

WATERSHED NEWS

November 2022

LITTLE SEWICKLEY CREEK WATERSHED ASSOCIATION P.O. BOX 183 LEETSDALE, PA 15056

www.lscwatershed.org

Note from the President 2022

Barbara Carrier

The purpose of the Little Sewickley Creek Watershed Association is to protect and to conserve the natural beauty and the environmental health of Little Sewickley Creek and watershed. For the past five years, the Associations' primary focus has been for Little Sewickley Creek to be declared as an Excellent Stream by the PA Department of Environmental Protection. A designation which protects all existing uses of the stream, guards against unlawful discharges and other protective rights, making it unique in this area. To this end, the association has had two recent, very detailed studies about the stream's water quality and surrounding flora. These studies were finished in 2022 and the essential question for the board was what to do with all this data to make changes since the watershed, unlike a land trust, does not own any land along the stream.

The second study looked in depth at twenty sites and narrowed down to specific areas of concern. Not being a scientist, the data and study conclusions are now in terms that one could easily comprehend. LSCWA has prepared Powerpoint presentations summarizing the results of the study and shared these presentations with the appropriate municipal officials. The LSCWA continues to support education about the interrelationships among our surface waters, ground water, and plants, by supporting the QV Creekers High School Program and Summer Camp. This year a new Creekers program will be started for Middle Schoolers.

The watershed encompasses over 26 miles of stream and tributaries. The Board recognizes the challenges of new development and field changes that may affect the quality of the stream. We have attended school board meetings and Planning Commissions to ensure that this treasure remains clean and that the plants and wildlife along the banks and in the water are safe

If you would like to contribute to the LSCWA, you can send to "Donations" at P.O. Box 183, Leetsdale, PA 15056.

Susan Craig in Memorium

Susan Craig, who dedicated 29 years of service to Little Sewickley Creek Watershed Association (LSCWA), died on October 14, 2022. She considered her time with the LSCWA as her proudest achievement as she was able to combine her love for teaching with her love of nature.



Susan served as vice president

of LSCWA from 1986 to 1990 and president from 1990 to 2015, During her 25 years as president, the LSCWA became steward of 169 acres of land in the watershed and doubled its financial endowment. Susan faithfully published an annual newsletter mailed to residents of the Sewickley Valley communities which highlighted the accomplishments and projects of the association. These included efforts to promote stormwater management and recycling, a Summer Discovery camp for fourth and fifth graders, a QV Creekers program for high school students, and specific initiatives addressing threats to the environmental health of the watershed.

Susan graduated from the Masters School, Dobbs Ferry, N.Y., in 1962, Denison University in 1966 and earned an MA in Education from Xavier University in 1970, becoming a teacher at private and Catholic elementary schools early in her career. Susan was passionate about supporting community organizations. She served as president of the Child Health Association of Sewickley. She was also a member and president of the Village Garden Club, and a long-standing member of the Grapevine Garden Club. She was named "Woman of the Year" by the Sewickley Herald for her tireless conservation efforts in the community.

Thank you, Susan, for your many years of leading LSCWA in its mission to protect and conserve Little Sewickley Creek and its watershed.

Summer Discovery Camp 2022

Chriss O'Lare, Secretary

Campers came back in full force this summer! Fifty-four campers joined us to explore Walker Park. The big attraction as usual was the clear, cool stream. Large storms were absent during our two weeks of camp so Little Sewickley Creek stayed calm and inviting. It is always rough when we have to tell the campers we will be doing activities next to the stream all day but can't go in because the flow is too high or too fast. Some of our interesting finds this summer included a frog, a large sucker fish and a spotted salamander.

As cooperative as the stream was, the night sky was stubborn. During both of our night programs, the sky was partly cloudy to cloudy so it was a bit tricky to see everything we would have liked. But we were still able to play Octopus in the Weeds (a crowd favorite) and Bat and Moth (in which campers and one police officer who stopped by simulated catching moths with echolocation).

Don and Rett King invited us back to their lake for our Friday finale. The campers are often amazed that people live in such an amazing location and that they are invited to spend the morning there. As we explored this upstream part of the watershed, campers learned about plants and wildlife on the property with a special emphasis on the macroinvertebrates that support the fish and other vertebrates in the lake. After the kids got over their disappointment of not being able to fish, they become fascinated with looking for the beetle larvae, small crayfish, and cranefly, dragonfly, and damselfly nymphs.

Any student who is presently in 3rd, 4th, 5th, or 6th grade is eligible. Camp runs in two separate sessions each June.





Quaker Valley Creekers

Gretchen Barbera, Environmental Educator, FHNC

The Quaker Valley Creekers, established in 2009, is an environmental science internship for high school students in Sewickley. The course is in partnership with Creek Connections at Allegheny College, a work-study program that brings hands-on environmental science to schools in Northwest Pennsylvania.

The Quaker Valley Creekers spent the 2021-2022 school year using chemical tests to determine the water quality in the Little Sewickley Creek Watershed. Students tested nitrate levels, dissolved oxygen, phosphates, and pH upstream and downstream of the new high school location. These tests were to help students better understand the impact that development and construction have on watershed ecosystems in their community.

Students also had the opportunity to learn about the watershed from guest speakers such as Allegheny Conservation Districts, Allegheny Land Trust, Slippery Rock University, and independent environmentalists in the area. At the end of the year, Quaker Valley Creekers participated in the Creek Connections symposium, where they showed off independent projects. Each student produced a project that showed off an interest or a question they had about environmental science. Topics ranged from Tardigrades in Fracking water to the effect of temperature on freshwater plants. Due to COVID, the research symposium was online. Follow the link to view student research projects, college student research, and environmental organizations: https://sites.google.com/allegheny.edu/creekconnections2022symposium

We hope to have another great year learning about the Little Sewickley Creek Watershed and our role in keeping it healthy! If you or someone you know would like to help out, please feel free to contact gretchen@fhnc.org!

LSCWA Water Quality Report and Summary

John Orndorff, Treasurer

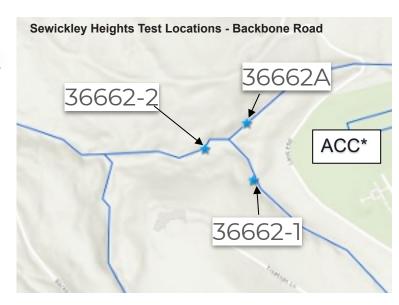
In 2017 Little Sewickley Creek Watershed Association (LSCWA) engaged CEC (Civil and Environmental Consultants, Inc.) to coordinate a field watershed assessment of the physical, chemical, and biological conditions in the streams of the Little Sewickley Creek watershed. Based on the results of this watershed assessment and on data collected from a previous survey in 1981-82, LSCWA engaged CEC to do a water quality study of selected streams in the watershed.

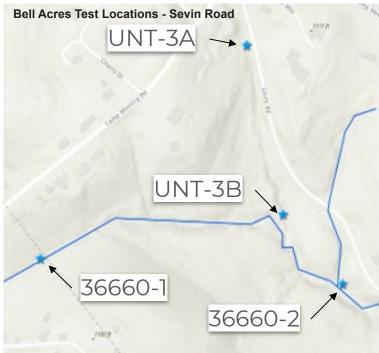
The water quality study began with a preliminary survey of water samples taken from 115 separate locations in the watershed. CEC then selected 20 of these sites where specific conductance was abnormally high for more detailed analysis. High specific conductance is an indicator of possible water pollution. CEC collected water samples from each of these 20 sites four times over the course of a year (September & December 2020, and March & June of 2021). An independent laboratory tested all samples for 17 different pollutants. CEC analyzed the results and submitted a report to LSCWA in July 2021.

Of the twenty sites studied, eighteen occurred in clusters at the headwaters of tributaries to Little Sewickley Creek: four in Acorn Park (Franklin Park Borough), four along upper Sevin Road just below Camp Meeting Road and three in Devil's Hollow below Witherow Road (Bell Acres Borough), four along Fern Hollow and Scaife Roads at their intersections with Blackburn Road and three along Backbone Road below Allegheny Country Club (Sewickley Heights Borough).

Chloride and total dissolved solid levels and fecal coliform bacteria counts exceeded the state water quality standards in two or more of these site clusters. Road salt mixing with precipitation and entering streams would be the most likely source of excess chloride and total dissolved solids. High fecal coliform counts suggest a leaking sewer line or poorly draining septic fields. Multiple sites showed elevated levels of nitrates, phosphates, anionic surfactants (used in detergents), and high chemical oxygen demand. Possible sources of these pollutants would be runoff containing turf fertilizers and leaking gray water from neighboring properties.

More detailed summaries of the results of the LSCWA quality study including site locations, specific data on the pollutants analyzed, and possible remediation strategies are available on the association website (lscwatershed. org) under "Data Bank, Recent Studies."







Water Report Continued...

Sample data from the Water quality reports showing excess over Pa State Water Quality standards (3/21 & 6/21)

On multiple occasions water samples in Bell Acres at UNT-3B exceeded the Chap. 93 PA State Water Quality Standards for chloride (250 mg/L), and total dissolved solids (750 mg/L).

Date	Chloride	Chloride Excess %	Total Dissolved Solids	TDS Excess
Sept '20	399	+60%	750	-
Dec '20	230	-	670	-
Mar '20	695	+178%	1300	+73%
June '20	559	+124%	1200	+60%

Water samples in Franklin Park at UNT-1A consistently exceeded the Chap. 93 PA State Water Quality Standards for chloride (250 mg/L), and total dissolved solids (750 mg/L).

Date	Chloride	Chloride Excess %	Total Dissolved Solids	TDS Excess
Sept '20	331	32%	890	19%
Dec '20	311	24%	820	9%
Mar '20	452	81%	960	28%
June '20	371	49%	970	29%

Water samples in Sewickley Heights at 36662-1 exceeded the Chap. 93 PA State Water Quality Standards for aluminum (0.75 mg/L) in September 2020 and chloride (250 mg/L) in September 2020 and June 2021.

Date	Aluminum	Aluminum Excess %	Chloride	Chloride Excess %
Sept '20	0.85	13%	268	+7%
Dec '20	0.067	-	199	-
Mar '20	0.077	-	164	-
June '20	0.28	-	260	+4%

The our next Members meeting is scheduled for January 9th - website at www.lscwatershed.org

Little Sewickley Creek Watershed Association 2022 Budget

John Orndorff

OPERATING INCOME Membership dues/contributions Summer Discovery camp fees Investment Account	\$1,500
OPERATING EXPENSES Program	\$11,725 \$9,500
Summer Discovery Camp	\$4,050
QV Creekers	\$3,250
Allegheny College Creek Camp	\$1,500
Website	\$750
Administration	\$225
Postage	\$50
P.O. Box Fee	\$100
POWR Membership	\$50
Other	\$25
Fund Raising	\$2,000
Newsletter	. \$2,000

2022 Current Board Members

Officers

President: Barbara Carrier, Rep. Glen Osborne

Vice President: Diana Morrow, Rep. Sewickley Heights

Secretary: Chriss O'Lare, Rep. Franklin Park

Treasurer: John Orndorff

Members

- David Case, Rep. Leet Township
- Steve Downing, Member
- Meg Forsyth, Member, Rep. Bell Acres
- Joseph H. Hajnas, Member
- Mary Kirsch, Member
- Roy Kraynyk, Member, Liaison with Allegheny Land Trust
- Joe Marrone, Liaison with QVRA and QVHS construction
- Deb Connor, Rep. Leetsdale
- Chris Popovic, Trail Advocate; Website, Newsletter and Fundraising
- Steven Pukansky, Member
- David Quatchak, Member
- Harton Semple, Member
- Gary Smith, Rep. Edgeworth