



After the Fact | [The Financial Toll of Flooding—Part 1](#)
Originally aired Aug. 4, 2017

Total runtime: 00:14:37

TRANSCRIPT

Dan LeDuc: Rising waters. We have all seen gut-wrenching pictures in the news of flooded homes and businesses—and we’re now reading more and more about the potential threats of rising sea levels. We’ve entered hurricane season, so we’re likely to be seeing more of this kind of news soon. But don’t think if you live far from the nation’s coastline that you’re high and dry. Places like Ellicott City, Maryland, near Washington, D.C., aren’t exactly waterfront property. Yet last year a flood triggered by a torrential rainstorm killed two people there and nearly wiped out Ellicott City’s historic downtown. In this episode, we will hear about a town known more for music than for high water: Nashville, Tennessee. We’ll talk with Roger Lindsey, who heads the city’s flood preparation planning.

Welcome to “After the Fact,” a podcast from The Pew Charitable Trusts that gives you the stories behind the data shaping our world.

Before we learn more about Nashville, it’s helpful to consider the national perspective on flooding. Namely, how do we pay for the damage wrought by high waters? One big source is the National Flood Insurance Program. And that leads us to this episode’s data point: \$25 billion. That’s how much the flood insurance program is in debt right now. Congress is debating how to extend that program, which provides essential coverage for many property owners. But that big debt masks another key piece of data: Historically, repeatedly flooded properties make up just 1 percent of policyholders in the National Flood Insurance Program—but account for more than a quarter of the claims. That means the program—and taxpayers—are footing the repairs for a lot of the same places over and over again.

We’re going to explore flooding in America, how to pay for the damage, and what can be done to prevent that damage in the first place. We start with Laura Lightbody, who directs Pew’s work on flood-prepared communities.



Laura Lightbody: Wherever it rains, it can flood. We're seeing more of that happening across the country, in coastal communities and inland communities. Their flooding events are becoming more common, but also more costly. And that financial burden is really coming to bear with the federal government and its budget.

2016 is a good example. Last year, there were 36 federally declared disasters that involved flooding. We're starting to see flooding in areas we don't always think of as natural areas that flood.

Dan LeDuc: Thirty-six flooding events in one year. It's an astonishing number. So I asked Laura if there's a reason why we are seeing this sort of an increase.

Laura Lightbody: You know with more population growth, increased development, and an increase in natural disaster events and sea level rise, those three factors compounded by increasing costs, something has to change in the way that our national government and localities and states prepare for and respond to natural disasters.

Dan LeDuc: That brings us to Nashville, Tennessee, well-known for its country music but lesser known for the flooding that devastated the city in 2010. Laura told me that it's one of the towns that is starting to think ahead.

Laura Lightbody: After a big flood event that they had in 2010 completely devastated the city—I think they had over 10 feet of water rise in that city—they have really embraced resiliency and really are proud of what the city's doing. And they're taking measures to reduce that future risk.

Dan LeDuc: That future risk is what's been driving up costs to flood insurance through the federal government's program. But without it, homeowners would—quite literally—be underwater. And it's up to policymakers to decide what happens next. But one thing is clear—it's a big problem that needs innovative solutions from many different stakeholders.

Laura Lightbody: It is sort of a shared responsibility among individuals, communities, states, and the federal government. We've got to look at how we can address our built infrastructure, what is already existing, but also look with an eye towards the future to new development, to



really understand how we can either build smartly or not build in areas that are really risky areas for us. We know that \$1 invested in preparedness activities saves us \$4 in recovery costs. So why not do that on the front end?

Dan LeDuc: We spoke with Roger Lindsey to understand how towns can be more prepared for flooding. He chairs the Tennessee Association of Floodplain Management and serves as the program manager for Metro Nashville Water Services, and he was an instrumental part of rebuilding efforts following the devastating floods in Nashville seven years ago.

So it was about seven years ago. Take us back to that time, and tell us what happened that day.

Roger Lindsey: We rarely watched the forecast from the perspective of looking for extreme events. But we knew that there were 4 to 5 inches of rain expected over the weekend. And I left town for my daughter's dance recital. And I stood in the hotel lobby in Athens, Georgia, and watched this thing unfold on television, on national television.

I watched a portable classroom float down the interstate and then just explode as the top was ripped off as it passed under a bridge. And cars driving into water—not just standing water on a roadway, but water that was 4 to 5 or 6 feet deep on the interstates. And people struggling to get out of cars and swimming to the areas where they could get footing and escape from these. And we left Georgia to come back to Nashville and almost couldn't get to our home because of the flooding and roadways around the area.

Dan LeDuc: As devastating as things were in May of 2010 in your hometown, it had happened there before.

Roger Lindsey: It had. There were two other floods back in the 1970s. And then you go through a span of a couple of decades and people begin to get complacent about how dangerous it is to build a new home in the flood plain. And the reality is that you may go for decades without an extreme event.

But on the other hand, in the years following our 2010 flood, we had another extreme event just three years later that flooded another 100 houses. So you never know. And that's our



message. It's our message to elected officials. It's our message to our citizens: Never assume that this will not happen again.

Dan LeDuc: But these sort of big storms, as you say, since the '70s, you've mentioned what, four of them already where you've had significant flooding in the town of Nashville?

Roger Lindsey: Right, and we've watched over the last several years, dating back to our flood, and even before our flood, big floods in Cedar Rapids, Iowa; Atlanta, Georgia; Nashville, Tennessee. The next year was Hurricane Irene, then Hurricane Sandy. Then there were the floods in the Front Range of the Colorado Rockies, the south Louisiana floods where they got 25 inches of rain in three days. These are all extreme events, and they're occurring two to four to six weeks apart. So you can count this past year, probably a dozen events that are 500- to 1,000-year recurrence-interval storm events.

So we can't define a flood by one event, even though it was a monstrous event in 2010. That was an event that resulted in 44 Tennessee counties being declared disaster areas and a presidential disaster declaration.

Dan LeDuc: Now in some of these flood areas, you have had, what, hundreds of homes not rebuilt in their previous locations?

Roger Lindsey: In the days following the flood, as people would come in to get permits, the vast majority would say, "I wish you'd buy my house." They don't want to go through the endlessly agonizing process to rebuild a house after a flood.

Dan LeDuc: The agony.

Roger Lindsey: And so a significant number of those people would say, "I wish you'd put me on the buyout list." Well, ultimately, you've got to have a federal presidential disaster declaration to make your county eligible for reimbursement through the FEMA [Federal Emergency Management Agency] Mitigation Grant Program. And so we can't buy 2,000 houses, but we can buy 200 houses.



If it's substantially damaged and located in the floodway, you're a prime candidate for a buyout. And so that's the way we started. And so we approached about 300 homeowners, and we said we're prepared to buy your house for demolition and restoration to creek-side greenways.

And so over the years, we've bought out 20 houses on the banks of Mill Creek, or we've elevated 15 houses on the banks of Dry Creek. We had the process down pat, if you will, before our 2010 flood ever occurred. So in 2010, we ultimately, with 300 offers, we ended up buying and tearing down 225 houses.

Dan LeDuc: Wow. And that says something, a lot, about how those homeowners viewed the situation they were in, right?

Roger Lindsey: Absolutely. And on a number of occasions, we've actually worked with parks to install new greenway trails. We have worked with other volunteer organizations to build playground systems in those areas, so there's a neighborhood park now. And we've worked with community organizations to build community gardens, or urban farms is the term that's used now.

Dan LeDuc: These are all important to communities. They're great amenities. But beyond that, the point people should remember is these are soft areas that absorb water. They are not brick and asphalt driveways and all the other things that hard structures do that prevent water from being absorbed.

Roger Lindsey: And as we remove those structures from those neighborhood areas along the creek, we remove any indication that there's ever been development there before. We take out all the driveways, the culvert pipes, the sidewalks. Everything is restored to a natural condition. We maintain an appropriate buffer away from the edge of the creek. And it becomes a natural area again. And it does. It absorbs water.

Dan LeDuc: Well, this is an expensive process, too. So that's where the role of the federal government comes in, right? I mean, that's where most of this funding has to come from. How does that work?



Roger Lindsey: FEMA has a number of different mitigation programs, but the most predominant is the HMGP grant, the Hazard Mitigation Grant Program. And for homes that meet this criteria in a presidentially declared disaster, those homes become eligible for buyout and demolition. So the parcels of land end up being owned by metro government.

There are stipulations that say this land can never be developed again. It must remain in a natural state. So FEMA provides 75 percent of the money to do the purchase of these structures.

Dan LeDuc: Let me ask you about a different program. Or maybe it is the same. Help us understand. There's a federal flood insurance program that is in great arrears right now, and needs authorization this year. How does that play into all of this?

Roger Lindsey: The National Flood Insurance Program, the NFIP, is so critical to just the basic function of essentially of the real estate market in a city. One, if your home is located in a flood plain, your lender is going to require that you carry flood insurance. And if you don't buy it yourself, they'll force-place that insurance on you, probably at a premium. So many houses can't even close without being able to prove that they can get flood insurance on that house. So that goes to the whole National Flood Insurance Program. Without a reauthorization of that program, then there's not flood insurance available to satisfy the needs and demands of the lenders as they lend money to this.

Dan LeDuc: Seems like a critical time then. You're at a period where folks who do what you do in your community are realizing that the flood plain is bigger than you anticipated with this new technology that allows mapping. Meaning more people need insurance and help at a time when the federal government is evaluating and Congress is going to have to decide this year whether to reauthorize this program. Seems like there's two very important things at work here that need to come together.

Roger Lindsey: That's correct. But you know, as important as these other issues are, the ability of a city to get federal aid for different disasters, a citizen that lives in the flood plain needs the reassurance that they can be—and we never make people whole again by insurance. Many people come in and they would sit across the desk from me, and they would express their loss. "I've lost everything I own." "I've lost all my wedding pictures, my children's baby pictures."



“I’ve lost all these things that are so significant to me.” And while you don’t replace those kinds of personal effects, they’ve lost all their furniture. And they’re looking at a year’s worth of some form of recovery, whether it’s trying to rebuild a flooded house, replace their cars, replace their furniture or their clothes. And it’s just an extremely traumatic time. And in the absence of a flood insurance policy being in effect, they have nowhere to turn.

Dan LeDuc: Another part of the nation with flooding worries is more obvious than Nashville—it’s the coastal cities. They are facing rising sea levels. One of them is Norfolk, Virginia. In our next episode, our conversation about flood preparedness continues when we travel to Norfolk to talk with Skip Stiles, who has been at the forefront of efforts to make that city more resilient against high water.

Skip Stiles: In Norfolk, in this part of southeast Virginia, when the wind comes from the north, it pushes the water up. So if you have a full moon, and a northeast wind, you’ll get flooding. And it doesn’t take much at all for this neighborhood to flood.

Dan LeDuc: Thanks for joining us. If you like what you heard, we’d appreciate you writing a review on Apple Podcasts or sending us an email at podcasts@pewtrusts.org—that’s podcasts with an “s”—at pewtrusts.org. For The Pew Charitable Trusts, I’m Dan LeDuc and this is “After the Fact.”