**Chad\_Berginnis\_interview\_20250902.mp3**

[00:00:08] **Speaker 1** How are you, Elijah?

[00:00:09] **Speaker 2** I'm good, how are you?

[00:00:11] **Speaker 3** I'm doing well, thank you.

[00:00:13] **Speaker 2** Thank you so much for joining us today.

[00:00:16] **Speaker 3** Absolutely. Absolutely. I loved, loved, enjoyed, enjoyed doing these kinds of things. So, and especially being able to talk a little bit, brag about our home state, Wisconsin, at least for, for ASFPM. So.

[00:00:29] **Speaker 2** All right. That's wonderful. So to start us off, just like a quick overview of what kind of the story is. And the other person in the chat today is Rachel. She's our media production specialist. She just recording the whole thing. So the story's going to be in light of all the stuff that's happening in Milwaukee, we want to do an update on flood management in Wisconsin, right? And just to start us off, real quick question. Your name is Tad Virginis, right? And you are the executive director of association state club play managers. So you're okay with being referred to all of that.

[00:01:02] **Speaker 3** Yes.

[00:01:03] **Speaker 2** All right, perfect. And just to make sure I have everything in order, ASFPM is you guys work with policymakers to help manage policy for flooding, and also you certified and trained flood managers, right?

[00:01:20] **Speaker 3** That's correct, yes. Yeah, they work with policymakers primarily at the federal and state level. And then we also, one aspect of ASFPM is we also do applied research and tool development as well.

[00:01:37] **Speaker 2** Okay, got it. So research and tool development. Okay, so my first question for you is how is Wisconsin doing in terms of managing floods compared to other states?

[00:01:51] **Speaker 3** Wisconsin actually has had a history of proactive flood management, and in fact, it isn't by pure happenstance that Wisconsin is also the home of ASFPM headquarters, because there has been a long time. A strong ethic when it comes to making sure that we're dealing with flood risks appropriately. When you look at flood management, historically speaking, the upper Midwest, including Wisconsin, Minnesota, Illinois, Iowa, some of those states have had long histories of proactive flood management. So I would say comparatively, Compared to other states, Wisconsin I think is doing quite well, and I think that's also a big reason that you don't see as many headlines about the flood damages occurring in Wisconsin that you might see elsewhere in terms of the scope and magnitude of those damages.

[00:02:58] **Speaker 2** Right, right. And in terms of the flooding that happened in Milwaukee last month, how good is Milwaukee and managing floods is sort of the largest city in the state.

[00:03:09] **Speaker 3** Yeah. Yeah. So I know a little bit about Milwaukee's approach. And again, much like the state of Wisconsin, I would say that it is quite proactive. The the Milwaukee Metropolitan Sewage District, I believe, is kind of oversees a lot of those activities. And I know that for a number of decades, MMSD has been looking to make sure that flood prone areas. Are cleared to the extent possible of human habitation and things so that you give rivers and streams appropriate places to flood being their floodplains. And so overall, I think Milwaukee's done a really good job at doing that. However, I think what happened this summer is something that we're seeing also across the nation, and that is the, um, the rapid increase. Of this flood threat that we would call pluvial flooding or stormwater flooding. And it was something that probably 25 years ago you'd see it on occasion, but I think that in trending also with kind of a warming climate and some of those climate change factors, we're also seeing the increase of very heavy rainfall events. And unfortunately, the Milwaukee area had to endure that over the summer.

[00:04:39] **Speaker 2** And can you just explain to me a little bit more what alluvial flooding is?

[00:04:43] **Speaker 3** Sure. One of the things that we know is happening across the country, and it's been measured and studied, is that we are seeing an increase overall in very heavy rainfall events. Now, this can even happen in areas that over the course of the year may be getting drier. But the problem is the rainfall is not being distributed as it used to be. And so you might have fewer, but more intense storms. And of course, in an urbanized area, how do we manage stormwater? We have engineered approaches to managing stormwater with our storm sewers and things like that. But if the intensity of those invents is getting worse. Then at some point, those events exceed the capacity of our engineered systems to handle it. And as a result, you get the stormwater or pleudial flooding.

[00:05:43] **Speaker 2** So because this was like, I've seen the headline like a thousand year flood that happened in Milwaukee. Is there anything like, can you build systems to sustain a thousand-year flood, or is it just too grand and there's something else that we might need?

[00:05:57] **Speaker 3** You know, I was thinking about this very topic quite a bit over the last week, as you may be aware, last Friday was the 20th anniversary of Hurricane Katrina. And I remember at the time people saying, like, oh, you know, Katrina, this is a once in a lifetime, a biblical event. You know you could throw whatever superlative out there, a thousand year, you know, just huge event. The problem is... Is since that time, we've just seen more and more and more of these really large events. And so even when we use a term like the thousand year event, that sounds really big, but I might argue that as these events become more frequent than what was a thousand year becomes a 500 year, becomes a hundred year event eventually. I think in the flood management world, we need to be starting to think about those large kind of events. And in fact, one of the newest national standards for flood management came out in January called ASCE 2424. And that is the first standard nationally that we have that asks us to start looking at the one in a thousand year event as a protection level. So actually I'm gonna argue that we've got to be very careful not to write off a thousand-year event as something that's just gonna happen once every thousand years and be done with it. We're seeing a lot more of those events and we need to start making sure our built environment is resilient against those events.

[00:07:41] **Speaker 2** And what does that look like, being more resilient toward these grand events?

[00:07:46] **Speaker 3** Yeah, so I think it happens in multiple ways. You know, first of all, facilities. Let's say those really essential facilities in your community, like a wastewater treatment plant, a hospital, those facilities probably should be designed to make sure that they're open, functional, and not impacted during a thousand-year event. And that's what actually ASCE 2424 recommends. But even things like our homes and our residences, I mean, look, flood losses now in the nation average $46 billion a year. We've had a flood standard in the country tied to the 100-year flood frequency for over 50 years. Clearly, that standard is not working. And so, again, and I go back to ASCE 2424 because I. It says for residential, for commercial, for industrial properties, why not protect those to the 500 year flood event? Now, designing storm sewers and such to a thousand year may be a little bit high, but again, in Houston we know, for instance, they use the streets as conveyance areas for those flood waters. So they're intentionally meant to flood. That way. So I think it, I think what it requires though, is us to look at it holistically and how we can update our stormwater standards, how we can upgrade our floodplain management standards and our building and land use standards.

[00:09:17] **Speaker 2** And going back to Milwaukee a little bit you did say that they were you know really well prepared for these kind of things compared to the rest of the nation. There was a letter that came out um from Tony Evers last week um about you know kind of what the results of were that flood. I take the notes where there's about one confirmed death, two possibly related, and three people missing, and then about 76 million dollars in damages. Um had Milwaukee not been so Do you think this flood would have been worse?

[00:09:49] **Speaker 3** Absolutely without question. Yes. You know, again, the state itself has had flood standards that every community in Wisconsin have to adhere to that include a protection level above the 100 year flood. It has a flood mapping standard that makes sure our floodplains largely are free of any newer residential commercial industrial development. And so While those damages are a lot and it is painful to hear injury and death happening with a flood, I can guarantee those numbers would have been far higher had the state not been practicing good floodplain management for decades.

[00:10:33] **Speaker 2** And another question I had about this report was that it said that about 90% of homes that were damaged were located outside of the FEMA 100-year floodplain. Why is that? Well, the fact is that the floodplain was

[00:10:46] **Speaker 3** Yeah, so the hundred-year FEMA floodplain, if we go back in history, and if we were in the room in 1968 when the National Flood Insurance Program was conceived, we would probably hear a debate using different flood standards, but really nobody knowing exactly what our standards should be. You know, at that time, the Corps of Engineers was using regional floods that probably we're about. 250-Year level. But there was debate on what that standard was. Ultimately, the NFIP's 100-year standard was a political compromise, nothing more, nothing less. And we needed to have a standard that we at least tried this big experiment called the Flood Insurance Program. But what we have not done in the 50 years since is, we have paid attention to the lessons learned after every flood. There are lessons that can be learned. And we need to incorporate that information back and make our programs even better. Unfortunately, with the NFIP, that hasn't been done, especially when it comes to the flood protection standards. So it is, again, I kind of point to the flood losses in the country, the fact that historically around 30 to 40% of flood claims happen outside of the FEMA 100-year floodplain. And that's because most of the time, a community's flood standards of their ordinances, the protection standards stop when you hit the boundary of that 100-year floodplain. And I was on a presentation a couple of weeks ago where another panelist had basically said what we're seeing actually are damages being higher outside of the FEMA 100-year floodplain than inside the floodplain. And it's because there are no flood standards applying to those buildings while there are standards in the mapped FEMA floodplains. So again, I'll kind of go back to this ASCE 2424, one of the... Really important ideas in there is that we should actually start looking at our regulatory level being both the 100 year floodplain and the 500 year flood plain so that we catch a few more of those outlying buildings, giving the nature of the changing flood risks we have.

[00:12:58] **Speaker 2** Yeah, and about FEMA, so with all the movement that's happening at a federal level, including cuts and the restructures of floodplain standards, how is that affecting floodplain managers and the way they manage floodplains?

[00:13:12] **Speaker 3** Well, where it's had its most immediate impact right now is on the hazard mitigation grant side of things. So I always look at floodplain management as needing to address two problems, the built environment and the yet-to-be-built environment. The built environment has a lot of older at-risk buildings that we've got to address. Probably not through codes and standards, because you need to do something more immediate. And that's where hazard mitigation comes in, where you can apply for grants to elevate or relocate or flood-proof buildings that way. And so when the, you know, when this administration came in. And one of the first actions, I have to say, to me, was a bit of a head-scratcher, which was curtailing the BRIC program, the Pre-Disaster Mitigation Program, because that was a program that President Trump in his first term actually signed into law. And then the administration now has also not granted any governor's request for hazard mitigation since February. And usually if there's a major disaster declaration, a governor can request individual assistance, public assistance and mitigation. There's been no mitigation granted across the country through the Hazard Mitigation Grant program that way. And then more recently, I think, due to some of the administrative decisions of FEMA, including... You know, every expenditure over $100,000 basically going through more bureaucratic red tape at the FEMA administrators level and the DHS secretary level. We're seeing delays in mapping projects. We have not seen the funding grant mechanism for cooperating mapping partners called the CTP program. And again, flood mapping is foundational to all of these efforts. You can't manage flood risk if you don't know where it is.

[00:15:31] **Speaker 2** So going a little bit into flood mapping very quickly, do you have any concerns with that about the way that we currently map floodplains?

[00:15:41] **Speaker 3** Well, my primary concern at this point is getting, making sure that we have mapping funds out the door that Congress has appropriated. And, again, this is where I'm scratching my head a little bit. And this is even a little bit more puzzling, because, on one hand, it seems like President Trump is supporting flood mapping in the president's budget for FY26. There was stronger language about the necessity of flood mapping, as well as an increase compared to the previous administration requests for flood mapping. But then only to see things not being implemented at the FEMA level. And I have to wonder what the heck is going on at FEMA or DHS? Are they not implementing the president's priorities that way? So again, we have not... Even completed mapping in the country. So that's why I go back to this is about Congress authorizing money and the administration executing on that. But beyond that, again, I think with flood mapping, one of the other concerns I have is kind of the brain drain at FEMA had been. Had been piloting a new prototype approach to doing flood mapping called the Future of Flood Risk Data. It's been about six or seven years in the making in terms of this approach. There were some pilots that were to wrap up and now with over a third of FEMA's workforce gone, including many in the mapping program, we don't know what the outcome is at this point. And it's too bad because Future of Flood Risk Data initiative is the right way the mapping program should be going, taking advantage of the latest technologies, the latest approaches, and giving us much more broad set of flood data, including the stormwater mapping data so that we can better identify those kinds of flood risks that hit Milwaukee.

[00:17:54] **Speaker 2** And just to wrap this up, final question for you. What would you like to see happen going forward for better flood management? And why do you think that people should care about it?

[00:18:08] **Speaker 3** Well, what I'd like to see going forward first, I think, would be FEMA to simply get both the grant funds out the door as well as their programs working again. FEMA is also not talking to any of their partners, so we don't know what is actually happening there. So that'd be the first step. Then the second is I think that we have got to get real as a nation when it comes to our flood standards. The ASCE 2424 standard, I think, represents something that we need to get to. And even if that's something where FEMA or Congress says, you know what, yes, the base standard for the NFIP needs to be ASCE-2424, I think that would push us ahead to where we need to be in terms of the standards that are meeting the hazard out there.

[00:19:03] **Speaker 2** Right. Is there anything else you feel like we didn't cover that you wanted to say today?

[00:19:09] **Speaker 3** You know, I'll just reiterate that the state of Wisconsin, because it's done proactive flood plain management for decades, is reaping those rewards. And I know it sounds funny to say this in the aftermath of 70-plus million dollars in damage in Milwaukee, but it would have absolutely been far worse than it was. And so, you know, hopefully, flood will be a reminder to policymakers in the state, as well as even local floodplain managers that we have to be vigilant because flood risk is increasing in the country and we've got to meet it head on.

[00:19:53] **Speaker 2** Well, thank you so much for your time today, Chad. It was lovely meeting you. When this story comes out, I'll absolutely send it to you guys. Okay. But yeah, thank so much. You have a good day.

[00:20:03] **Speaker 3** All right, thank you. You too, take care.

[00:20:04] **Speaker 2** Thank you. Take care. Bye-bye. Thank you, Rachel, by the way, I'm going to go ahead and end this meeting, but you have a good rest of your day.