Low-head dams can be 'drowning machines.' Awareness and safety urged for summer outings

Amanda Malott's son Andre "AJ" Edwards Jr. was 14 when he went down to play near the Silver Creek dam with some friends last year. A large billboard loomed over the creek where the boys were headed, encouraging southern Indiana locals to "Check out New Albany's Silver Creek Landing." It depicted several people standing above a small dam, and one figure dangling their legs over the edge.

The waterway empties into the Ohio River just less than a mile from Silver Creek Landing and was one of AJ's favorite spots to play outside, Malott said. Less than an hour after AJ left home, two police officers were knocking on Malott's door. They told her AJ hadn't resurfaced after jumping off the low-head dam into Silver Creek, which divides New Albany and Clarksville. First responders and volunteers found AJ's body after a lengthy search into the night.

AJ's story is part of a growing number of tragic incidents involving low-head dams across Indiana and the United States.

Around 170 low-head dams in various states of disrepair sit in Indiana's rivers and creeks, and many have deadly currents that can trap even the strongest swimmers. At least 28 people in the state drowned in these underwater currents since 2010. Victims included a conservation officer with nearly three decades of experience who died in 1998 during a practice-rescue operation on the White River.

AJ's tragedy pushed Malott to file a lawsuit, adding to the growing legal debate over low-head dam safety in Indiana. In March, the family of two kayakers who drowned at the Emrichsville Dam last year sued Indianapolis, alleging city officials knew about the "lethal danger" of the dam but failed to place proper warning signage.

Malott hopes her suit will help provide accountability and raise awareness around low-head dams, which Ken Smith, DNR's assistant director of the Division of Water, called "drowning machines" in a 2016 PBS documentary. AJ's sister has set up a GoFundMe to support the family.

How Hoosiers can stay safe in the water

Thousands of low-head dams were built across the U.S. in the 19th and 20th centuries. They typically aren't higher than 15 feet, yet they're capable of altering habitats and raising water levels. By creating slower pools of water upstream, low-head dams allowed industrial, municipal and agricultural entities to easily divert water.

But many of these structures have outlived their purpose. They sit abandoned in streams and rivers because they're tricky and expensive to remove — sometimes costing nearly a million dollars — and ownership is not always clear.

These outdated dams are still posing a risk for Hoosiers today. From the water, they can look small and unassuming, but they've continually proven to be deadly to swimmers and kayakers.

As water flows over the crest of the dam, it can form deadly hydraulic currents. This phenomenon can trap swimmers in a sort of sideways vortex that experts say is almost impossible to escape.

"It's basically a cyclone or a whirlpool turned on its side," said Scott Salmon, the former executive director of Friends of the White River. "Once you get stuck in there, whether you're a person or you're a tree or you're a boat, the chances of you getting out of that ... is very, very low."

Low-head dam safety boils down to three points: Wear a life jacket for the entirety of your trip on the water, don't go paddling when the water level is abnormally high, and figure out in advance where you will low-head dams and other potential threats.

Hoosiers should always wear life jackets while recreating in a body of water, according to the Indiana Department of Homeland Security. The jackets should be in working condition, fit properly, and United States Coast Guard approved. Wearing a life jacket isn't a guarantee of safety in the face of low-head dams, but "it won't hurt," Salmon said.

Capt. Jet Quillen, with DNR's Law Enforcement Division, advised boaters to "always avoid elevated water levels and fast-moving water" in an email to IndyStar. Boaters can check the National Water Dashboard for safety information about Indiana waterways.

And lastly, creating a float plan can mitigate danger. Prior to departure, Quillen recommended noting any nearby hazards, like low-head dams, and planning for where you will put in and take out.

There are low-head dams across the state without proper signage, so the Indiana Low-Head Dams map is one of the most comprehensive resources for finding existing dams that might intersect your float.

Silver Street Dam caught up in lawsuits

The dam on Silver Creek was embroiled in disputes and lawsuits even before AJ's death. One of the ongoing fights started in 2021 after DNR issued a permit to Ecosystems Connections Institute to remove the dam. New Albany pushed back. In a legal filing, the city said destroying the dam "constitutes an unlawful and unconstitutional taking of property." A judge let the removal permit move forward, and New Albany filed an appeal.

The city has since claimed, in a 109-page document Director of City Operations Michael Hall shared with IndyStar, that no one knows who owns the dam and "DNR refused any ownership or responsibility." The document also claimed removing the dam would "severely impact the recreation opportunities available in the creek, such as fishing and wading."

After AJ's death, New Albany Mayor Jeff Gahan declared a State of Emergency and the city attempted to make the dam safer by adding stones on the downstream slope to eliminate the hydraulic current. The action resulted in the U.S. Army Corps of Engineers ordering the removal of the rock because the city did not acquire a permit. The DNR filed a separate legal proceeding over the lack of a similar permit.

Neither case has been resolved.

The dangers of low-head dams — and their deadly currents specifically — have been known for years, according to Malott's lawsuit, which cites evidence from the dam removal case. Mallott accuses officials of New Albany, Clarksville, Clark and Floyd counties and the DNR of negligence for failing to post warning signs about the danger posed by the dam.

"How can you have something that the Indiana government acknowledges as a perfect drowning machine available for the public, small children, to recreate around?" said Jon Noyes, the attorney representing Malott. New Albany denied all counts in Malott's suit including that it owned, operated or controlled the dam, according to documents filed with the Marion Superior Court on June 5.

Clarksville and Floyd County did not respond to IndyStar requests for comment, while Clark County and DNR said they do not discuss pending litigation.

Malott's suit claims New Albany officials were notified in 2021 the dam is "dangerous to humans," and urged the city to "see the human safety value of removing this structure ..." The same year, Clarksville officials passed a resolution stating the dam was an "acknowledged 'attractive nuisance'" during high-water flows. Despite those concerns, the suit alleges the public was encouraged to recreate at the dam.

The lawsuit said the Silver Creek Landing billboard was in place on May 27, 2024, when AJ and some friends went to the landing to explore and play. There were no signs warning them of the danger of what the boys called a waterfall, just the billboard.

"As A.J. and his friends were jumping off the 'waterfall," the lawsuit says, "A.J. slipped and landed in deadly hydraulic currents, which took his life."

The benefits of dam removal

Low-head dam removal provides safety for Hoosiers spending time outdoors and also bolsters wildlife habitat along Indiana waterways, especially for fish, according to Jerry Sweeten, a stream ecologist at the Ecosystems Connections Institute.

Silver Creek feeds into the Ohio River, which allows fish to swim upstream from the larger water body — until they reach the dam.

"We know that 85 percent plus species of fish in Indiana need to move upstream and downstream as a part of their life history. That's just biology," Sweeten said. "Low-head dams can have a severe effect on that movement."

Sweeten's research found 15 fish species downstream of the dam, but only four species directly upstream. Throughout his career, he has noticed more invasive carp in the pools above low head dams and fewer smallmouth bass, which are a prized species for many local anglers. "The science of all of this strongly suggests that the best thing you can do for the stream is to get that concrete out," he said.

Advocates of the dam say the structure creates more opportunities for recreation but Sweeten said that dam removal is almost always the best option. It can improve fishing, vitalize ecosystems, and most importantly,

eradicate danger for Hoosiers outdoors.

"One of the saddest things I've ever heard in my entire career is listening to a mom or a sibling of a young person who needlessly lost their life at one of these dams. Why they're there is bewildering to me," said Sweeten. "How someone can justify leaving something that would cause someone else to get hurt like that is, it's just bewildering. It's hard to understand."

AJ remembered as 'ball of light'

The Silver Creek area was AJ's favorite place to hang out with friends. He didn't know it was dangerous, Mallot said. AJ would never spend a sunny day inside, even during the winter, his mom said. He would go outside and meet up with friends every chance he could. The 14-year-old was a ball of light making friends wherever he went, Malott said. He wasn't just her son, he was her best friend, too.

A few summers ago, Malott remembers AJ would take six or seven water bottles with him when he went outside to play with his friends. It turns out he was taking those bottles to some of the homeless community who lived out in the woods, she said.

"That kid would give you the shirt off his back and had a smile that lit up a room," Malott said. A year later, Malott said her son's death at the dam still doesn't feel real. "I'm still waiting," she said, "for him to come through the door."

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