



**LITTLE SEWICKLEY CREEK
WATERSHED ASSOCIATION**

(LSCWA)

P.O. BOX 183 LEETSDALE, PA 15056

www.lscwatershed.org

NEWS FROM THE WATERSHED

OCTOBER 2019

MOVING FORWARD WITH PROJECTS IDENTIFIED THROUGH WATERSHED ASSESSMENT

In early 2017, due to concerns about sedimentation and decreasing biodiversity within Little Sewickley Creek (LSC), the LSCWA engaged the services of Civil and Environmental Consultants, Inc. (CEC) to coordinate and supervise the first complete assessment of the creek and its tributaries ever performed by professional environmental consultants.

Many people have asked us if the assessment was done to support a new application to the Pennsylvania Department of Environmental Protection (PA DEP) to designate LSC as "Exceptional Value Waters". The simple answer is "No". While we supported the application done several years ago by LSCWA Board member Ed Schroth and Nate Reinhart, a graduate student at Duquesne University, and we were disappointed that it was not approved, the main assessment goals for CEC were: 1) to identify existing impairments within the creek system that were affecting water quality; 2) to prioritize these impairments by severity; and 3) to make

recommendations that would improve the health of the creek and its watershed.

At the conclusion of the assessment, CEC delivered its report in early fall of 2018 (see **Summary** at <http://lscwatershed.org/>).

The assessment provides objective, watershed-wide baseline data. Going forward, we can refer back to this baseline data to evaluate the impact of various activities on the stream.

The report also included general recommendations – as well as specific ones for improving the physical, chemical, and biological conditions in the creek. With this "road map" in hand, the LSCWA began the work of developing a list of priorities for future restoration projects and activities that would enhance the creek's water quality and encourage biodiversity as well as educate the community on how we can all be part of this effort. Work has begun too on researching grants that would help alleviate costs for some of the larger projects.

Progress has been made on the following CEC recommendations:

1. *Develop a watershed-wide water-quality monitoring program to update historic data and identify potential areas or discharge points of concern – and implement a watershed-wide water sampling and analysis program.*

The LSCWA developed a Request for Proposal that was sent to environmental consultants in the area. Three consultants responded with proposals outlining the tasks and costs associated with the development of a watershed-wide water-quality testing and monitoring program for LSC. A committee of the LSCWA Board has reviewed the proposals and will be making a recommendation to the Board at the October 2019 meeting.

2. *Initiate or continue investigations into previously identified (gas) wells in the watershed and evaluate potential effects on streams.*

In May 2019, we began working with the Natural Sciences Department at Robert Morris University and the PA DEP, to do background searches on three abandoned wells near LSC. A geochemical survey will test for hydrocarbons for two of the wells located on land. Students will conduct a macroinvertebrate study upstream and downstream for the one well located in the water. The work will continue this fall, and we are hoping to have results later this fall or early spring.

3. *Maintain existing Little Sewickley Creek Watershed Online GIS Database.*

CEC is working with our Board to transfer the watershed assessment GIS database to an ESRI-hosted website that could then be accessed by researchers and other interested persons through our website.

4. *Designate Walker Park along with the main branch of the creek and two of its smaller tributaries as a demonstration area for various stream- and watershed-enhancing activities and community education.*

LSCWA Board members will be meeting with representatives of Edgeworth and Leet Township in the near future to flesh out the details of such an important community project.

Sewickley Heights Borough, one of our partners on the assessment project, has developed a list of projects based on the CEC recommendations to improve the health of the creek and its watershed, but unfortunately the record rains this spring and summer have hampered their progress. We applaud their willingness to address impairments within their Borough, especially as almost 100% of the Borough is located within the LSC watershed.

We will continue to update you on progress made on the above projects and will keep you informed on new efforts made to protect and preserve the health of this special creek and its watershed.

OIL SPILL IN LITTLE SEWICKLEY CREEK - MAY 2019

On May 16, 2019, the LSCWA received a complaint of a strong odor coming from LSC, so several of our board members immediately began investigating. Through phone calls, site visits, and other communication with Woodland Swim Club (WSC), the PA DEP, and Edgeworth Borough, we learned:

- On Sunday 5/12/19, volunteers working on the pre-season clean-up at the WSC noticed members of the Sewickley Fire Department investigating a report of an oil sheen in LSC. When asked if the spill originated from the WSC property, the Fire Department told the Club's board president that the spill originated upstream from the Club.
- The fire department responded and installed barriers/absorption logs in the creek and began investigating the source of the sheen. PA DEP and the appropriate hazmat responders were notified.
- On 5/15/2019, WSC conducted their own investigation and determined that the spill had come from the Club's fuel storage tank. According to the oil company who inspected, the tank was vandalized, and the plug on the tank had been removed, releasing an estimated 480 gallons of heating oil onto the ground and eventually into LSC.
- WSC responded quickly and engaged the services of Civil and Environmental Consultants, Inc. (CEC) to evaluate the extent of the spill and coordinate the required remediation.
- Working in cooperation with the PA DEP, CEC took the following actions to mitigate the spill:
 - Deployed additional absorbent logs in and near the stream.
 - Vacuumed out an underground water retention tank, located within a retention pond, where some of the oil had accumulated. The pond was deepened, and the outlet piping was modified to create an oil/water separator. Additional absorbent logs were placed in the tank to continuously collect and remove the floating oil.
 - Covered the fuel storage tank to protect the area from rain and reduce infiltration into the ground.
- CEC conducted an investigation to evaluate the extent of the spill into the soils, groundwater and creek:
 - Installed one soil boring, two test pits and three shallow piezometers.
 - Conducted a closed-circuit TV inspection of the water retention tank, pond and clay outlet pipe that discharged into the stream.
 - Sampled and analyzed the Club's on-site water well.
- WSC has implemented the following preventive measures:
 - Installed a new 300 gallon above-ground heating oil storage tank with secondary containment and a rain shield.
 - A security fence will be installed around the tank.
 - Instituted a routine maintenance/inspection program of the tank.
- As required by the PA DEP, WSC submitted a Remediation Status Report to the PA DEP on June 21, 2019. It is currently under review by the PA DEP.
- In the report, CEC asserts:

"The absence of petroleum compounds at the water well, test borings and test pits indicate that the hydrocarbons are following a narrow flow path and are being drawn into the water tank and retention basin.....Since none of the test pits or soil borings encountered any evidence of petroleum compounds, it is likely that most, if not all, of the oil that is reaching LSC is entering via the RBDP" (which is the terra cotta outlet pipe from the water tank/retention basin).
- Until otherwise directed by the PA DEP, CEC will continue to monitor the site and change out the absorbent logs within the creek, water tank/retention basin and out pipe as needed.
- In accordance with their MS-4 ordinance, Edgeworth Borough fined WSC \$600 for the unlawful discharge.

The spill was an unfortunate, preventable incident, but the LSCWA is grateful for WSC's quick and thorough response. We reached out to Rebecca Earlewine, president of the Board of WSC, to offer our support and assistance. Rebecca kept us informed and encouraged us to talk directly with CEC, PA DEP and Edgeworth Borough officials.

SUMMER INTERNSHIP COLLABORATION: SEWICKLEY HEIGHTS BOROUGH PARK AND LSCWA

For the second year, the LSCWA and Sewickley Heights Borough Park joined forces to offer a summer internship experience for a local college student. College junior, Christian Tobias (Hawaii Pacific University, 2021) logged over 270 hours with April Claus working to maintain and repair trails and stream crossings damaged by torrential spring and summer rains. Christian also enjoyed a mini-study on box turtles in our watershed, estimating that at least 11 different box turtles have been seen in our watershed. "Sir Shellton John" and "Mishell Oboxma" are favorites.

We have just received a career update from last summer's LSCWA intern, Matthew McCurdy. Matt has just secured a full time position to work as a reserve technician for the American Prairie Reserve (APR). The APR is a Montana-based nonprofit that started to assemble land in 2004 to glue together a vast mosaic of existing public and private lands so that the region is managed for wildlife conservation and public access. APR hopes to be a catalyst in the effort to bring many wildlife populations back to significantly larger populations than currently exist in the region. Matt will be supporting wildlife managers with maintaining the large mammal species on the preserve, including monitoring the health and habits of the American bison herd. His work will be physically demanding and will involve long hours outdoors. We know he is up for the challenge! Congrats Matt! Check APR out at <https://www.americanprairie.org/our-story>.

BIG SEWICKLEY CREEK WATERSHED RIVERS CONSERVATION AND STEWARDSHIP PLAN UNDERWAY

As members and supporters of the LSCWA, you are aware of the benefits that a watershed association can provide. The decades of research, advocacy, and monitoring land uses for impacts to water quality have all helped to sustain the LSC watershed's health as a PA DEP designated High Quality Watershed – which is just one step below Exceptional – the highest rank.

The neighboring Big Sewickley Creek (BSC) watershed is unfortunately not so lucky to have a watershed association to give it a "voice". Creating an association for the BSC watershed is just one goal of the BSC Watershed Rivers Conservation and Stewardship Plan currently underway with financial support from PA DCNR, Foundation for PA Watersheds, Sewickley Community Foundation and the municipalities of Ambridge, Bell Acres, Economy, Franklin Park, Leet, Leetsdale and Marshall – all of which have representation on the project Steering Committee.

Other goals include an assessment of the animal and plant diversity, water quality, land use patterns and local zoning. Early results indicate that the 46-square mile watershed has a better than average bird diversity for a watershed of its size. Many species are migratory making their way up the watershed from the river. Duquesne and Chatham Universities have integrated the watershed into their fall biology curriculum having students electro-fish to identify aquatic species.

You can help too! A public survey is ongoing at surveymonkey.com/r/G5NT9GL. You do not have to live in the watershed to respond to the survey. To date, about 100 people have responded which will help to inform the process and shape recommendations. So please share your thoughts and concerns about the watershed.

If you are interested in learning more, please contact, Project Manager Alyson Fearon at Allegheny Land Trust, 412-741-2750 or afearon@alleghenylandtrust.org.

BEAVERS CREATING HEALTHY HABITAT

Over the past 33 years, the LSC watershed has been home to several different beaver colonies. Their dams create productive freshwater wetlands for fish, turtles, frogs, birds and other mammals. In addition, the wetlands help to mitigate the effects of droughts and floods, minimize erosion, and raise the water table. The dams collect silt, and microbes in the wetlands help to breakdown toxins, so water flowing downstream is cleaner.

In the LSC watershed, beavers eat tubers, apples, leaves and green bark from willows. Once their food supplies dwindle near their ponds, they construct canals to other areas and move on as these areas are flooded also.

Steve Downing, one of our board members, has been visiting colonies since 1998! The current colony started in August of 2018, and babies (kits) were born in spring 2019. Steve and Eileen Hencher set up two motion detecting game cameras to track their progress as their dam grew to 5 feet tall. The strong storms this spring and summer destroyed parts of their dam and lodge but, the beavers have been as busy as ever making repairs and stocking their winter cache of food.

To learn more about the LSC beavers, stay tuned (on <http://lscwatershed.org/>) for a fall beaver hike led by Steve where he will also show many of the game camera pictures.



A wood duck enjoys new habitat near the lodge

ANNOUNCEMENT of ANNUAL MEETING

The Annual Meeting of the LSCWA is open to everyone in our community.

**The meeting will be held on Tuesday, December 3, 2019, at 7:00 PM
at the Fern Hollow Nature Center, 1901 Glen Mitchell Road, Sewickley, PA 15143**

AGENDA

Approval of Minutes from 2018 Annual Meeting
Approval of Treasurer's Report for Fiscal Year-2019
Approval of Budget for 2020

Election of officers and members of the Board of
Directors for the 2020-2021 term

Anyone who is a paid member of LSCWA may vote on the above
agenda items.

President's Report of LSCWA accomplishments in 2019
Report on Allegheny College Creek Camp

SUMMARY OF OPERATING EXPENSES INCURRED IN 2019 BY THE LSCWA (through Oct. 2019)

Summer Discovery Day Camp	\$3,560
Fern Hollow Nature Center	\$4,550
QV Creekers Projects; Allegheny College Creek Camp Scholarship	
Summer Intern	\$1,500
General Liability Insurance	\$380
Administrative costs	\$2,250
Including website and newsletter	

STILL GOING STRONG

As stated in our by-laws: *The purpose of the Association is to protect and to conserve the natural beauty and the environmental health of Little Sewickley Creek and its watershed (the Watershed) in Allegheny County, PA.*

Our by-laws also specify that our purpose may be accomplished by:

Educating the general public, and in particular local students, about the interrelationships among our surface waters, ground water, plants, animals, and people that share the resources of our Watershed.

Sponsoring and supporting – financially or otherwise – projects, programs, and initiatives that promote the protection and conservation of the Watershed.

We are proud of accomplishing these goals with a few programs that have been going strong for a number of years:

	SUMMER DISCOVERY CAMP*	QV CREEKERS	BRADLEY CENTER**
Year Started	1994	2009	2017
No of kids served	1350	123	920
Core Activities	Catching critters in the creek, creek walks, games that teach ecological concepts (water cycle, animal adaptations, predator/prey relationships)	Fish shocking and stocking, stream clean-ups, participation in annual Creek Connections conference, Amphibian Habitat Restoration project in Bell Acres	Plankton, mammals, rocks, minerals, fossils, owls, maple sugaring, fishing together in King’s Lake and forming warm friendships!
New in 2019	Hiking on the new Oriole Trail at King’s Lake	Bird inventory for SH Park and litter survey	Butterflies and landslides

* To register for *Summer Discovery* in 2020, look for info on our website (<http://lscwatershed.org/>) in March. Regardless of where they live, students who are presently in grades 3, 4, 5, or 6, are eligible to join us!

**Our Bradley Center program is funded by a generous three-year \$12,000 grant from the Thomas Marshall Foundation. Thomas Marshall, the former chairman of Aristech Chemical Corp., started the foundation in 1994 to improve the quality of life for women and children. The Bradley Center is a licensed, private academic school for elementary and secondary students who have severe trauma histories and mental health diagnoses.



QV Creekers fish shocking with Eric Chapman, WPC (above)



Summer campers at the water trough on the new Oriole Trail (right)

INVITATION

The Board of Directors of the LSCWA invites you to work with us on current and future projects. Please get in touch through our website (<http://lscwatershed.org/> -Join and Volunteer), if you are interested in volunteering to help on projects, if you have ideas for future projects, and/or if you wish to be a member of the LSCWA

LSCWA was organized in 1972. While we have been successful in funding specific projects through grants, we have sustained our stewardship through our membership and donations. We appreciate your continued support. Please consider spreading the news of our mission to friends in our community so that our membership can grow.