

UNITED STATES COURT OF APPEALS

FOR THE SIXTH CIRCUIT

EUGENE BAKER; LESTER BAKER; PATRICIA BAKER; RAYMOND BAKER;
RAYMOND G. BAKER; VADA BAKER; ALBERTA BUSH; CLAY FUGATE;
GREGORY CHASE HAYS; ANITA HENSON; ELLEN HENSON; LISA
HOLBROOK; BILLY JOE MULLINS; GEORGE MULLINS; SHERRY MULLINS;
JOHNNY E. MULLINS; BARBARA NEACE; JERVIS NEACE; LURANIE NOBLE;
MATILDA RANEY; JOHN ROBERTSON; MELVIN RUPERT; AARON WAYNE
WHITE; AARON PAUL WHITE; BRITTANY WHITE; DAVID WAYNE WHITE;
Y. DEBORAH WHITE; DELBERT WHITE; HAROLD RAY WHITE; RICHARD
WHITE; GRETA WHITE; MOLLIE WHITE; RACHEL WHITE; SHELVIN WHITE;
VAUGHN WHITE; VICE WHITE; WADE WHITE; JASON SCOTT WHITE; JAY
D. WHITE; JERSON WHITE; LISA WHITE; LORETTA WHITE; CARL W.
ASHER; FARMER EDWARD BAKER, administrator of the estate of Vanessa
Baker; JENNIFER BAKER; MICHAEL J. BAKER; ALICIA BAKER; BENJAMIN
CRAFT; BRUCE L. DRYDEN; MONICA FUGATE; REBECCA GIBSON; ANGELA
KAY HENSON; MASON HENSON, JR.; VICKIE HENSON; MASON LEE
HENSON; SHIRLEY HENSON; TIMOTHY DEAN HENSON; ARISSA HENSON;
WILLIE RAY HENSON; BARBARA HENSON; ELIZABETH MILLER; LOU
MILLER; FREDDIE WAYNE MULLINS; GERALDINE MULLINS; JOSHUA
MULLINS; MADRO M. NOBLE; CASSANDRA SCOTLAND; BRIAN STRONG;
BROWN STRONG; JAMES STRONG; WILLIAM THORPE; DARLENE THORPE;
ASHFORD WHITE; BIRCHEL WHITE; DEWEY WHITE, deceased; ELIJAH
WHITE; ETTA WHITE; FAYE WHITE; JEFFERY GRAN WHITE; RONALD
DARRIS WHITE; TONYA BAKER; LAVERNE NOBLE; JANICE MULLINS; RUTH
STRONG; TIFFANY WHITE; MISTY STRONG; CHRISTINE WHITE; GEORGE
FRANCIS, III; TONYA ASHER; DILLO NEACE; BRENDA STRONG; DAN
HENSON; SHANNON VAUGHN WHITE, administrator of the estate of Amy
LaDawn Henson,

Plaintiffs-Appellants,

v.

BLACKHAWK MINING, LLC

Defendant,

PINE BRANCH MINING, LLC

Defendant-Appellee.

No. 24-5490

Appeal from the United States District Court for the Eastern District of Kentucky at Lexington.
No. 5:22-cv-00231—Danny C. Reeves, District Judge.

Argued: December 11, 2024

Decided and Filed: June 23, 2025

Before: SUTTON, Chief Judge; BUSH and MURPHY, Circuit Judges.

COUNSEL

ARGUED: Ned B. Pillersdorf, PILLERSDORF LAW OFFICES, Prestonsburg, Kentucky, for Appellants. Grahmn N. Morgan, DINSMORE & SHOHL LLP, Lexington, Kentucky, for Appellee. **ON BRIEF:** Ned B. Pillersdorf, PILLERSDORF LAW OFFICES, Prestonsburg, Kentucky, for Appellants. Grahmn N. Morgan, Kristeena L. Johnson, James M. McClure, DINSMORE & SHOHL LLP, Lexington, Kentucky, Ashley L. Pack, DINSMORE & SHOHL LLP, Charleston, West Virginia, for Appellee.

OPINION

JOHN K. BUSH, Circuit Judge. In late July 2022, an unprecedented flood destroyed numerous homes and other properties in Eastern Kentucky. Many of those who suffered brought this suit against Pine Branch Mining, LLC. They allege that Pine Branch violated Kentucky mining regulations in how it maintained a surface mine property, located relatively near Plaintiffs' lands. According to Plaintiffs, Pine Branch committed negligence *per se*.

To succeed at trial, Plaintiffs must prove that Pine Branch committed infractions that substantially contributed to the flooding. But the district court excluded the opinion rendered by Plaintiffs' sole causation expert. In so ruling, the district court did not abuse its discretion, as we explain below. Without competent expert proof, Plaintiffs lacked enough evidence to create a jury question on causation. So, we agree with the district court that Plaintiffs cannot establish a *prima facie* case of negligence *per se*. We therefore **AFFIRM** the district court's grant of summary judgment to Pine Branch.

I.

This case arises from a “historically unheard of” storm that devastated Eastern Kentucky. R. 141, PageID 1248 (citation omitted); R. 141-3, PageID 1333. Upwards of 14–16 inches of rain accumulated from July 25 to July 30. The five-day rain event resulted in 24 Flash Flood Emergencies—designations that only the severest storms receive, when flooding immediately endangers property and human life. *See Baker v. Blackhawk Mining, LLC*, 734 F. Supp. 3d 615, 619–20 (E.D. Ky. 2024) (*Blackhawk II*). Public research reports noted that nearly 9,000 homes were damaged or destroyed, with more than 1,400 people requiring rescue.

Most of the rain fell during the evening of July 27 and into the hours before dawn on July 28. That night, the rate of rainfall surged to 4 inches per hour, overwhelming an already saturated region. Per National Oceanic and Atmospheric Administration Regional Climate Center data, the precipitation readings on July 27 and 28 were the highest and second-highest daily levels, respectively, since 1981. The storm finally ended on July 30, but not before taking the lives of 44 people across 13 counties.

The flooded properties at issue in this case are in the community of River Caney, located in Breathitt County and named after a creek that runs through it to meet the Kentucky River. The River Caney watershed is a 3,507-acre complex drainage system, with terrain of steep forested mountains and narrow valleys. Plaintiffs’ properties and Pine Branch’s operation, Combs Branch, share that watershed. The mine sits in its southern portion and actively operates under two Kentucky surface mining permits: Permit No. 897-0568 and Permit No. 897-0569.

River Caney endured even more rainfall than neighboring areas—it received more than 750 percent of its normal precipitation levels over the five-day period. The flooding significantly damaged Plaintiffs’ real properties and killed at least two people. A tidal wave of water crashed down on their homes on July 28, sweeping residents to their deaths and houses downstream. As the deluge of water descended throughout the night, residents fled to higher ground. They feared for their lives as they witnessed continued rainfall. When the storm finally stopped, it left ruin and devastation in its wake.

Soon afterwards, in August 2022, Plaintiffs filed suit in state court against Pine Branch and its parent, Blackhawk Mining LLC. Defendants successfully removed the case to federal court on diversity grounds, and the court later granted summary judgment to Blackhawk. As noted, Plaintiffs allege negligence *per se*. They argue that Pine Branch's failure to reclaim disturbed land on its surface mine was "the main causative factor" for their losses. Appellant Br. at 13.

The district court relied on Federal Rule of Evidence 702 and Federal Rule of Civil Procedure 26(a)(2)(B) to grant Pine Branch's motion to exclude Plaintiffs' proposed expert opinion. *Baker v. Blackhawk Mining, LLC*, No. CV 5:22-231-DCR, 2024 WL 643133, at *1 (E.D. Ky. Feb. 15, 2024) (*Blackhawk I*). That opinion, offered by Scott Simonton as a preliminary report, was Plaintiffs' sole expert disclosure. *Id.* at *2. In it, Simonton referenced studies that analyzed the effects of mining on hydrology in the Kentucky towns of Pikeville and Middlesboro, and in Mingo County, West Virginia. *Id.* at *3. Notably missing was any such study conducted in River Caney. Also absent was any hydraulic (HEC-RAS) or hydrologic (HEC-HMS) modeling. *Id.* Other than his own hydrologic modeling and permit files from areas outside of River Caney, Simonton relied primarily on aerial observation and third-party eyewitness and anecdotal accounts of the flooding. *Id.* at *4–5.

The district court concluded that Simonton failed to meet Federal Rule of Evidence 702's demands because (1) his preliminary report was not based upon sufficient facts or data about the specific mining sites at issue, (2) he did not rely upon any form of scientific modeling or testing to reach conclusions, (3) he struggled to apply principles and methods reliably to the facts of the case by relying on extrapolations from studies conducted on outside sites, and (4) he failed to consider alternative causes of the property damage. *See id.* at *5.

The proposed expert further failed to meet disclosure requirements under Federal Rule of Civil Procedure 26(a). *Id.* at *8. The "fundamental problem" with the evidence, the district court noted, was Simonton's offering of it as a "summary of *initial* preliminary opinions" without providing any form of later supplementation. *Id.* at *6. The disclosure rule is clear: a party has a duty to provide "a complete statement of all opinions the witness will express." *Id.* (quoting Fed. R. Civ. P. 26(a)(2)(B)(i)). Plaintiffs did not satisfy this obligation here.

Having struck Plaintiffs' expert testimony, the district court then denied Plaintiffs' motion for partial summary judgment on their negligence *per se* claim and granted Pine Branch's cross motion for summary judgment. *Blackhawk II*, 734 F. Supp. 3d at 629. The court based those rulings on Plaintiffs' lack of competent and admissible evidence to prove causation. *Id.* The court also determined that the proof was insufficient to show that Pine Branch violated mining regulations because the Kentucky Energy and Environment Cabinet never issued a final order declaring a violation. *See id.* at 623–26. But even if there had been a violation found by Cabinet order, the court held that Plaintiffs had not provided sufficient evidence to show the company's violation was a substantial factor in causing their damages. *See id.* at 626.

II.

In this timely appeal, Plaintiffs argue that Simonton's designated expert opinion should not have been excluded.¹ And they contend that even without the expert evidence, the district court wrongly decided the negligence *per se* claim. We disagree.

We review the district court's summary judgment rulings on a *de novo* basis. *See Ellis v. Chase Commc'ns, Inc.*, 63 F.3d 473, 475 (6th Cir. 1995). Summary judgment is appropriate only if the record demonstrates that there exists no genuine dispute of material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(a). We view the actual proof—not isolated, conclusory allegations—in the light most favorable to the nonmovant. *See Bishop v. Lucent Techs., Inc.*, 520 F.3d 516, 519 (6th Cir. 2008). The district court determined that, as a matter of law, Pine Branch was not *per se* negligent because there was an insufficient showing of causation, amongst other reasons. *See Blackhawk II*, 734 F. Supp. 3d at 626–27. For our analysis, we assume, without deciding, that Pine Branch committed mining violations. Our opinion focuses only on how Plaintiffs fell short in their presentation of evidence on causation.

¹ The number of Plaintiffs has thinned since the district court's judgment because the notice of appeal named fewer Plaintiffs than the complaint. *Compare* Third Amended Complaint, R. 70, PageID 265–71, *with* Notice of Appeal, R. 157, PageID 1829–31. Because of the “mandatory and jurisdictional” nature of Federal Rule of Appellate Procedure 3(c)(1)(A), this court lacks jurisdiction to hear an appeal from any plaintiff not named in the notice of appeal (when the intent to appeal is not otherwise clear). *Isert v. Ford Motor Co.*, 461 F.3d 756, 759 (6th Cir. 2006).

A.

We begin with review of the district court's exclusion of Simonton's proffered expert opinion. We review this ruling for abuse of discretion, a standard that applies even when the exclusion of testimony results in entry of summary judgment for the party who opposed its admission into evidence. *Adkins v. Marathon Petroleum Co., LP*, 105 F.4th 841, 848 (6th Cir. 2024). To show abuse of discretion under Federal Rule of Evidence 702 or Federal Rule of Civil Procedure 26(a), parties "face a daunting task." *Madej v. Maiden*, 951 F.3d 364, 374 (6th Cir. 2020) (discussing Federal Rule of Evidence 702); *see Goldblum v. Univ. of Cincinnati*, 62 F.4th 244, 257 (6th Cir. 2023) ("Federal Rule of Civil Procedure 26" affords "wide discretion"). A district court has "broad discretion" to admit or exclude expert evidence, and its "action is to be sustained unless manifestly erroneous." *United States v. Demjanjuk*, 367 F.3d 623, 633 (6th Cir. 2004) (citation omitted); *Brainard v. Am. Skandia Life Assurance Corp.*, 432 F.3d 655, 663 (6th Cir. 2005). Based on this standard, and as we explain below, the district court did not abuse its discretion by excluding Simonton's anticipated testimony.

The district court gave two separate reasons for this ruling: (1) Simonton's testimony did not meet Rule 702's relevancy and reliability standards, and (2) it failed to comply with Rule 26(a)(2)(B)'s disclosure requirements. We address each ground for inadmissibility in turn.

1.

Federal Rule of Evidence 702. To be admissible under Rule 702, scientific testimony must be "not only relevant, but reliable." *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 147 (1999) (citation omitted). As for relevancy, Rule 702 mandates that the expert's scientific, technical, or other specialized knowledge help the trier of fact understand the evidence or determine a fact in issue. Fed. R. Evid. 702(a). As for reliability, Rule 702 only allows an expert to testify when the opinion is (1) "based on sufficient facts or data," (2) "the product of reliable principles and methods," and (3) "a reliable application" of those "principles and methods to the facts of the case." Fed. R. Evid. 702(b)–(d).

Unreliable expert testimony can involve inadequate facts, methods, or applications. This leads courts to make four inquiries: "Is the technique testable? Has it been subjected to peer

review? What is the error rate and are there standards for lowering it? Is the technique generally accepted in the relevant scientific community?” *United States v. Gissantaner*, 990 F.3d 457, 463 (6th Cir. 2021). In asking these questions, a district court should look for “[r]ed flags that caution against certifying an expert,” like “reliance on anecdotal evidence, improper extrapolation, failure to consider other possible causes, lack of testing, and subjectivity.” *Newell Rubbermaid, Inc. v. Raymond Corp.*, 676 F.3d 521, 527 (6th Cir. 2012). The purpose of this scrutiny is to satisfy core requirements of Rule 702: “any relevant scientific or technical evidence must be the ‘product of reliable principles and methods’ and must have been ‘reliably applied.’” *Gissantaner*, 990 F.3d at 463.

To be sure, under Rule 702 an expert is “permitted wide latitude to offer opinions” that “are not based on firsthand knowledge or observation,” unlike “an ordinary witness.” *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 592 (1993). But this “relaxation of the usual requirement of firsthand knowledge—a rule which represents a ‘most pervasive manifestation’ of the common law insistence upon ‘the most reliable sources of information’”—assumes “that the expert’s opinion will have a reliable basis in the knowledge and experience of his discipline.” *Id.* (citation omitted). So, a district court must scrutinize whether expert evidence is relevant and reliable, mindful of the weight the “expert” designation carries and the expert’s lack of firsthand knowledge.

On appeal we review this determination for an abuse of discretion, which can result from “an erroneous view of the law or a clearly erroneous assessment of the evidence.” *Ky. Speedway, LLC v. Nat’l Ass’n of Stock Car Auto Racing, Inc.*, 588 F.3d 908, 915 (6th Cir. 2009) (citation omitted). But our court only steps in when we have “a definite and firm conviction that [the district court] committed a clear error of judgment.” *In re Scrap Metal Antitrust Litig.*, 527 F.3d 517, 528 (6th Cir. 2008) (citation omitted). Otherwise, we will “not substitute our own judgment for that of the district court” and will defer to the district court’s “ultimate decision of admissibility.” *Id.* (citation omitted).

a.

We have dealt with expert testimony on causation before in cases analogous to this one. Deficiencies such as an expert's lack of specific and relevant data, lack of relevant testing, overreliance on unhelpful studies unconnected to causation, failure to rule out alternative causes, and failure to comply with court-ordered report submission deadlines have all justified excluding proposed expert opinion. See *Pluck v. BP Oil Pipeline Co.*, 640 F.3d 671, 680–81 (6th Cir. 2011); *Baker v. Chevron U.S.A. Inc.*, 533 F. App'x 509, 519–21 (6th Cir. 2013). Time and again, we have affirmed district court exclusion decisions, finding no abuse of discretion. See, e.g., *Newell Rubbermaid*, 676 F.3d at 528–29 (finding that district court's concerns regarding proffered expert's "anecdotal evidence, improper extrapolation, failure to consider other possible causes, and, significantly, a lack of testing" were sufficient to warrant exclusion in defective design case); *Madej*, 951 F.3d at 367 (affirming summary judgment against plaintiffs given that their proffered medical expert's diagnosis of multiple chemical sensitivity was not sufficiently reliable and plaintiffs lacked any other causation evidence); *Pluck*, 640 F.3d at 675–80; *Baker*, 533 F. App'x at 511. A deeper dive into two of these cases—*Pluck* and *Baker*—is particularly relevant for our current inquiry.

In *Pluck*, we upheld the exclusion of expert testimony in a suit against BP over benzene contamination near the home of the plaintiff couple, the Plucks. 640 F.3d at 674–75. Between 1948 and 1962, BP's pipeline leaked gasoline into nearby soil and groundwater. *Id.* at 673. By 1990, benzene levels in several wells exceeded safe limits, though the well at the Plucks' house seemed safe until 1996, when they moved in and tested it. *Id.* at 673–74. Prior to that 1996 testing, BP had monitored but not remediated the Plucks' well. *Id.* at 674. But after detecting benzene in their well and following Mrs. Pluck's 2002 Non-Hodgkin's Lymphoma diagnosis, the Plucks sued. *Id.* They relied on proposed expert testimony from Dr. James Dahlgren to establish specific causation. *Id.* at 675.

The district court excluded Dahlgren's opinion and granted BP's motions for summary judgment. *Id.* at 675. It rejected Dahlgren's testimony as unreliable, saying it "suffered significant methodological flaws and [was] apparently based on speculation and conjecture rather than evidence and data." *Id.* The district court was alarmed that Dahlgren had formulated

his opinion “without any exposure data.” *Id.* On appeal, we had a similar concern and held that the district court had not abused its discretion in excluding Dahlgren’s opinion. *Id.* at 680. Exclusion rested on the purported expert’s inability to explain the methodology he used to calculate Mrs. Pluck’s benzene dose, *id.* at 675, and his failure to “reliably ‘rule[] in’ the potential causes of Mrs. Pluck’s NHL and ‘rule[] out’ alternative causes” like Mrs. Pluck’s extensive smoking habit, *id.* at 678; *see id.* at 680; *see also Tamraz v. Lincoln Elec. Co.*, 620 F.3d 665, 674 (6th Cir. 2010) (excluding expert opinion as unreliable because “his efforts to ‘rule in’ manganese exposure as a possible cause or to ‘rule out’ other possible causes turned on speculation, not a valid methodology”). Also, a review of the studies and literature underlying Dahlgren’s causation opinion proved less supportive than initially framed: they indicated there “‘was not a statistically significant increase in [NHL]’ following prolonged periods of benzene exposure.” *Pluck*, 640 F.3d at 680 (citation omitted). And he filed an untimely supplementation that contradicted previous testimony and employed “an entirely new differential diagnosis methodology.” *Id.* at 678.

We noted that the “causation inquiries” in *Pluck* involved “scientific assessments that must be established through the testimony of a medical expert” or else the claim “will fail.” *Id.* at 677 (citation omitted). As Dahlgren’s opinion was unreliable and excluded, the Plucks’ claims fell short at summary judgment.

Baker informs us as well. 533 F. App’x at 511. The relevant facts of *Baker* are analogous to ours, and our opinion in that case correctly applied well-established principles from our published cases. Although our opinion in *Baker* is unpublished, it drew heavily from the district court’s reasoning in that case—the same reasoning our published opinion in *Pluck* relied upon.

Like *Pluck*, *Baker* involved benzene contamination from seeping fuel. *Id.* at 511–12. Over 55 years, roughly 8 million gallons of fuel leaked from a crude oil refinery near Hooven, Ohio. *Id.* at 512. Chevron began remediation, and by 2006, both the EPA and Ohio Department of Health found no ongoing health risks. *Id.* at 512–13.

Despite this, over 200 residents filed a mass tort suit alleging Chevron's emissions and contamination caused personal injury, property damage, and heightened health risks requiring medical monitoring. *Id.* at 511, 513. The district court bifurcated the plaintiffs based on their injury type and, after excluding two expert opinions as unreliable, granted summary judgment for Chevron on all claims. *Id.* at 511–16.

The plaintiffs' property damage claim rested on expert testimony from Dr. Philip Bedient. *Id.* at 513–14. The district court excluded his opinion as unreliable because he “did not perform any analysis” to determine whether a soil vapor pathway existed from the plume to the surface. *Id.* at 514. Without such analysis, the court found the remaining evidence of soil vapor intrusion—Chevron's *theoretical* model and plaintiffs' odor complaint testimonies—insufficient to prove causation. *Id.* We affirmed, emphasizing that neither Bedient nor plaintiffs' remaining expert completed “any vapor pathway analyses.” *Id.* at 524. Bedient's reliance on an Ohio Department of Health study, which deemed the plume's health risks “indeterminate,” further justified the exclusion as a proper exercise of discretion. *Id.* at 516. None of this was an abuse of discretion.

The district court also excluded testimony from the plaintiffs' personal injury expert, Dr. Dahlgren, finding flaws in all four of his reports. *See id.* at 514–15.² Of note, his reliance on 1977 short-term benzene exposure data in his fourth report was “wholly irrelevant” since none of the plaintiffs then lived in Hooven. *Id.* at 516. The court also concluded that none of Dahlgren's cited medical studies “support[ed] an opinion that benzene can cause [] illnesses” at the low exposure levels the plaintiffs suffered. *Id.* With no other causation evidence besides Dahlgren's inadmissible reports, the court entered summary judgment for Chevron.

²The first and second reports in *Baker* failed to meet Rule 26(a)(2)(B) disclosure requirements. 533 F. App'x at 515. And Dahlgren adopted a “one-hit theory” stating that “there is no safe level of exposure to benzene.” *Id.* The district court considered that to be “an unreliable causation theory” because it did not rule out an alternative cause for their injuries: ambient benzene. *Id.* The third report fared no better: The district court excluded it because Dahlgren “provided no justification for providing [it] five months late.” *Id.* As everything in that report could have been included in the first report, the court considered the report an “attempt to correct the weaknesses of Dr. Dahlgren's opinions” and “not harmless error.” *Id.*

We upheld this ruling on appeal, holding that the district court did not abuse its discretion in excluding Dahlgren’s reports.³ *Id.* at 520–21. The fourth report, in particular, relied on outdated exposure data and studies having no clear link to the plaintiffs’ conditions. *See id.* at 521. The absence of any “accepted scientific methodology for ruling out non-benzene explanations” for the plaintiffs’ injuries further undermined the opinion. *Id.* We noted that the absence of such elimination methods “is fatal to the admissibility of an expert’s opinion.” *Id.* (citing *Pluck*, 640 F.3d at 678–80; *Tamraz*, 620 F.3d at 674–76). These shortcomings resulted in “simply too great an analytical gap between the data and the opinion proffered.” *Id.* at 520 (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997)). We were left with no “definite and firm conviction that the district court committed a clear error of judgment.” *Id.* at 521 (citing *Pluck*, 640 F.3d at 678–80; *Tamraz*, 620 F.3d at 674–76).

b.

Like the district courts in *Pluck* and *Baker*, the court below did not abuse its discretion and instead correctly spotted red flags in the proffered expert opinion on causation. Here, Dr. Simonton’s testimony was deficient in all three reliability areas: it unreliably applied unreliable methods to insufficient and even irrelevant data.

First, Simonton lacked site-specific data. His preliminary report referenced studies that analyzed mining effects on hydrologic systems not in River Caney but instead in Pikeville and Middlesboro, Kentucky, and Mingo County, West Virginia. Not only is River Caney’s watershed topographically unique, but it experienced unprecedented rainfall compared to nearby locations. The district court thus properly acted within its discretion to “question the relevance of the studies.” *Blackhawk I*, 2024 WL 643133, at *4.

³We didn’t analyze the first or second report, as the plaintiffs did not “argue that the court abused its discretion by excluding” them for “failing to comply” with Rule 26(a)(2)(B). *Baker*, 533 F. App’x at 520. As for the third report, we recognized how district courts “have broad discretion to exclude untimely disclosed expert-witness testimony,” *id.* (quoting *Pluck*, 640 F.3d at 681), and saw no issue with the district court’s ruling, given how “prejudicially late” the opinion was and how it was a “transparent effort to reopen an opinion after its weaknesses had been exposed” earlier. *Id.* at 519. Besides, the plaintiffs did “not specifically challenge the court’s conclusion that the untimely [t]hird [r]eport was an obvious attempt to bolster a deficient opinion.” *Id.* at 520.

Simonton's data exhibit deficiencies analogous to those in Dahlgren's fourth report in *Baker*. See 533 F. App'x at 516. That report relied on "wholly irrelevant" 1977 short-term benzene exposure data, *id.*, similar to Dr. Simonton's reliance on off-point studies from places outside of River Caney. Simonton also proposed an expert opinion like the one offered in *Pluck*, which lacked "any exposure data." 640 F.3d at 675. The district court here did not commit a clear error of judgment in deciding that "Simonton's preliminary report is not based upon sufficient facts or data about the specific mining sites." *Blackhawk I*, 2024 WL 643133, at *5.

Simonton further failed to conduct flood modeling. Such modeling is "the accepted methodology to determine whether land disturbances caused or exacerbated flooding." *Id.* at *3 (citation omitted). The district court adopted the view that "natural hydrologic systems are inherently complex" and "can rarely be described in simple terms, nor can their behavior be predicted with anything less than a computer based hydrologic simulation model." *Id.* (citation omitted). The complexity of the River Caney Watershed's system "is magnified by the fact that in almost all circumstances, certain inputs to the system like river flows and precipitation are not predictable with any certainty." *Id.* (citation omitted). That's why "the task of attempting to establish the behavior features of [hydrologic systems] is *rarely performed without a simulation model.*" *Id.* (emphasis in original) (citation omitted).

It's one thing to say courts do not *per se* require the use of HEC-RAS or HEC-HMS modeling, which is true. See *id.* But it's another thing to say that the district court committed a clear error of judgment when deciding that Simonton's methodology was unreliable—especially when we consider that Simonton did not provide any quantifiable or objectively testable model that is accepted by the relevant hydrologic engineering community. Simonton even testified previously that experts in the field cannot reach conclusions about the impacts of surface disturbances on flooding without first modeling. See *id.* He said he had "never seen" an opinion "where modeling wasn't included," considering it "kind of the standard." *Id.* (citing R. 116-4, PageID 448:20-449:5). In addition, most of the studies that Simonton cited to serve as his (insufficient) data involved hydrologic modeling, albeit at other locations under different storm events. *Id.* That choice of studies shows that even he believes the hydrologic modeling method is reliable and the industry standard.

We again find parallels in *Baker* and *Pluck*. See 533 F. App'x at 511; 640 F.3d at 673. Simonton's lack of testing is like Bedient's failure to conduct his own vapor pathway analysis—something that alarmed both the district and this court in *Baker*. See 533 F. App'x at 524. Simonton's testing shortcomings are also like *Pluck*, where the expert could not properly “rule in” benzene exposure as the cause of Mrs. Pluck's cancer. 640 F.3d at 679. Instead, he relied on less than helpful studies. See *id.* at 679–80. In both *Pluck* and *Baker* this court found no abuse of discretion for exclusion based on faulty methodology. For similar reasons here, there was no abuse of discretion.

Further, Simonton failed to “properly exclude potential alternative causes of the damage that plaintiffs suffered.” *Blackhawk I*, 2024 WL 643133, at *5. More specifically, he did not explicitly rule out, for example, the historic rainfall as causal. *Id.* That sounds like Dahlgren's fourth report in *Baker* again. This report did “not contain any differential diagnosis or other accepted scientific methodology for ruling out non-benzene explanations for plaintiffs' diseases.” *Baker*, 533 F. App'x at 521. And in *Pluck*, Dahlgren did not rule out alternative causes for cancer, like smoking. 640 F.3d at 680. Such an absence in expert testimony is “fatal to the admissibility of an expert's opinion.” *Baker*, 533 F. App'x at 521.

Instead, the bases for Simonton's opinion primarily consisted of “aerial observations,” “studies and publications regarding other locations” that were only “presented in remarkably general terms,” “reviews of relevant precipitation data,” and “examinations of Google Earth imaging.” *Blackhawk I*, 2024 WL 643133, at *4–5 (citation omitted). Or, as the district court categorized them, “anecdotal evidence” and “improper extrapolation.” *Id.* That court said it best: Simonton struggled “to apply principles and methods reliably to the facts of the case by relying on extrapolations from studies conducted on sites outside of the River Caney Watershed.” *Id.* There was “too great an analytical gap between the data and the opinion offered.” *Id.* at *4 (quoting *Joiner*, 522 U.S. at 147).

Simonton's report raises those various red flags that caution against certifying his opinion: reliance on “anecdotal evidence, improper extrapolation, failure to consider other possible causes, and, significantly, a lack of testing.” *Newell Rubbermaid*, 676 F.3d at 528. We cannot say that the district court's understanding of the law and its application to the facts were

manifestly erroneous to overcome the deferential standard we afford to a district court's decisions under Rule 702. The district court identified the correct legal standard and reasonably considered Simonton's testimony to fall short of Rule 702's requirements. None of this suggests "a clear error of judgment" on the part of that court. *In re Scrap Metal Antitrust Litig.*, 527 F.3d at 528 (citation omitted). So, we conclude the district court did not abuse its discretion in excluding Simonton's opinion under Rule 702.

2.

Federal Rule of Civil Procedure 26(a)(2)(B). There also was no abuse of discretion when the district court excluded Simonton's opinion for failure to meet disclosure requirements under Federal Rule of Civil Procedure 26(a)(2)(B). If a party "fails to provide information or identify a witness as required by Rule 26(a) or (e)," Federal Rule of Civil Procedure 37(c) prohibits the party from using "that information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless."

Rule 26 mandates disclosure from each side of a case to enable the other side to prepare for trial and to prevent surprise tactics from affecting the case's outcome. *See Fielden v. CSX Transp., Inc.*, 482 F.3d 866, 871 (6th Cir. 2007). An expert disclosure, in particular, must include "(i) a complete statement of all opinions the witness will express and the basis and reasons for them; (ii) the facts or data considered by the witness in forming them; (iii) any exhibits . . . used to summarize or support them; (iv) the witness's qualifications"; (v) "a list of all other cases" in which the witness testified as an expert; and "(vi) a statement of the compensation to be paid for the study and testimony in the case." Fed. R. Civ. P. 26(a)(2)(B). The rule vests district courts with broad discretion to exclude materials from consideration if a party does not comply with Rule 26. *Brainard*, 432 F.3d at 664; *see Crawford-El v. Britton*, 523 U.S. 574, 598 (1998). And it places a "level of rigor and detail" on disclosing expert testimony. *Adkins*, 105 F.4th at 850. The expert opinion must "outline a line of reasoning arising from a logical foundation" and "include the 'how' and 'why,' not just his conclusions." *Id.* (citation omitted).

We find guidance from *Adkins* for applying these standards. *Id.* at 849–50. In *Adkins*, the plaintiff (Brent Adkins) sought recovery for exposure to hydrogen sulfide while working for the defendant’s barge, alleging the fumes caused his lung deterioration. *Id.* at 848–49. We affirmed the district court’s exclusion of Adkins’s expert opinion from Dr. Charles Pue because it was conclusory and did not meet the level of rigor and detail that Rule 26 requires. *Id.* at 850. It simply stated that pulmonary function tests of Adkins showed his lung function worsened during his employment and that “exposure to hydrogen sulfide and other toxic fumes caused that deterioration.” *Id.* The report contained “no explanation of how hydrocarbon inhalation caused” his decreased pulmonary function and was “without any elaboration.” *Id.* That was the “sole causation theory Dr. Pue offered.” *Id.* Also, the report did not contain a complete statement of Pue’s opinions. *Id.*

Brainard is also instructive. There, we upheld the district court’s exclusion of an expert report submitted in support of the plaintiffs’ claim that an agency relationship had formed between the relevant parties. 432 F.3d at 664. The report called for supplementation, yet the plaintiffs failed to provide it. *Id.* And the court considered the expert opinion “conclusory” as it lacked “substance or analysis.” *Id.*

For similar reasons, the district court acted within its discretion to exclude Simonton’s opinion for lack of completeness. Pine Branch moved to exclude Simonton’s testimony on four grounds. *See Blackhawk I*, 2024 WL 643133, at *6–7. First, his report was incomplete. *See* Fed. R. Civ. P. 26(a)(2)(B)(i). Second, it reached conclusions without identifying their supporting reasoning. *Id.* Third, Plaintiffs did not produce all of Simonton’s considered facts, data, or exhibits. *See* Fed. R. Civ. P. 26(a)(2)(B)(ii)–(iii). And fourth, Plaintiffs did not produce a comprehensive list of all the cases in which Simonton had testified. *See* Fed. R. Civ. P. 26(a)(2)(B)(v). All of these grounds were proper bases for exclusion under Rule 26, the district court reasoned, and we agree. There was no abuse of the district court’s broad discretion.

Plaintiffs provided only a “Preliminary Opinion” of the Caney Creek Flooding in Breathitt County, Kentucky. Although Plaintiffs now contend that the report was complete, we remain unpersuaded. The opinion is only a summary of Simonton’s initial evaluation of topography, existing sediment control structures, and sedimentary conditions that led to flooding.

See *Blackhawk I*, 2024 WL 643133, at *6. Its “fundamental problem” is its status as just a “summary of *initial* preliminary opinions” lacking additional supplementation. *Id.* (emphasis in original). The district court did not commit a clear error of fact or law to require that the opinion be a “complete statement.” *Id.* As in *Brainard*, a need for supplementation was sufficient grounds for exclusion of the report under Rule 26. See 432 F.3d at 664.

Plaintiffs also unduly delayed providing Simonton’s supporting exhibits until after Pine Branch had filed its motion to exclude. See *Blackhawk I*, 2024 WL 643133, at *7. By the time Plaintiffs produced the materials, months had passed since the expert disclosure deadline. *Id.* Nor did it suffice, as Plaintiffs contend, that much of the information Simonton considered “derived from freely available public resources.” Appellant Br. at 60. Placing the burden on Pine Branch to discover the bases of Simonton’s opinion from public sources does not cure Plaintiffs’ Rule 26(a)(2)(b)(ii) and (iii) deficiencies.

Finally, Plaintiffs violated Rule 26(a)(2)(B)(v)’s disclosure requirement. They did not give Pine Branch a comprehensive list of all the cases that Simonton has testified in during the last four years. See *Blackhawk I*, 2024 WL 643133, at *7. Such information is not “worthless,” but instead a disclosure requirement. *Id.* The district court did not abuse its discretion in drawing the inevitable conclusion that the disclosure was deficient. *Id.*

When an expert disclosure is deficient under Rule 26(a), Rule 37 exclusion is “mandatory unless there is a reasonable explanation of why Rule 26 was not complied with or the mistake was harmless.” *Bessemer & Lake Erie R. R. Co. v. Seaway Marine Transp.*, 596 F.3d 357, 370 (6th Cir. 2010) (citation omitted). Here, Plaintiffs made only a minimal effort to explain the failure to disclose critical components of Simonton’s expert material. *Blackhawk I*, 2024 WL 643133, at *8. So, the district court’s exclusion of Simonton’s opinion soundly complied with the mandates of Rules 26 and 37. None of the district court’s Rule 26 conclusions were “manifestly erroneous,” either legally or factually. Because the district court did not abuse its discretion, we defer to its decision to exclude.

B.

Without Simonton’s testimony, Plaintiffs cannot prove causation to establish negligence *per se*. Simonton was their sole expert. Kentucky requires expert testimony for “scientific or specialized” issues that are beyond the “ordinary knowledge gained in the ordinary affairs of life.” *Com., Dep’t of Highways v. Robbins*, 421 S.W.2d 820, 824 (Ky. 1967). We have recognized that “causation of flooding is a complex issue which must be addressed by experts.” *Cox v. Tenn. Valley Auth.*, 989 F.2d 499, 1993 WL 72488, at *11 (6th Cir. 1993). Plaintiffs do not dispute that Kentucky’s state-law rule concerning expert testimony applies or that flood causation involves scientific questions requiring expert testimony at Kentucky law. So we can assume that Kentucky’s rule is “substantive” and extends to this federal proceeding and that it directs Plaintiffs to provide expert testimony. *See Erie R.R. Co. v. Tompkins*, 304 U.S. 64, 78 (1938); *Madej*, 951 F.3d at 373–74.

We have affirmed (or directed) summary judgment against parties who failed to offer expert evidence when it was required to prove causation. *See, e.g., Adkins*, 105 F.4th at 852; *Madej*, 951 F.3d 364; *Pluck*, 640 F.3d at 677. In *Pluck*, we noted that claims involving “causation inquiries” and “scientific assessments” required “testimony of a medical expert” at Ohio law. 640 F.3d at 677. Without it, the “claim will fail.” *Id.* Then in *Baker*, having “excluded Dr. Dahlgren’s opinions—plaintiffs’ only evidence of causation—the district court granted Chevron’s motion for summary judgment” and we affirmed that decision. 533 F. App’x at 516. We do the same now with respect to a summary judgment that similarly turns on the exclusion of Plaintiffs’ sole causation expert opinion.

Even if we thought Plaintiffs somehow could prove causation without an expert, Plaintiffs’ remaining evidence would be insufficient to place the issue in the hands of a jury. The district court was right that the evidence “is thin.” *Blackhawk II*, 734 F. Supp. 3d at 628.

Plaintiffs point to an aerial photo depicting “the barren landscape created by [Pine Branch’s] surface mining operation” and identify the “moonscape-like topography” making it “clear that there is no vegetation on the permit area.” Appellant Br. at 43; R. 137-2, PageID 961.

But that is a mere conclusory allegation that does not establish causation. It fails to establish a genuine dispute of material fact. Fed. R. Civ. P. 56(a).

Nor do the “mine inspection reports” and Notices of Violation testimony from Cabinet Inspector Wilson create a jury issue on causation. The mine inspection reports relied upon by Plaintiffs to prove causation are for Permit Nos. 813-0410 and 813-0413, which are “not permits held by Pine Branch.” Appellee Br. at 50 (emphasis omitted). Permit Nos. 897-0568 and 897-0569 are the only active surface mining permits in the River Caney Watershed and not the ones Plaintiffs cite. Also, Wilson testified he had never issued cessation orders to Pine Branch. Even viewing the facts in the light most favorable to Plaintiffs, neither the warnings contained in the mine inspection reports nor the Notices of Violation show causation of Plaintiffs’ injuries so as to create a genuine dispute of material fact.

Finally, Plaintiffs refer to deposition testimony from Pine Branch’s Regulatory Affairs Director, Don Gibson, and accompanying Notices of Non-Compliance. But the relevance of those notices is unclear because they mostly postdate the flood. Besides, the ponds of sediment buildup did not reach the requisite “clean-out” level prior to the flooding event. *Blackhawk II*, 734 F. Supp. 3d at 623. And the notices noted that “the erosion the [Kentucky Energy and Environment Cabinet] sought to remedy was caused by the flooding event rather than apparent maintenance deficiencies.” *Id.* Again, Plaintiffs’ proof failed to create a genuine dispute as to material fact in support of causation.

By contrast, testimony of Pine Branch’s expert, Dr. Ricci, was the only admissible expert evidence, and it conclusively rebutted Plaintiffs’ causation argument. Unlike the Simonton Report, the Ricci Report met the evidentiary standard of Rule 702 by employing industry modeling. It documented pre-flood and pre-construction files to show sediment control and other site-specific data. Plus, it considered the local rain gauge data from the storm. The report concluded that “no pond associated with any mining operation . . . is designed to withstand the July 2022 storm event”—any would “be overtopped by a storm of this magnitude.” *Ricci Report*, R. 141-1, PageID 1297.

In light of the Ricci Report, and with Simonton's opinion on causation excluded, Plaintiffs lack sufficient evidence to create a genuine dispute of material fact as to causation, an essential element of their claim. So, the district court correctly granted summary judgment to Pine Branch.

III.

We sympathize with Plaintiffs for all that they lost in the flood. But the district court did not abuse its discretion when it excluded their proffered expert testimony under Federal Rule of Evidence 702 and Federal Rule of Civil Procedure 26(a)(2)(B). Without that testimony, Plaintiffs cannot prove that Pine Branch's alleged negligence was a substantial factor that contributed to the flooding of their properties. We therefore **AFFIRM** the district court.