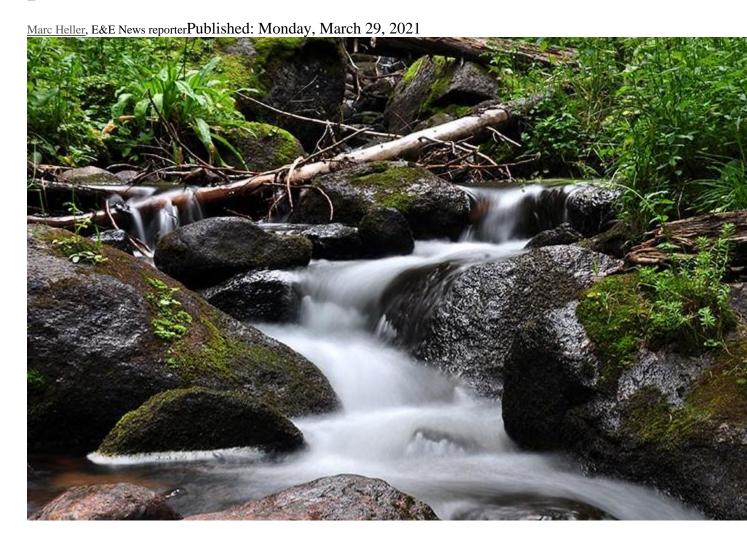
[http://WATER%20POLLUTION:%20Study:%2090%25%20of%20streams%20contaminated%20by%20pesticides%20--%20Monday,%20March%2029,%202021%20--%20www.eenews.net]WATER POLLUTION: Study: 90% of streams contaminated by pesticides -- Monday, March 29, 2021 -- ww.eenews.net

Study: 90% of streams contaminated by pesticides



A stream in Colorado. Larry Lamsa/Flickr

Federal researchers found pesticides and their remnants in 90% of streams, according to a recently published study.

Researchers with the U.S. Geological Survey said the leftovers of pesticides — called "transformation products" — are key to understanding contamination of waterways and warrant further study.

For the <u>study</u>, which was published in the journal *Environmental Science and Technology*, researchers took more than 3,700 samples from 442 small streams in mostly urban water drainage basins across five regions. They detected 102 pesticide particles in addition to the pesticides themselves.

Although the occurrence and risk of pesticide residue in groundwater isn't fully understood, they said, the findings suggest those threats have been underestimated.

The Center for Biological Diversity, which opposes the use of many pesticides, said the research illustrates the ongoing threat from pesticide residues, which in some cases can be more toxic than the parent chemicals.

"Pesticide breakdown products were found in small streams across the country, indicating that pesticides are probably causing chronic harm to species like endangered salmon and freshwater mussels that rely on small, unpolluted streams," CBD said in a news release.

Pesticide-makers say their products, which are subject to regular reviews and label restrictions from EPA, in some cases help reduce environmental threats, such as reducing the amount of tilling farmers have to do to control weeds — a practice that encourages erosion and disrupts microorganisms in the soil.

In the latest study, researchers said they found pesticide particles in 90% of the sampled streams, and parent pesticides in 95%.

Among the most frequently detected pesticides was atrazine, which has a reputation for escaping into waterways and showed up in more than half of the samples.

In addition, they said, residue from the fungicides chlorothalonil and thiophanate-methyl, as well as the insecticide fipronil, were among the most frequently found.

Twenty-eight pesticide residues were found in more than one-fifth of samples in at least one region, they said.

A scientist at CBD, Jess Tyler, said the research should capture the Biden administration's attention.

"This study should be a wake-up call to the pesticide regulators at the Environmental Protection Agency, and the Biden administration, that they can't keep ignoring the well-documented, systemic pesticide pollution of our landscapes and waterways," Tyler said.

Atrazine, made by Syngenta, has raised particular concern. Farmers commonly use the weedkiller on corn and sorghum, and its tendency to show up in water supplies has led to regular monitoring programs at EPA. It is the second-most-used herbicide in the U.S., after glyphosate, according to the federal government.

EPA under the Trump administration ended an atrazine monitoring program for drinking water systems, and it suspended a stream-monitoring program for a year at Syngenta's request in connection with the COVID-19 pandemic.

The stream-monitoring program will return this year, the agency said. EPA's risk assessments for atrazine "has continued to show atrazine concentrations of potential ecological concern in the most vulnerable watersheds, even when stewardship programs are employed," the agency said in its interim registration review decision for the chemical last September.

Researchers at USGS said atrazine levels have fallen in recent years but that breakdown products have increased, an indication of the lasting effects of contamination. USGS said concentrations fell in more than half of 60 streams surveyed between 2002 and 2012, even as the breakdown product deethylatrazine increased.

Researchers have also warned of potential risks connected with measures that help drain the soil but may deliver atrazine more quickly to water supplies (*Greenwire*, April 29, 2020).

Syngenta promotes atrazine on a website called atrazine.com.

"Each year, it supports up to \$5,000 American jobs, while saving U.S. consumers up to \$4.8 billion due to decreased input costs and increased production," the company said. "Atrazine is effective, safe, and integral to agriculture's success in the United States and worldwide. There is no substitute."

Email: mheller@eenews.net