

Introduction

Julia Jarema: Hi, welcome to the NCDPS Safety Scoop, a podcast sponsored by the North Carolina Department of Public Safety. There are great people, programs and resources within this department. In each episode of the Safety Scoop, we'll share how NCDPS employees prevent, protect and prepare North Carolinians and help enhance safety in our state. We hope you'll listen along and learn something you may not have known about the largest state agency in North Carolina.

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Julia: Hi, I'm Julia.

Kirsten Barber: And I'm Kirsten!

Julia: And you're listening to the NCDPS Safety Scoop, a podcast sponsored by the North Carolina Department of Public Safety

Kirsten: NCDPS is the largest Department in the North Carolina state government with some amazing programs and resources...

Julia: ...as well as phenomenal personnel and volunteers.

Kirsten: Listen along as we take you behind the scenes and dive into how the people, programs and resources within this department enhance the safety of the people of North Carolina—give you the scoop, if you will, of all things NCDPS.

Julia: NCDPS's mission is to safeguard the people of North Carolina through prevention, protection and preparation. As you listen to this podcast, we hope you'll learn something you may not have known about the ways the people of NCDPS are working to keep our state safe.

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Season 1 Episode 4

Julia: Hello, today on Safety Scoop we're talking about hazard mitigation, and we'll talk with two NCDPS employees whose primary mission is to protect and prepare North Carolina communities for disasters. Steve McGugan is the Assistant Director for Hazard Mitigation at North Carolina's Emergency Management division. As such, he receives five million dollars in grants to help communities rebuild stronger and safer after disasters. A retired colonel from the US Army, the Durham native joined Duke Energy in 2017 as Director of

Emergency Preparedness, then became the state's Hazard Mitigation Director in May of 2019.

As the Hazard Mitigation Development Manager, Jason Pleasant works with local governments in planning and developing new hazard mitigation projects. Retired from the NC National Guard, Jason's grant management experience made him a great asset for Emergency Management's Hazard Mitigation Group. He joined the state in the fall of 2018. Welcome, gentlemen.

Kirsten: Thanks for joining us.

Asst. Dir. Steve McGugan: Thanks.

Col. (Ret.) Jason Pleasant: Thank you for having us.

Kirsten: So, starting off very generally, what is hazard mitigation, for those who may have zero idea of what it is, or they aren't even involved in it at all?

Asst. Dir. McGugan: So, North Carolina has a variety of potential hazards. They are both natural and manmade hazards. Natural hazards are hurricanes which everyone's familiar with, any type of large rain event which could result in floods. You could have the fires like we've had in the—both the eastern and western part of the state. Of course, there's tornadoes, and then you get into some of the man-made hazards which would be chemical spills, let's say a train derailment, or nuclear accidents, because we do have nuclear power plants in this area, and even cyber-attacks.

Hazard mitigation is intended to lessen the severity of the impacts experienced by those during any one of these hazards occurring and focused on building more resilient communities in the end. So, for example, uh, with respect to flooding, that can mean we elevate homes. Uh, you have homes that get flooded. We figure out where the base elevation of the flood was, and then we raise them above where the worst case happened. Or you could have something like removing the home completely from the floodplain. Doing so allows, of course, the water to flow, nobody to receive damage and, at the same token, communities can then use that property and possibly use it to develop something like parks or whatever. So, there's—there's multiple uses for that.

If you're looking at something like a wildfire, wildfires happen because there's a lot of debris in the woods, uh, and it really pushes up against structures, and so we could give a fire mitigation grant to be able to go out and remove all that debris, all those hazards, and get them out so that it cuts down on the amount of fires. Then there's things that most folks don't think about. There could be providing emergency backup generators for things like hospitals, things like Emergency Operations Centers, things like emergency communications, so responders can continue to communicate during one of those events. All those things are critical, and what we're trying to do is identify where those areas are so that we can then put together a project that would be federally paid for

which state—saves the citizens money, saves the state money and takes advantage of federal dollars to be able to make us better prepared to respond in the event of one of those emergencies.

Julia: That makes sense, and so, I think that's... Obviously, nothing can totally eliminate disasters and make us disaster-proof, but I think what you said, to lessen the impacts, and that's really what I understand hazard mitigation is all about. Tell us a little bit about where does hazard mitigation fit in with the Department of Public Safety?

Asst. Dir. McGugan: So, hazard mitigation, um, falls under the Division of Emergency Management. Right now, our section is probably one of the smallest sections, believe it or not, within North Carolina Emergency Management. We are authorized a total of 16 folks, but we are undergoing a reorganization, and we are going to grow to double that so that we're better able to handle the current responses that we need.

Kirsten: Can you give us some examples of the mitigation efforts that help prepare and protect North Carolina communities from future disasters and potentially walk us through these steps. Uh, the mitigation programs are long-term solutions, like Julia said, not quick fixes, so what are some examples of these?

Asst. Dir. McGugan: Hazard mitigation takes a lot of time. First off, it takes time because our budget is dependent upon how much the federal government spends between PA and IA in the first year after the storm.

Julia: Between the public assistance and the individual assistance programs?

Asst. Dir. McGugan: In...that's correct. So, if the storm happens the first of September, the 30th of August the next year, we get our budget of how much we can help with

Julia: So, you really can't start for about a year or so.

Asst. Dir. McGugan: Well, we...

Julia: With the funding part.

Asst. Dir. McGugan: Well, we *start* because what we do is—is we ask the local communities to provide us folks that would want to be acquired—their homes acquired. How many folks would want to be elevated? How many generator projects based upon, let's say, water station—water lift stations went out? They may need a generator there. They identify all those projects, and we take in all those projects and put them together and do an initial, "Okay, here's what we think we can support based upon where we see the budget going" from, of course, our PA and IA sections.

Julia: Tell our listeners a little bit more about what those mitigation efforts are. What is that being used for? I mean, kind of what are our typical, um, go-to solutions, if you will?

Col. (Ret.) Pleasant: Right, so, what people are used to hearing from hazard mitigation, or at least exposed to the most, are buyouts or—or elevations of residential properties, and the idea with those mitigation, uh, activities is to eliminate or reduce the damages into the future. The buyouts, you know, of course, is what a lot of folks are familiar with—with hazard mitigation, and that, the idea and concept there, is to take a...

[Deep breath]

...a homeowner who may be in a vulnerable spot, um, and—and buy the home from them using grant funds which essentially eliminates any future damages at that location. We also elevate homes, meaning, uh, you know, we take a home and elevate it up out of potential flood risk, uh, down the road, so that reduces potential future damages at a—at a residential location.

So, those are the two primary, um, mitigation practices most people are familiar with, and outside of that we also work with local communities with infrastructure projects, with generator-type projects to—to help assist with potential power redundancy during the future storms, also for managing stormwater during future storms. You know, what we're designed to do is put into place something that will help us for the future, not to recover, necessarily, from the last storm. So, we're—we're trying to look forward in how to build a resilient community whether that be at a residential address through a buyout or an elevation or as the community itself with stormwater management and that kind of thing.

Kirsten: Can you give us a sense of the size and scope of the state's hazard mitigation efforts post-Hurricane Matthew and post-Hurricane Florence?

Col. (Ret.) Pleasant: With Matthew, uh, and—and Hurricane Matthew and the projects that preceded that or, uh, were a result of that was, uh, we're working with 783 properties. Following that with Hurricane Florence, we're looking at 850 properties. Uh, and—and to give that some relative sense, you know, the—the biggest one that preceded that was Floyd which we, you know, looked at around 800 properties, so we're hovering around between Matthew, Florence and the, uh, Michael, Dorian, the other types of projects, we're running about 2,000 properties right now that we're currently working, so much larger-scale in hazard mitigation right now.

Julia: Tell us a little bit about how some of those mitigation efforts have been made in previous storms like Floyd. I know we had some after Irene, as well. How have those benefited the state?

Asst. Dir. McGugan: So, one of the key parts of being able to remove folks from the floodplain is that you reduce the impacts on the National Flood Insurance Program. If you'll remember all the way back to Floyd, basically, the National Flood Insurance Program went broke trying to ensure everybody paid out for all the damages that were from Floyd. So, one of the pieces that we're doing is—is by continuing to do this mitigation, you do help protect that program against the National Flood. So, you know, in conjunction with FEMA, we're reducing the threat that NFIP cannot pay out as it should. Now again, they're international. They will get the money for it, but it does cause a lot of issues. As we continue to mitigate year after year after year, we're being able to reduce impacts on those type of national programs. Of course, it also impacts state programs because the state does provide 25% of the funding for all these projects that we do. So, we talked about...

[Clears throat]

...500 million dollars in a program, I mean, if you look at currently what we're working with Florence alone. So, the federal government's provided 210 million dollars for Florence, but the state's matching that with 90 million dollars. So, again, as you reduce that, it reduces the funds that the state has to bring which, again, is—is a benefit because then the state could then apply those funds to other areas that are very critical.

Julia: Mmm.

Asst. Dir. McGugan: So, it all works in conjunction with each other as we reduce the threat from those storms and reduce the amounts that we have to pay out.

Julia: So, we've talked about elevating and buying out homes. What are some of the other mitigation strategies that are used? And the elevations and the buyouts I know center a lot around the floods, flood damage, but what are some of the other, uh, strategies that are used and what's used for—for disasters other than flood-related or water related?

Col. (Ret.) Pleasant: The, um, the most notable is, uh, we have had wildfires in the western part of North Carolina. We submitted back in the fall some grant applications for fuel reduction and soil stabilization.

Julia: What do you mean "fuel reduction"?

Col. (Ret.) Pleasant: So, uh, fuel reduction, what that is is to reduce brush, dry timber that may, uh, catch fire. Also, we have a grant application in for, uh, reducing that material so that we can...

Julia: So, literally going in and clearing out some of that dead brush that may fuel those wildfires and, you know, create a bigger problem.

Col. (Ret.) Pleasant: Absolutely.

Kirsten: So, recently DPS announced the award of millions of dollars to local governments, and these are called SARF funds. That's S-A-R-F funds. What are those funds, and how are they helping with hazard mitigation?

Asst. Dir. McGugan: So, SARF stands for the State Acquisition and Relocation Funds. This is a purely state-provided, legislature-provided money for this program. The intent is that for most of the folks that are in a floodplain, their houses are not highly valued, so when they purchase their homes...

[Clears throat]

...for them to move into newer homes, out of the floodplain, there's a cost increase. So, the intent is—is to be able to provide them funds that not only allows them to relocate, so they can get up to \$5,000 for relocation costs (that's their moving costs and—and their closing costs on the new home that they're moving to), but it also pays part of the difference between the closing on the new home (the closing price on the new home, not the closing functions but the actual price difference) will be provided for their old home when they move out...

[Clears throat]

...any residual if they paid off a home loan and then what it would be to be able to take a conventional loan on a new home. So, it closes that gap, so we can verify that they moved into a safe home. A safe home, it's out of the floodplain, and it's intended for them to be able to buy us that safe home out of the flood plain in the same county they were in and not have to go. So, if their county may be a more expensive county, they may get a little more of the money in the SARF. The SARF is set up—the actual difference is set up as a fixed rate, and then we have a calculation based upon HUD values and the legislature's direction to be able to—to provide them that delta in that cost, and then those funds allow them to get into that safer home and allows them to relocate to that safer home. So, that's the intent of SARF.

Kirsten: So, what it sounds like to me is you're not trying to make people move and uproot out of their community. You're trying to keep them within that community that they've been in where they have friends, neighbors, churches, schools...

Julia: Family, jobs...

Kirsten: ...what have you.

Julia: Yeah.

Asst. Dir. McGugan: Yeah, you want to keep them there. And, you know, when you look at the—the county or the city where they're locating from, what's also in—critical to

understand from the economic side of the house is that when we take one of these properties out, that property is no longer able to provide that community a tax base because that land is now, quote unquote, owned by the county. They're not collecting on it. So, if we can relocate that person or that family within that town, they don't lose out on the tax base, so they can continue to provide services for their citizens based on how they're set up. So, it's critical that we try to maintain community integrity as much as possible, and that was part of the—the—the reasoning behind the SARF being provided.

Kirsten: That makes a lot of sense.

Julia: So, Steve, I know you had talked about, um, and Jason, you had talked about some of the funding earlier for hazard mitigation, and—and I understand that you mentioned earlier that states, uh, receive the federal hazard mitigation funds based on the percentage of total federal dollars that are distributed in aid through the individual and public assistance recovery programs that we talked about earlier. But I know North Carolina gets a higher percentage of funding. Tell us a little bit about that. How—how is it that we get a higher percentage of funding, and—and what does that mean for us, and how does that translate into additional dollars or projects?

Asst. Dir. McGugan: [Clears throat]

I used the number 75% earlier. So, in the hazard mitigation program, the way the program's written is—is that the federal government will pay 75% of the cost to do the work, and it must be matched by the local. So, it's either homeowner, the local county, or the state. So, in North Carolina, the state, under a disaster, takes care of that to take the burden off the local community as well as the homeowner. Enhancement means is that because we're an *enhanced* state, we get 20% which, again, when you look at a storm like Florence, so Florence is, again, right at 1.2 billion at the time that we did our lock-in. If we had been a normal state at 15%, that would have only provided us about 250 million dollars between the federal and the state share to be able to do homeowners. At 20%, that put us over 300 million, so that's what the enhancement means. And basically the enhancement comes from because of our planning, again, our—the planning section that we have. We—we do hazard mitigation plans across the state, so the state has a plan, and then we have 34 jurisdictional plans to cover.

Julia: So, the—so the state, just to clarify, the state is considered a... We have earned a statewide enhanced hazard mitigation plan.

Asst. Dir. McGugan: That's right.

Julia: So, we...

Asst. Dir. McGugan: So, the state plan covers that 20%. And—and the—but what's critical is—is that we also cover all the communities with a plan. So, each community, all the way

down to the local community, a local town, is covered by a jurisdictional plan. So, like here in Wake County, Wake County has its own plan that covers the entire county. Durham County and Orange County are a plan together. So, there's different plans, but we have 34 as a state. And based upon our resiliency and planning across the state, and because of how we have written our state plan, FEMA declared us to be an enhanced planning state, and based on being an enhanced planning state, that gave us the extra 5% to be able to get extra money to be able to help our communities.

Julia: So, it sounds like, uh, if I understand you correctly, that the state government and the local governments really worked together, uh, to really figure out how can we be more resilient? How can we partner together to be more resilient and to help lessen some of these—the impacts of some of these disasters? And let's come up with a plan or a formulation to do that. And that's what you're—that's what you're referring to.

Asst. Dir. McGugan: That's—that's correct. And those plans are done every five years, and—and so we update the state plan every five years and the communities on rolling five years.

Col. (Ret.) Pleasant: I think something remarkable to bring up here, though, is the fact that North Carolina is unique as a state in that not only does it, the state, pick up the funding for the local municipality, but we also offer programs like SARF which are not available in any other state. So, uh, you know, sometimes that kind of gets missed at, you know, the local levels. Uh, you know, in South Carolina and Georgia and other states, the local governments have to pick these costs up, whereas in North Carolina, you know, the state, through its, you know, efforts, takes that cost on. And also, programs like SARF that don't exist in other—in other states, you know. And, you know, the—the state of North Carolina is pretty robust when it comes to, uh, recovery efforts.

Kirsten: You are currently involved with an effort with the University of North Carolina system to develop hazard mitigation plans for all of its university campuses across the state. Can you tell us a little bit more about that?

Col. (Ret.) Pleasant: The university systems and—and the programs we work with them date back to the Clinton Administration under the Disaster Resistant Universities Program which was an initiative that—that's been in place for a while. Uh, these universities, in effect, are small communities and—and need to be acknowledged as such. Uh, you know, they—they integrate with cities but have needs that are on par with small communities, so, uh, looking to them to develop mitigation planning, looking to them for mitigation strategies and putting into place grant activities that can help support more resilient, uh, um, community for a university is what—what that effort is—is—is involved with, so...

Kirsten: And we did see in Hurricane Florence UNCW, UNC Wilmington, was deeply affected by that storm and the flooding on that campus, and so I definitely think that the campuses and that the college towns will definitely benefit from these mitigation efforts.

Col. (Ret.) Pleasant: Absolutely.

Julia: Is there anything else that we've missed that you, uh, would like to add?

Col. (Ret.) Pleasant: This program is a strategic community development program, but it has a human element to it that every day that we come into the office, we hear the stories, and we understand the stress of—that every individual that's participating in this is going through. And to ha—marry that with the strategic nature of what we do is—is obviously, um, you know, a balancing act, for sure.

Kirsten: If there are North Carolinians listening who want to learn more about these programs, where can they go?

Asst. Dir. McGugan: Multiple websites, of course. FEMA website provides you some information. Our website, if you can go under the North Carolina Emergency Management website, and you look for hazard mitigation, we're there. You click on a link and come in to see—and see what we have. And of course, if you go to FEMA, you can do the same thing.

But the best place to go is to start with their local, city government or town county government, depending upon where they live. Uh, normally either the city or town county manager's office, they have a certified floodplain manager. In each county, the certified floodplain manager will be able to tell them one, if they live in a floodplain, and two, kind of get them in-involved, understand if they've been damaged previously. That would be who they would want to let know that they've been damaged previously. And then from there, our office will send out a note to those counties, to all—all recipients across the state, let them know when the program opens. And those counties then will provide that information, again, from folks that went and contacted them, will provide that information up to us, and then that opens the door for us to be able to see if they fit into the program, communicate with them and be able to—to discuss things further with them.

Conclusion

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Julia: Thanks for listening to this episode of the Safety Scoop. To learn more about NCDPS, go to ncdps.gov. Tune in next time on your favorite podcast app to hear more behind-the-scenes stories from the North Carolina Department of Public Safety.

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