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TAR CREEK

THREAT: Mining pollution

STATE:

Oklahoma

AT RISK:

Clean water, public health

SUMMARY

Tar Creek in Oklahoma flows through what was once the richest grasslands of the Southern Plains, but today is one of the country's largest Superfund sites. Heavy metals from mining have contaminated the creek for decades, and cleanup efforts continue to fall short, threatening the health of Indigenous communities and other local residents. The Environmental Protection Agency, Federal Energy Regulatory Commission, state of Oklahoma and tribes must work together to develop a comprehensive solution to clean up the pollution and safeguard public health.

ILLEGAL ROCK DAM ACROSS TAR CREEK, OKLAHOMA

PHOTO: MARTIN LIVELY

THE RIVER

Tar Creek begins in Kansas and crosses into Oklahoma, flowing through the towns of Commerce and Miami before joining the Neosho River as it flows south to the Grand Lake of the Cherokees, a major drinking water source created by the Pensacola Dam. The watershed is a destination for anglers, hunters, conservationists, artists, recreationists and nature lovers and is dammed to produce hydropower.

Tar Creek once supported a rich ecosystem – fish, crawdads, mussels and plants provided ample subsistence to the area's Indigenous people. Along Tar Creek, they found wildlife and plants that provided food, medicines and clean water. Only a few decades after many tribes were forcibly relocated to this part of Oklahoma in the 19th century, metal ores were discovered and the largest lead mine in the world transformed Tar Creek. Ottawa County is home to nine Tribal Nations (Quapaw, Miami, Peoria, Ottawa, Modoc, Eastern Shawnee, Wyandot, Seneca-Cayuga and Shawnee). Tribal members make up more than 20 percent of the population in the county, with many individuals having ancestry in multiple tribes. The watershed is further shared by the Cherokee Nation, which borders it on the West and South.

THE THREAT

After 80 years working the world's largest lead and zinc mine, industry abandoned Ottawa County in the 1960s, leaving behind 75 million tons of lead-contaminated tailings piles. The mining epicenter contains 40 square miles of abandoned mines with more than 30 major tailings piles as high as 200 feet tall. By 1979, an aquifer had filled the abandoned mine caverns, and acid mine water loaded with lead, zinc, arsenic and cadmium began flowing into Tar Creek, killing most aquatic life and turning the water orange. Ever since, one million gallons of contaminated water have discharged daily into Tar Creek.

In 1984, the Environmental Protection Agency (EPA) established the Tar Creek Superfund Site. Today the site encompasses all of Ottawa County and is among the nation's largest and most complex Superfund sites. The EPA and state of Oklahoma have done piecemeal work at the site, spending more than \$300 million, yet orange water continues to flow, tailings piles still loom on the horizon and too many children are still poisoned by lead. People are warned not to eat the fish

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TAR CREEK

Continued

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TAKE ACTION:

[AmericanRivers.org/
TarCreek2022](https://AmericanRivers.org/TarCreek2022)

TAR CREEK, OKLAHOMA

PHOTO: TODD STEWART

because of lead, but only in 2022, after children were repeatedly reported swimming and playing in Tar Creek, did the state actually post warnings along the creek and in mailers to families living nearby. When children are poisoned by lead, it can affect not only their IQ and how they learn, but it can harm every organ in their bodies with life-long effects. One-third of all Indigenous children were found to be affected by lead poisoning in the early 1990's. The source material has not yet all been removed, so children continue to be exposed. Lead and other heavy metals are present in water and soils throughout much of Ottawa County, endangering the health of people who fish, swim or consume edible plants grown in contaminated soil. In addition, contamination inhibits important Indigenous subsistence lifestyles and cultural practices, as well as recreational activities for all residents and visitors.

Heavy metal contamination poses a danger in two ways— upstream at the source from acid mine drainage and surface runoff, and downstream from the disturbance of contaminated sediments dispersed during floods. Homes, neighborhoods and entire farms are in danger any time a storm causes flooding. Climate change will only lead to more frequent storm events and flooding; the sediment built up behind Pensacola Dam and efforts to raise the lake level will serve to exacerbate this problem. Holding water longer to keep the lake level high will only increase the backwater effect of the dam. Ottawa County will not be free of heavy metal exposure unless both the source and migration of metals through toxic floods are fully addressed.

WHAT MUST BE DONE

The Grand River Dam Authority (GRDA), the Pensacola Dam operator, is seeking a hydropower license renewal from the Federal Energy Regulatory Commission (FERC). GRDA refuses to discuss in the official record the disturbance of heavy metals in Grand Lake and upstream toxic flooding caused by dam backwatering effects. Further, GRDA is asking to raise the lake level in its license request, which will increase the risk of toxic flooding to upstream communities.

Tar Creek is poisoned with watershed-wide pollution that requires a landscape-scale solution. In conjunction with the relicensing of the Pensacola Dam, the EPA, FERC, GRDA, U.S. Army Corps of Engineers and state of Oklahoma must collaboratively address historic and ongoing contamination throughout Tar Creek and the Grand Lake watershed. Agencies and tribes with land adjacent to Tar Creek must sign a Memorandum of Understanding that requires all parties to commit to an integrated solution to address metals contamination and cleanup within the dam's relicensing record. In addition, the lake level must not be raised as proposed because doing so will increase the redistribution of sediment-bound heavy metals during floods.

Furthermore, EPA Region 6 Administrator Dr. Earthea Nance must order a new Remedial Investigation and Human Health Risk Assessment that is more protective of human health and the environment. The health of communities around Tar Creek can no longer be ignored and set aside as an accepted casualty of historic mining. Tar Creek must be addressed as a matter of environmental justice, a priority of the Biden administration.

Lastly, Congress must fully and permanently reauthorize the Superfund Fee (or 'polluter pays' provision) under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act, which together fund cleanup at Superfund sites across the country, lifting the burden of cleanup costs from impacted communities. They must also increase the funding dedicated to cleaning up Tar Creek.