Supreme Court of Texas

No. 23-0808

Tenaris Bay City Inc., *Petitioner*,

v.

Ricky Ellisor, et al., *Respondents*

On Petition for Review from the Court of Appeals for the Fourteenth District of Texas

Argued February 19, 2025

CHIEF JUSTICE BLACKLOCK delivered the opinion of the Court.

Justice Huddle and Justice Young did not participate in the decision.

Hurricane Harvey, one of the most destructive storms in Texas history, struck the gulf coast in the summer of 2017. Thousands of properties were flooded. A group of flooded homeowners in Matagorda County sued a nearby pipeline manufacturing company, blaming design defects at its facility for flood damage at thirty homes in the area. After a favorable jury verdict, the district court rendered judgment for the plaintiffs, and the court of appeals affirmed.

The question presented is whether the plaintiffs failed to prove a basic element of their case—that the defendant, as opposed to merely the extraordinary rainfall combined with other environmental factors, caused their houses to flood. We conclude there was legally insufficient evidence that the plaintiffs' houses would not have flooded but for the defendant's negligence. Houses all throughout this flood-prone region were at risk of flooding during the storm, regardless of the presence of nearby industrial facilities. To recover on their claims, the plaintiffs needed to prove that their houses would not have flooded during Hurricane Harvey if not for the presence of the defendant's defectively designed facility. Challenged to draw that key conclusion, the plaintiffs' expert witness declined to do so. Instead, he acknowledged that he could have done the scientific analysis necessary to know the cause of the flooding of these particular houses, but he had not done it.

In flooding cases following catastrophic rains, causation may often be hard to prove. But pinning the consequences of a historic act of God on your neighbor is no small thing. Thousands of properties across southeast Texas were damaged by flooding during Hurricane Harvey. These plaintiffs were certainly entitled to come to court to contend that *their* Harvey flooding was not merely Harvey's fault but was this defendant's fault. But the natural, default explanation for flood damage during a historic and unpredictable rain event is the storm itself, not the actions of neighboring property owners. Those who wish to prove otherwise must demonstrate, with reliable evidence, that their flood damage would not have occurred if not for their neighbor's tortious actions. Because the plaintiffs in this case did not carry that burden, the judgments of the lower courts are reversed, and judgment is rendered for the defendant.

I.

The plaintiffs own homes in the cities of Van Vleck and Bay City in Matagorda County. Defendant Tenaris Bay City Inc. operates a pipe fabrication facility in Bay City. The Tenaris plant occupies land previously used as a sod farm. To address the concern that replacing a sod farm with impervious cover would increase flooding, Tenaris hired Fluor Enterprises, an international engineering firm, to design and build a drainage system for its new plant. Jones & Carter, a construction and design firm, reviewed the drainage plan and recommended that the county drainage district approve it. The district approved the plan. The system included water detention ponds surrounded by a raised "berm" to prevent uncontrolled runoff.

Hurricane Harvey struck in August 2017, and the plaintiffs' thirty homes were flooded. Expert testimony at trial described Hurricane Harvey as "the most significant tropical cyclone rainfall event in United States history, both in scope and peak rainfall amounts, since reliable rainfall records began around the 1880s." It caused great damage all over southeast Texas, including Matagorda County, which suffered over \$500 million in property damage. As to the severity of Harvey in Matagorda County, there was evidence that other areas of the state were harder hit. However, the lay and expert testimony showed that Harvey dumped 21.6 inches in Matagorda County over four days and that it was either the worst or the second-worst hurricane (after Carla) in memory.

The plaintiffs sued Tenaris, Fluor, and Jones & Carter under theories of negligence, gross negligence, negligence per se, and negligent nuisance. Jones & Carter settled before trial. Fluor settled after trial. By agreement, the plaintiffs' properties were divided into three zones, and the case proceeded to an initial trial on liability only. On the question of causation, the plaintiffs relied primarily on the expert testimony of Gabriel Novak, a civil engineer. The substance of his testimony plays a key role in the outcome of this appeal, as detailed below.

The district court directed a verdict on gross negligence in favor of Tenaris. The court submitted the other theories of negligence to the jury. The jury found Tenaris liable on all three negligence theories as to all three zones. Tenaris and the plaintiffs agreed that the total damages were \$2.8 million. The district court rendered judgment for that amount plus interest. Tenaris appealed, and the court of appeals affirmed. 704 S.W.3d 37, 53 (Tex. App.—Houston [14th Dist.] 2023).

II.

A.

"The elements of a negligence cause of action are the existence of a legal duty, a breach of that duty, and damages proximately caused by the breach." *Rodriguez-Escobar v. Goss*, 392 S.W.3d 109, 113 (Tex. 2013) (quoting *IHS Cedars Treatment Ctr. Of DeSoto, Tex., Inc. v. Mason*, 143 S.W.3d 794, 798 (Tex. 2004)). Proximate cause has two elements: (1) cause in fact, and (2) foreseeability. *Id.*; *IHS*, 143 S.W.3d at 798. Cause in fact, in turn, also has two essential components: (1) "but for" causation, and (2) "substantial factor" causation. *Pediatrics Cool Care v. Thompson*, 649 S.W.3d 152, 158 (Tex. 2022). The plaintiff must establish both elements of cause in fact in order to prevail on a negligence claim. *See id.*; *Goss*, 392 S.W.3d at 113; *Transcon. Ins. Co. v. Crump*, 330 S.W.3d 211, 221–23 (Tex. 2010); *Ford v. Ledesma*, 242 S.W.3d 32, 45–46 (Tex. 2007); *IHS*, 143 S.W.3d at 798–99.

The cause-in-fact standard thus "requires not only that the act or omission be a substantial factor but also that it be a but-for cause of the injury or occurrence," and "a cause-in-fact definition that omits the but-for component [is] 'incomplete." *Rogers v. Zanetti*, 518 S.W.3d 394, 403 (Tex. 2017). The defendant's negligence is the "but for" cause of an injury if, "without the act or omission, the harm would not have occurred." *Pediatrics*, 649 S.W.3d at 158 (quoting *Gunn v. McCoy*, 554 S.W.3d 645, 658 (Tex. 2018)). The jury charge in this case was consistent with these standards. It defined proximate cause to include foreseeability as well as "actual causation," which it described as requiring proof that the defendant's negligence was "a substantial factor in bringing about an injury, and without which cause such injury would not have occurred."

Tenaris contends there was legally insufficient evidence demonstrating that, but for the presence of its facility, the plaintiffs' houses would not have flooded during Hurricane Harvey. After reviewing the record, we must agree. The plaintiffs' expert witness criticized Fluor's decision "to go with a very large drainage basin and shift a lot of flow" to one point on the Tenaris property called "Outflow 1." His "fundamental opinion" was that the drainage facility's design allowed too much water to be directed toward Outflow 1. This design, in his view, caused "additional flooding elsewhere in Van Vleck or Bay City."

Novak's testimony provided sufficient evidence that design flaws at the Tenaris facility contributed to *some* additional flooding in the local area during Hurricane Harvey. But that fact alone is no evidence that anything Tenaris did or did not do was a but-for cause of the flood damage at any of the thirty particular properties at issue. Novak did not and could not say whether, for any of the thirty properties spread throughout the two towns, the flood damage they suffered would not have occurred but for the additional flooding he attributed to Tenaris:

- Q: Okay. And so if the jury [is] going to be asked: Hey what caused these poor folks to have their homes flooded during Hurricane Harvey, you actually can't answer that question, can you?
- A: As far as to the specific homes?
- Q: Yes, sir.
- A: No, I cannot answer that question.
- Q: You can't answer it about any of these places here in Van Vleck or down south in Bay City where the plaintiffs live, can you?
- A: With for as far as a detailed analysis? No.

. . . .

- Q: Okay. You can't put your seal or your stamp on any kind of conclusion in this case about what caused any of these plaintiffs' homes to flood, can you, sir?
- A: A defin I not as far as a definitive conclusion.

- Q: And you can't give us a general conclusion, because you haven't done the work that you just told me you'd have to do to reach that conclusion –
- A: For each –
- Q: right?
- A: That is correct.

Novak acknowledged that he could have determined whether the Tenaris facility caused plaintiffs' homes to flood. To do so, he would have looked at topographic information to create "a detailed drainage analysis" and "hydrographic models of that area." He would have consulted "soil maps" from the Natural Resources Conservation Service and conducted a "study of all of the waterways" in the relevant area. He did not do this analysis, however:

- Q: Okay. And the five things you told us that you would have to look at to figure out what actually caused the flooding at any of these people's homes, right? Are those things that you, in your professional experience and career, you would be able to do?
- A: Yes.
- Q: Okay. But you haven't, have you?
- A: Done a detailed analysis of any of the specific plaintiff[s'] homes?
- Q: Right.
- A: No, I have not.
- Q: In fact, you haven't [done] a general flooding analysis at all about what happened in Van Vleck, Texas, have you, sir?
- A: No. I have not.

Regarding the design of Outflow 1, Novak testified:

- A: Let me make sure I understand your question here. The question is: Have I looked at the – done an analysis to compute the flooding effects off of Outflow 1?
- Q: Fair that's very well put. Very well put. Have you done that?
- A: I have not done that that full of an analysis, no.
- Q: Have you done any any flooding analysis?
- A: I have not done any flooding analysis in that area.
- Q: Whatsoever?
- A: Whatsoever.

At another point, Novak testified that Tenaris's conduct was "a factor" in bringing about the plaintiffs' harm, but he declined to confirm that the conduct was a substantial factor, and he never testified at all to the essential element of but-for causation:

- Q: Mr. Novak, based on your education, work experience, and your modelling, have you – do you have an opinion based on a reasonable degree of engineering probability whether or not the storm water drainage design plan as written by Fluor, and as implemented by Tenaris was a substantial factor in bringing about the flooding of plaintiffs' properties?
- A: Yes.
- Q: Okay. Well, what is your opinion?
- A: My opinion is that the failure of the Fluor design and its implementation was a factor in the flooding of the plaintiffs' properties.

None of Novak's testimony supports the conclusion that Tenaris's defectively designed facility was a but-for cause of the flood damage suffered at the properties in question. The problem is not merely that his testimony was devoid of any such opinion or of any facts from which such a conclusion could reasonably be drawn. The further problem is that he candidly admitted he had not attempted to determine the effect of Tenaris's facility on any of the subject properties, and he had not attempted to determine whether any of the properties would have suffered comparable flood damage in the absence of the facility's alleged defects. As we have stated before, expert testimony on causation is fundamentally unreliable if the expert fails to exclude other plausible causes with reasonable certainty. E.g., Helena Chem. Co. v. Cox, 664 S.W.3d 66, 80-81 (Tex. 2023); JLG Trucking, LLC v. Garza, 466 S.W.3d 157, 162 (Tex. 2015); Crump, 330 S.W.3d at 218. Novak made no attempt at all to exclude the exceptional hurricane itself and other environmental factors in the region that might plausibly have caused the plaintiffs' damages irrespective of any contribution the Tenaris plant made to flooding in the area. His testimony was insufficient to establish but-for causation, and there was no other evidence from which a jury could reasonably infer that the Tenaris facility—rather than merely the storm itself—was a but-for cause of the plaintiffs' damages.

В.

The plaintiffs point out that they recovered on three separate theories—negligence, negligence per se, and nuisance—and they complain that Tenaris focuses its arguments only on the causation element of negligence. Tenaris correctly responds, however, that sufficient evidence of but-for causation was required under all of the plaintiffs' theories of liability, both as a matter of Texas law and as a matter of the jury charge given in this case. As with their negligence claim, under each of their alternative theories the plaintiffs had to prove that their flood damage would not have occurred but for Tenaris's tortious conduct. As discussed above, they did not do so.

An actionable nuisance can arise from intentional conduct, negligence, or in the case of certain ultra-hazardous activities, strict liability. Crosstex N. Tex. Pipeline, L.P. v. Gardiner, 505 S.W.3d 580, 604–09 (Tex. 2016). The plaintiffs' nuisance claim embraced a negligence theory. A negligent nuisance claim "is governed by ordinary negligence principles," which require the plaintiff to prove a legal duty, breach of that duty, and damages proximately caused by the breach. Id. at 607. The nuisance portion of the jury charge instructed that proximate cause means a cause that was foreseeable and "that was a substantial factor in bringing about an injury, and without which cause such injury would not have occurred." Thus, the nuisance charge both correctly required a showing of proximate cause and correctly defined proximate cause to include its required element of but-for causation. The insufficiency of the evidence of but-for causation is therefore just as fatal to the plaintiffs' nuisance claim as it is to their negligence claim.

"Negligence per se" is merely a species of negligence, in which the breach-of-duty element is established by showing the violation of a statute or regulation. *See Mo. Pac. R.R. v. Am. Statesman*, 552 S.W.2d 99, 102 (Tex. 1977). The plaintiffs' negligence per se claim was based on section 11.086 of the Water Code, which provides:

(a) No person may divert or impound the natural flow of surface waters in this state, or permit a diversion or impounding by him to continue, in a manner that damages the property of another by the overflow of the water diverted or impounded.

(b) A person whose property is injured by an overflow of water caused by an unlawful diversion or impounding has remedies at law and in equity and may recover damages occasioned by the overflow.

In general, a negligence per se claim retains the usual requirements of proximate cause. See Mo. Pac. R.R., 552 S.W.2d at 103. Section 11.086 reiterates the causation requirement by specifying that liability attaches only if the injury to property was "caused by an unlawful diversion or impounding" of water and that the damages available are those "occasioned by the overflow." TEX. WATER CODE § 11.086(b). These textual causation requirements only reinforce the proximate causation requirement that would normally apply to any negligence per se claim. This means, as another court applying section 11.086 has observed, that "[t]he plaintiff carries the burden to prove the unlawful diversion caused damages to plaintiff's property which would not have resulted but for such unlawful diversion." Contreras v. Bennett, 361 S.W.3d 174, 178 (Tex. App.—El Paso 2011, no pet.); accord Benavides v. Gonzalez, 396 S.W.2d 512, 514 (Tex. App.-San Antonio 1965, no writ) (interpreting predecessor statute prohibiting diversion or impoundment of surface waters). Once again, these legal standards are consistent with the jury charge in this case, which instructed that "[t]he diversion or impounding of surface water, if any, must have caused damages to Plaintiffs' properties and without which cause such injury would not have occurred." The failure of but-for causation therefore defeats the plaintiffs' negligence per se claims as well.

The parties argue over whether the court of appeals dispensed with the but-for causation requirement and improperly rested its causation holding on substantial-factor causation alone. *See* 704 S.W.3d at 47–48 ("Viewed in the light most favorable to the appellees, we hold there was legally sufficient evidence to support the jurors' finding that Tenaris was a substantial factor in bringing about appellees' harm."). We do not understand the court of appeals to have done so, but in any event, the law (and the jury charge) required the plaintiffs to prove but-for causation, which they failed to do.

Our decision in Bostic v. Georgia-Pacific Corp., 439 S.W.3d 332, 344-46 (Tex. 2014), has no bearing on our application of the usual requirements of proximate causation to this case. Bostic was an asbestos case in which the Court adjusted the but-for causation requirement due to the nature of asbestos injury. Observing that asbestos exposure from various sources can happen throughout a person's life, the Court did not require the plaintiff to "establish[] which fibers from which defendant actually caused the disease" because doing so "is not humanly possible." Id. at 344. We have since held that this relaxed standard will apply only in rare cases. See, e.g., Rogers, 518 S.W.3d at 403. It does not apply here. There is no contention that it "is not humanly possible"—or anything close to that—to reliably demonstrate that water flowing from the Tenaris facility caused the flooding of these particular properties. The plaintiffs' expert testified that he could have determined the cause of flooding at the plaintiffs' houses by tracing the runoff from Tenaris's property to each property, but for whatever reason he did not do so.

The plaintiffs contend that expert testimony was not necessarily required to prove causation. The court of appeals likewise suggested that lay testimony alone was sufficient. 704 S.W.3d at 47. We disagree. There are surely flooding cases in which the cause of flooding is straightforward enough that a factfinder may permissibly rely only on lay testimony when asked whether the defendant caused the plaintiff's flooding. This was not remotely such a case.

"Expert testimony is required when an issue involves matters beyond jurors' common understanding." *Mack Trucks, Inc. v. Tamez,* 206 S.W.3d 572, 583 (Tex. 2006). The plaintiffs' counsel agreed before trial that expert testimony was required to establish causation.¹ The court agreed as well. The plaintiffs' expert, Novak, testified that he would have had to conduct a complicated analysis of data, maps, and models to determine what caused plaintiffs' properties to flood. Such an analysis was by no means impossible, but neither was it within the common understanding of jurors. The flow of flood waters across relatively flat terrain, and the multitude of factors affecting the propensity of any particular gulf-coast property to flood at any given time, are generally matters that are not susceptible to proof solely by

¹ In opposing an attempt to add the sod farm as a responsible third party, the plaintiffs' counsel insisted, correctly, that "there has to be a causation opinion.... If we are talking about I had no expert witness, no engineer, no one else, and I put a plaintiff up there that said, 'I think the water came [from] Tenaris,' that's not evidence where we could have this case. There'd be a no evidence motion filed saying: You can't prove causation."

lay testimony. When thousands of properties are flooded during a historic coastal rainfall, proving that your property's flood damage was caused by your neighbor rather than simply by the storm will generally require proof by expert testimony. The plaintiffs took on that burden and tried their case that way, as they should have, but as explained above, their expert could not provide any opinion on the essential question of but-for causation.

On similar facts, we held in *City of Keller v. Wilson* that proving whether a real estate development increased flooding on neighboring properties required expert testimony. 168 S.W.3d 802, 829 (Tex. 2005). The Court explained that "[c]alculating the effect of detention ponds and absorption in a grassy drainage ditch forty-five feet wide and over two hundred yards long required hydrological formulas, computer models, and mathematical calculations." Id. Similarly here, Novak testified that to determine what caused the plaintiffs' houses to flood, he would have needed to (1) study United States Geological Survey topographic maps, (2) perform a detailed drainage analysis, (3) create computerized hydrological models, (4) look at Natural Resources Conservation Service soil maps, and (5) study all the relevant waterways. This may have proved time-consuming and expensive, but it was not impossible. No matter the difficulty or expense involved in mustering the required evidence, we cannot lightly dispense, in this case or any other, with the bedrock requirement of proof that the defendant actually caused the plaintiff's damages.

The plaintiffs rely heavily on another flooding case, *Tarrant Regional Water District v. Gragg*, 151 S.W.3d 546 (Tex. 2004). They read *Gragg* to excuse a lack of expert testimony on causation and to dispense with the but-for causation requirement in flooding cases. The latter point is belied by *Gragg*'s clear statement that "Gragg was required to prove that the same damaging floods would not have occurred under the same heavy rainfall conditions had the dam not been constructed." *Id.* at 554. Far from retreating from the usual but-for causation requirement, *Gragg* insists on it.

As for the requirement of expert testimony, Gragg relied on both expert testimony and lay testimony in holding that sufficient evidence demonstrated causation. Id. at 551–54. But even if we had found lay testimony alone to be sufficient in Gragg, that would by no means compel the same result here. Gragg involved water discharged from a single floodgate, which flowed downstream in a single river and damaged a single ranch. Demonstrating causation was therefore not nearly as complicated as doing so in a case like this one, where an extraordinary volume of rain fell on vast swaths of acreage in a relatively flat area and then moved from one property to another in ways that are not at all obvious to non-experts. The water flow depended on slight elevation differences, multiple small channels carrying water in various directions, varying amounts of rainfall, varying permeability of the ground, wind, impervious cover, adjacent water flows, etc. Without the help of expert testimony, no factfinder-judge or jury-could reasonably have concluded that the flooding suffered at these thirty houses during Hurricane Harvey would not have occurred but for Tenaris's facility.

The plaintiffs focus much attention on evidence that a portion of the drainage berm was built 43 feet high instead of the designed height of 44 feet, and they blame this failure for the outflow of water from the facility. They also emphasize Tenaris's evident failure to perform proper maintenance on the drainage system in various respects. As incriminating as this evidence may be, it can establish only that Tenaris was negligent. Proof that the defendant was negligent—even vivid proof that the defendant was woefully negligent—is not proof that the plaintiff's injury would not have occurred but for the defendant's negligence.

It will not always be true that proving causation requires mustering *additional* evidence beyond the evidence demonstrating the defendant's negligence. In many car wreck cases, for instance, proof of the way in which the defendant's vehicle struck the plaintiff's may often be sufficient evidence both of the defendant's negligence and of the defendant's causal responsibility for the plaintiff's injuries. But when the allegation is that, if not for the defendant's negligence, certain pieces of property would not have flooded during a catastrophic rain event that flooded many thousands of other properties in the area, proof of the defendant's negligence is no proof of causation. In such a case, the plaintiff must proffer reliable evidence indicating that the defendant's negligence is what made the difference between a flooded home and a dry one during a storm that flooded thousands of homes all on its own. There is no such evidence in this record, and the only witness in a position to provide such evidence pointedly declined to do so. Finally, the plaintiffs testified that their properties had never flooded before, even during similarly drenching rains. But such evidence is not nearly enough to prove that Tenaris caused their flooding during Hurricane Harvey, either on its own or in combination with Novak's testimony. In any community near the gulf coast, gradual changes to impervious cover, subsidence of the earth, extreme weather events, and other factors may alter a property's propensity to flood over the years. There are many reasons why a gulf-coast neighborhood might flood for the first time, and it would not be at all unexpected for that first time to come during one of the wettest and most destructive hurricanes in Texas history.

Novak evidently could have been tasked with a more detailed hydrological analysis, which might have provided some reliable evidence demonstrating that the outflow from the Tenaris facility is what caused these thirty properties to flood. Because he did not attempt that analysis, we are left only with evidence that Tenaris's defectively designed facility caused some additional flooding in the area. The jury must have believed that without the additional flooding attributable to Tenaris, the plaintiffs' flood damage would not have occurred. Perhaps that belief would be proven accurate if we could obtain perfect knowledge of the past. But our judgments must be based on evidence, and on this evidentiary record, the belief that Tenaris caused the flooding of the plaintiffs' properties during Hurricane Harvey rests only on speculation, not on evidence.

III.

For these reasons, the judgment of the court of appeals is reversed, and judgment is rendered for the defendant on all claims.

> James D. Blacklock Chief Justice

OPINION DELIVERED: May 23, 2025