

Natural Allies: Craft Brewing and Source Water Protection

By Ellen Kiley

When you listen to beer enthusiasts discuss their favorite brews, you'll hear them mention the bitterness and aroma of the hops, the caramel or nutty notes of the malt, or the interesting flavors added by a special ingredient like fruit, honey, or the exotic-sounding grains of paradise. But arguably, the most important ingredient in your favorite local microbrew is... water.



Image courtesy of craftbeer.com

Craft brewing is a growing phenomenon in the United States. According to the [Brewer's Association](#), the majority of Americans live within 10 miles of a brewery, with over 2,300 microbreweries operating in 2012 and 1,500 more getting ready to open their doors¹. Like everyone else, these small brewers rely on local water sources to be clean and reliable, whether that water comes from a private well or a municipal supplier. A good brewer cannot start a batch of beer without considering the quality of all raw ingredients, and that awareness makes brewers and source water protection advocates into natural allies.

In Berks County, the [Saucony Creek Brewing Company](#) and the [Schuylkill Action Network](#) (SAN) have formed just such a partnership. Even before the brewery opened for business on the banks of the Sacony Creek (Saucony is a historical spelling), Berks County Conservancy Ecologist and craft beer fan Larry Lloyd brought members of SAN together with Matt Lindenmuth, the owner and brewmaster.

"Water is our main ingredient in beer," says Mr. Lindenmuth, who moved from a career as a world-traveling professional skater and snowboarder to opening his business in Kutztown, his hometown. "We brew off of a well at the brewery, so clearly we care about the natural water sources being provided to the area." Mr. Lindenmuth came up with a plan and a product -- Stonefly IPA beer, with a percentage of profits on each beer sold donated to SAN to fund source water protection projects in the area.

The stonefly is sensitive to pollution and is only found in clean streams, making it the perfect mascot for the project.

What is a stonefly? Why Should We Care?

The stonefly is a soft-bodied winged insect that appears for a few weeks in spring or summer near clean, fast-moving streams or oxygen-rich lakes. Stoneflies have very low tolerance for water pollution. As a result, their presence in a stream is usually an indicator of good or excellent water quality.

Mr. Lindenmuth said that some attendees at the recent Philly Beer Week sought out his offering specifically because of the conservancy component. "It's two different worlds, but there's a little bit of crossover there. I definitely notice that a lot of those involved with water conservation are in turn, craft beer enthusiasts and vice versa."

Tom Davidock, the SAN Coordinator, is enthusiastic about the Stonefly IPA project: "One of the great things about this project is that it allows us to reach new audiences with our message about protecting our important water resources. Microbreweries are a great way to do this because they're typically small, flexible, and willing to try new things. The microbrewery customers are also great because they seem to be willing to take that extra time to learn a little more about the beer that they're drinking. People who drink beer like Stonefly IPA typically pay more attention to how the beer is made, its

ingredients, characteristics, and other small details. That works great for us when we attach a source water protection message to it. I think people like to know that they're helping to protect the stream by purchasing the beer. We like to say: 'protecting Schuylkill Waters one beer at a time'."



A coaster for Stonefly IPA provides information on the Schuylkill Action Network.

Saucony Creek Brewing Company is still young, barely a year old, with a bottling line that began operation in June of this year. In addition to Stonefly IPA, the brewery produces a variety of other beers that all embrace Mr. Lindenmuth's "farm to pint" philosophy, sourcing as many of their ingredients from local farms as possible. Bottles of Stonefly IPA will soon be available throughout the state (and possibly beyond), and every purchase will benefit SAN.

To other brewers just getting started, Mr. Lindenmuth offers the following advice: "Do exactly what we did. Team up early and learn as much as you possibly can about the local water supply. Any brewer knows

your water profile is one of the heaviest and most contributing factors to the outcome of your beer. Team up, and let the relationship benefit both of you."

On the other side of Pennsylvania, near Pittsburgh, [Full Pint Brewing Company](#) has been in operation since 2009. Located in North Versailles in a converted bus repair garage, it supplies Pennsylvania, Ohio, and Florida with a line of seven year-round beers with a few seasonal offerings. The brewery gets its water from the Municipal Authority of Westmoreland County, and must dechlorinate and filter chloramines from it before it can be used for brewing (steps every home brewer must take as well).

Full Pint Brewing has supported events by community groups like the Greater Pittsburgh Arts Council, but currently does not have any relationship with local watershed or source water protection groups.

Why? ***Because no one has asked.***

Barrett Goddard, one of the five owners and brewers behind Full Pint, says of a potential partnership, "We would be interested. It's definitely the way we'd like to be headed." He is grateful for the work that conservation groups do. "Water is the most important ingredient in beer," he says, echoing Mr. Lindenmuth's comments above. "You have to have a good water supply." For now, the brewery does what it can by being conscious of their water usage, and ensuring that cleaning chemicals are neutralized before they enter the wastewater system. In a future brewery, built from the ground up, they would like to make environmentally friendly improvements, like a grey water recycling system.

PA Beer Facts (2010 - 2011)

- 20% of the market belongs to craft beers
- 60,000 jobs provided by the brewing industry
- 4,333,747 barrels produced per year
- 2 Million tourists visited breweries and spent \$305.6 Million
- \$1.1 Billion in direct economic impact

Source: <http://lbfc.legis.state.pa.us/reports/2013/78.PDF>

[Victory Brewing Company](#) is a well-established Pennsylvania brewery, founded in 1996 in Downingtown. They brew 11 year-round beers and an assortment of seasonal and specialty beers in two breweries, both located in the Brandywine Creek watershed. They use reclaimed heat and solar power to reduce their natural gas usage, recycle spent grain to feed livestock, and compost food waste at their brewpub. To celebrate their 15th anniversary, Victory expanded their environmental commitment by creating

[Headwaters Pale Ale and the associated Headwaters Grant](#). A penny from each beer sold in 2011 went to the [Guardians of the Brandywine](#) for clean water education. This grant was continued in 2012, with an additional grant given to [The Brandywine Valley Association](#) to restore a tributary stream in Parkesburg.



On a national level, the [Sierra Nevada Brewing Company's Wild Rivers](#) campaign donates a portion of sales of its perennial favorite, Pale Ale, to six non-profit organizations across the United States, including the [Delaware Riverkeeper Network](#) in Pennsylvania. Since 2009, the company has donated over \$400,000 to help preserve and protect vital watersheds across the country. Sierra Nevada Brewing and other companies have taken the Clean Water Pledge to support the

federal Clean Water Act. With the Pledge, they have joined the Brewers for Clean Water, sponsored by the Natural Resources Defense Council.

The next time you see a beer commercial featuring a clear, rushing stream, remember: it isn't just marketing. Your local brewer needs plenty of clean, safe water to make the beer that he or she and perhaps YOU, are so passionate about. So head down to your local taproom or brewpub, grab a beer, and strike up a conversation. They would appreciate your support. You might find a new favorite beer, and new source water protection allies, all in the same place.

Citation:

¹"History of Craft Brewing." *Brewers Association*. Brewers Association, 1 June 2013. Web. 29 June 2013.
<http://www.brewersassociation.org/pages/about-us/history-of-craft-brewing>

Ellen Kiley is a writer who lives in Pittsburgh, enjoying all three rivers and nine breweries the town offers.

For more information

Brewers for Clean Water Pledge

<http://www.nrdc.org/water/brewers-for-clean-water/>

Craft Brewers Call on the President to Protect American Waters—And Beer!

<http://www.nrdc.org/media/2013/130612a.asp>

Breweries Raising Their Glasses to Clean Water

Article: <http://newswatch.nationalgeographic.com/2013/05/14/breweries-raising-their-glasses-to-clean-water/>

Video: <http://youtu.be/oxDmilcFPQE>

Sierra Nevada Joins Craft Brewer Coalition to Safeguard Clean Water Sources

http://www.sustainablebrands.com/news_and_views/articles/sierra-nevada-joins-craft-brewer-coalition-safeguard-clean-water-sources

What is Source Water Protection?

Source Water Protection helps protect the safety of the public water supply by preventing pollution from reaching raw drinking water sources used by the community, including groundwater aquifers, springs, streams, reservoirs, or river intakes.

Establishing a Source Water Protection Program is voluntary in Pennsylvania, and allows for local control over local water quality issues. View [WREN's 3 minute video](#); more information at www.sourcewaterpa.org.

PADEP [Source Water Protection Technical Assistance Program Fact Sheet](#)

About WREN

The Water Resources Education Network (WREN) is a project of the **Citizen Education Fund of the League of Women Voters of Pennsylvania**. WREN works to help communities across Pennsylvania protect and improve our most precious natural resource, our water. WREN is a nonpartisan informal collaboration of organizations and public officials working for the protection and management of Pennsylvania's Water resources, both surface and ground water, through community education and informed policy-making. WREN provides training and grants for local coalition building to promote community awareness and development of public policies necessary to protection Pennsylvania water resources. Since 1992, the WREN Project has provided almost \$2 million in mini-grant funding to over 350 Pennsylvania community partnerships working to safeguard clean water today and for future generations.