virtual on Zoom

Watershed Land Protection Collaborative Workgroup Meeting

Tuesday, October 29th, 10am - 12pm
In-person at Green Valleys Watershed
Association, Welkinweir in Pottstown, PA

[Click here to
RSVP](#)

Agriculture Workgroup Meeting

Wednesday, November 6th, 10am - 12pm
Virtual on Zoom

Stormwater Workgroup Meeting

Friday, November 15th, 10am - 12pm
In-Person at Wissahickon Trails in Ambler, PA
Registration will open soon



Upcoming SAN Events

SAVE THE DATE

SANnual Meeting

Friday, November 1st, 2024

Registration and Agenda to follow.



Abandoned Mine Drainage

Workgroup Surface Mine Tour

On April 23rd, the SAN AMD Workgroup met to learn about surface mining in Pennsylvania. Thank you, Dan Koury, SAN AMD Workgroup Co-chair, for organizing the tour and John Hadesty, Chief Operating Officer of Lehigh Anthracite Coal, for hosting us.

The group traveled to the Lehigh Anthracite Coal Office, where John Hadesty spoke with the group about the operation and the anthracite coal that is mined there. The 8,000-acre mine they manage is located partly in both Schuylkill and Carbon Counties and lies in a valley running between the Lehigh and Schuylkill Rivers. Lehigh Anthracite Coal Mines banded veins of carbon-rich anthracite coal, moving a considerable amount of earth and rock in the process. The high-carbon content of anthracite, compared to the more common bituminous coal, makes it ideal for use in steel production.



Following this introductory discussion, the group dispersed into trucks and other four-wheel-drive vehicles to navigate the rocky mine access roads and visit two sites. The first stop was the Little Italy site, where John Hadesty highlighted features of the surface mining process, including the distinct bowl shape of the mine and rock bands along the retaining walls. The second stop, at Job 88, featured a mine pool that discharges to a treatment site, which we later toured along Route 309. The legacy of abandoned underground mining in Schuylkill County has resulted in the leaching of acidic water and metals, which degrades water quality. However, in collaboration with state and federal agencies, modern coal facilities are playing a key role in remediating these issues.

Many thanks to John and the team at Lehigh Anthracite for answering our questions and to our partners who attended.

Agriculture

SAN Partners Learn about Agroforestry at Rosy Meadows Farm

On May 1, 2024, SAN Agriculture Work Group partners gathered at the picturesque Rosy Meadows Farm in Union Township, Berks County, to explore the farm's newly implemented riparian buffer and agroforestry projects.

Rosy Meadows Farm, a 113-acre preserved farm nestled within the Sixpenny Creek subwatershed, is managed by the Rosenbaum family. The farm benefits from the expertise of owner/operator Joe Rosenbaum, a member of the Berks County Conservation District board and local Farm Bureau, and his son, Eric Rosenbaum of Rosetree Consulting. The project aimed to transform 7 acres of formerly marginal pastureland into a productive, ecologically beneficial landscape. This effort included converting 3 acres of former pasture to traditional riparian buffer and 4 acres to agroforestry through the combined efforts of the Stroud Water Research Center, Propagate Ventures, and Trees for Graziers. The project was funded by the PA Department of Conservation and Natural Resources.



During the tour, attendees heard from Wills Curley of Stroud Water Research Center about the riparian buffer project and coordination of the agroforestry project. Participants observed distinct planting zones marked by color-coded shelters—3.3 acres were dotted by green tubes denoting riparian buffer plantings implemented by the Stroud Water Research Center team. The trees were planted at a density of 194 stems per acre, and per Stroud's scientifically tested method, a modified gravel base was applied around the base of each tree to protect the seedlings from rodent damage.



Harrison Rhodes and Jono Droege of Trees for Graziers, who served as subcontractors to Propagate Ventures on this project, spoke to the group about the implementation of the agroforestry project. At Rosy Meadows, white tubes were spaced at differing densities depending on the growth habit of the species contained within to facilitate future maintenance and harvesting. Groves of Chinese chestnuts, English walnuts, and hazelnuts have been established, each with varying timelines to fruit-bearing and commercially viable yield within 5-8 years from planting. Robbie Coville of the PA Department of Conservation and Natural Resources shared information and resources about the practice of agroforestry in Pennsylvania and spoke about the diversity of farm products and potential markets that could be accessed through the inclusion of agroforestry into the farm's management.



[Click here to see more photos](#)

Groves of Chinese chestnuts, English walnuts, and hazelnuts have been planted, each with varying timelines to fruit-bearing and anticipating a commercially viable yield within 5-8 years from planting.



Converting the seven acres of Rosy Meadows from marginal pasture to managed forestland adds significant benefits to the quality of Sixpenny Creek and the downstream Schuylkill River through reduced soil erosion and nutrient inputs, and the direct shading of the stream from the riparian buffer sections increases habitat value.

The agroforestry initiative at Rosy Meadows is a testament to the environmental stewardship of the Rosenbaums and to the power of collaboration, innovation, and dedication to sustainable farming practices among workgroup partners. Thank you to all of our workgroup partners who joined us on this beautiful morning near the intersection of Montgomery, Berks, and Chester counties!

Engagement & Stewardship

Schuylkill Sojourn: A Journey Through History, Nature and Community

Article and photos by Lucy Heggenstaller, 2024 SAN Sojourn Steward

I followed storms to Schuylkill Haven, a place I had never been before, for the Pre-Sojourn celebrations. Google Maps snaked me up and down mountain ridges and through coal region towns: Elysburg, Bear Gap, Strong, Lavelle, Buck Run, Minersville, Pottsville. I arrived with the rain and headed to the pavilion where things were “happening,” and was warmly greeted by Tim Fenchel and Elaine Paul Schaeffer of the Schuylkill River Greenways NHA. Friends of Schuylkill Haven Island Park were serving barbecued chicken dinners. Grateful to be there and grateful for warm food, I purchased dinner and started to meet my fellow sojourners as we ate, listened to a classic rock band, and waited for the sky to clear.

The sky did clear and remained clear for the rest of the week (though some of us wished for a cooling shower). Saturday morning kicked off by the river’s edge with the awesome Take It Outdoors team, a venture of the Schuylkill River Greenways. Their expertise in guiding us through the river’s riffles, chutes, and ledges was invaluable. Day one was an adventure, shooting the chutes under bridges, navigating around dams, and quickly realizing my child’s water gun was no match for real bilge pumps—but sojourners with bilge pumps were always willing to help.



That evening, I dined with locals in Port Clinton who reminisced about the days when the Schuylkill was seriously compromised—a stark contrast to the vibrant ecosystem we paddled through, teeming with woodland birds and even a sighting of a Bald Eagle.

Sunday brought twisty river bends, a portage around the Kernsville Dam, and plenty of wave trains. We paddled 18.5 river miles, but with all the weaving back and forth across the river, it felt like more. On Monday, we encountered an unexpected challenge—an overturned PennDOT dump truck in the river just downstream of our lunch stop. Thanks to the swift action of the cleanup crew, we continued without issue, learning about invasive crayfish from Dr. Erik Silldorff, who later entertained us by snorkeling with the youngest paddlers.



Each day brought new sights: American Mink, fawns, and raccoons along the riverbank. Tuesday's paddle was a scenic journey through a very scenic "tunnel of love," ending with a celebration of Schuylkill River Greenways' 50th anniversary.

As the week progressed, the heat intensified, and we welcomed the cooling sprays from the Take It Outdoors team. Wednesday's highlight was paddling into Lock 60, where the ever-jesting, kilt-wearing Lock Tender, Dan Daley, ensured a memorable experience.

On Thursday, we donned garlands in celebration of the Summer Solstice and enjoyed a program on freshwater mussels by Fairmount Water Works. The final day saw us navigating the busy waters near rowing crews, culminating in a lunch at the historic Philadelphia Canoe Club, where through-trippers were recognized for their persistence.

[Click here to see more photos](#)

The biggest lesson I took from a week on the river? "Go with the flow." Even if the flow takes you across the river, it's better than getting stuck on rocks. And if you do, then

- Shimmy off the rocks,
- Challenge yourself,
- Help each other out,
- Understand wave patterns,
- Yearn for more,
- Let the current carry you,
- Keep hydrated,
- Inspire stewardship,
- Leave no trace, and
- Live in the present moment.

If you haven't paddled the Schuylkill River, I highly recommend this trip. As a sojourner from Erie put it, "This Sojourn puts the icing on the cake."



Stormwater & Pathogens and Point Source

Tour of Flat Rock Dam and Manayunk Canal Improvement Project

On June 10th, 2024, the Schuylkill Action Network (SAN) hosted a tour of the Flat Rock Dam and Manayunk Canal, offering participants an in-depth look at the ongoing rehabilitation project. This event was organized through a collaboration between the Pathogens and Point Source Workgroup and the Stormwater Workgroup to highlight the combined efforts to address water quality issues in the region.

The event was divided into two parts. The first took place at the Venice Island Performing Arts Center, where Will Whalon and Lance Butler, scientists from the Philadelphia Water Department's Office of Watersheds, presented on the current conditions of the canal and the expected benefits of the Flat Rock Dam and Manayunk Canal Improvement Project. Attendees also had the opportunity to hear about the department's freshwater mussel research and observe mussels in the canal, an essential component of the project's ecological focus.

The second part of the tour involved a visit to the Flat Rock Dam, located approximately two miles upstream along the Schuylkill River Trail. Here, the Philadelphia Water Department's Construction Unit provided insights into



the structural work underway at the dam, offering a closer look at the construction efforts designed to revitalize the canal.

The Flat Rock Dam and Manayunk Canal Improvement Project is a comprehensive initiative aimed at addressing long-standing concerns related to water quality, aesthetics, and recreation. The canal has been disconnected from the Schuylkill River since the 1940s, resulting in significant sediment accumulation and deteriorating ecological conditions. The canal currently supports a stressed community of pollution-tolerant fish species, with various species exhibiting stunted growth. In addition, the canal experiences significant algal blooms and daily fluctuations in dissolved oxygen levels, sometimes leading to near hypoxic conditions detrimental to aquatic life.

A key aspect of the Flat Rock Dam Improvement project, funded by a \$21 million PennVEST loan, is the reintroduction of flow into the canal. This flow restoration is expected to produce substantial improvements, including a projected increase in flow rates from the current 3-5 cubic feet per second (cfs) to 50-100 cfs post-construction. This increase in flow will reduce the residence time of water in the canal, improve dissolved oxygen levels, and decrease the likelihood of harmful algal blooms - ultimately leading to a healthier aquatic ecosystem.

Construction and Future Benefits

The construction work, scheduled for completion in Fall 2024, involves a variety of structural and ecological enhancements. Among the key features are:

- **Debris Management:** A boom across the intake will collect debris from the river, improving water quality and maintaining the canal's functionality.
- **Safety Measures:** Fencing will be installed along the Schuylkill River Trail to prevent public access to the dam structure, ensuring the safety of visitors.
- **Green Infrastructure:** The project will incorporate three green infrastructure elements, including rain gardens and stormwater basins, to manage stormwater runoff and enhance the surrounding environment.
- **Historical Preservation:** The old dam structure will be preserved for historical purposes, with a new intake built in front of it to accommodate modern needs.

Freshwater Mussels and Blue Infrastructure

An additional component of the project is the implementation of blue infrastructure, which includes the introduction of freshwater mussels to improve water quality. The Philadelphia Water Department (PWD) is collaborating with several organizations, including the John Bartram Association, Partnership for the Delaware Estuary, Philadelphia Parks and Recreation, and the Academy of Natural Sciences to implement this initiative. Freshwater mussels are being cultivated in a lab for reintroduction efforts and will help PWD and its partners improve water quality as the filter-feeding bivalves reduce suspended sediment and excess nutrients such as nitrogen and phosphorous. Mussels currently in the canal are being monitored as part of a Before-After-Control-Indicator (BACI) experimental design, which will help quantify the impact of these mussels on water quality once flow has been reintroduced into the canal.



Partner Resources, Funding and Events



DEP is now accepting applications for 2025 Environmental Education Grants.
Deadline: November 15th



[2024 PA Healthy Lands Week runs from Sept 28- October 6th.](#)
[Click here to submit your PA Healthy Lands event.](#)

Need funding for your park, trail,
or conservation project?

Start here.

The Department of Conservation and Natural Resources (DCNR) is hosting its annual grant workshop virtually this November. Those interested in applying for grants in 2025 are strongly encouraged to attend. Get info on applying for grants to support:



Community
Recreation
Planning &
Development



Trail
Planning &
Construction



Land
Acquisition &
Conservation



Rivers
Conservation



Community &
Watershed
Forestry



State &
Regional
Partnerships

The statewide, virtual
workshop will be on:

**Thursday,
Nov. 7, 2024**

Register FREE at
events.dcnr.pa.gov
or by scanning this QR code:



Saturday, September 28th

CHECK-IN BEGINS AT 8:30AM for families

BEGINS & ENDS AT
POTTSTOWN
RIVERFRONT PARK

4-MILE FAMILY FUN RIDE!



Families receive half
price on same day
admission to the
Pottstown Children's
Discovery Center

Register today!

Start the day with Ride for the River, then enjoy a
free beverage and food item at Can Jam at Sly Fox!



AGRICULTURE & NATURAL RESOURCES

CAREER & JOB FAIR

NOVEMBER 14, 2024 8:30-11:30 AM
Leesport Farmers Market, Leesport, PA

FREE and open to high schoolers, college students, and adults of all education levels!

- Exhibitors include: local companies, government agencies, and colleges.
- Opportunities for **internships, volunteering, job shadowing.**
- Current or future employment opportunities.

*Ag is more than farming
It includes*

business engineering
food safety horticulture environmental science
animal production nurseries
marketing veterinary medicine
agricultural research entomology
crop production agronomy natural resources forestry
conservation economics
robotics biotechnology food processing
wildlife management meat processing turf management
finance education

Save THE Date

Look for more information this fall
Questions? Contact : deptofag@berkspa.gov or 610-378-1844

Pasa's 2025 Sustainable Ag Conference is being held on February 5th-7th at the Lancaster County Convention Center. Wills Curley of Stroud Water Research Center, Propagate Ventures, and Ben Davies of Wild Fox Farm (Barto, PA) will be speaking at 1:30pm on the 7th for a session entitled "Agroforestry Success: How Partnerships Scaled Working Buffers" and share some insights into Wild Fox Farm's hazelnut agroforestry planting as well as their riparian buffer.



Delaware Estuary Science & Environmental Summit Celebrating 20 Years!

February 11-12, 2025

Chase Center on the Riverfront

815 Justison St

Wilmington, DE 19801

The Partnership for the Delaware Estuary is seeking abstracts for the 2025 Delaware Estuary Science & Environmental Summit. Our theme is Bridging the Gap Between Science, Policy, and Action.

Since 2004, this biennial event has brought together 300+ scientists, managers, educators, and restoration practitioners to share knowledge and build linkages to strengthen environmental protection, restoration, and resilience in the Delaware River Basin and beyond.

CALL FOR ABSTRACTS

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