Flood Awareness Month – PODCAST 8: River Floods vs. Flash Floods
RUN TIME: 2 MIN 41 SECONDS

Jeff Johnson, Warning Coordination Meteorologist
National Weather Service (Des Moines)

Jeff Zogg, Senior Hydrologist
National Weather Service (Des Moines)

Stefanie Bond, Public Information Officer
Iowa Homeland Security and Emergency Management Division

STEFANIE BOND: Is there anything else that you two would like to add? See, I can’t get your names wrong. If I say “Jeff,”

JEFF JOHNSON: Well–

STEFANIE BOND: …it doesn’t matter–

JEFF ZOGG: There you go.

STEFANIE BOND: …I got it right!

JEFF JOHNSON: Just want to make sure the listeners out there know the difference between a river flood and a flash flood. We aren’t talking about flash flooding today, but flash flooding is caused by the rapid inundation of a normally dry area – usually brought on by either heavy conductive rainfall, extremely heavy rain over a short period of time. Although it can be caused by river ice jam flooding in the spring and also dam failures. And levee failures. Those are the four main ways, but of those four main ways most serious flash floods in Iowa are caused by heavy rain. That’s a rapid increase of water in a very short time and that’s the kind of flooding that typically kills people because the water’s moving very quickly and it will either sweep you off your feet if you’re on your feet – or in a car, that’s the biggest culprit. Your car will get carried away in the flood waters.

River flooding, on the other hand, causes tremendous property damage and lasts a lot longer – it’s an order of scale. It’s usually pretty slow, relatively, to rise and slow to fall. Which means that although property damage is significant, and crop damage – the loss of life from river flooding is less.

STEFANIE: Mmm hmm.

JEFF JOHNSON: Because people can typically get out of the way.

JEFF ZOGG: Jeff, I think you covered it pretty well. I think the primary reason is, again, the speed at which the flooding develops with flash flooding. It’s very fast. Uh, sometimes it’s in locations that typically may not flood, or, people are not used to it flooding, and they could drive into it in the middle of the night and be swept away. So it’s definitely a danger to be reckoned with. River flooding, obviously, you need to keep track of that, too, but flash flooding tends to be the more serious, the more immediate, more life-threatening type flooding.

JEFF JOHNSON: In the short term, since we’re on both flash and river flooding, flash flood warnings should be responded to similarly like a tornado warning. That doesn’t mean run downstairs to shelter necessarily;
that means if you’re in a flood-prone area, you need to move to higher ground, or if you are in an automobile you need to be darned careful not to drive through a flooded area. And make sure you don’t do that because that’s a quick way to get killed.

STEFANIE: “Turn around, don’t drown?”

JEFF JOHNSON: …don’t drown. Thank you. “Turn around, don’t drown” is the motto of the day. Now river flood warnings are issued for longer duration. Usually they don’t even have an end time – usually it’s when the river falls back below flooding – is when the flood warning ends. And they’re long duration. They can last – well, the flood warning was out, for example, on the Missouri for, my goodness, several months – they had river flood warnings in effect. So if you have a river flood warning posted for your area, you know, you need to be really into in tune as to what the river’s gonna do and what are the impacts. And then, how best to respond to that. If you’re not living in the flood plain, just avoid the area – don’t go in there. If you’re living in the flood plain, listen to the local emergency management officials and get directions as to what to do. Again, turn around, don’t drown. Don’t drive through flood waters, and remember these flood waters are very dirty…

STEFANIE: Mmm mm.

JEFF JOHNSON: …and they’re very toxic. They’re full of chemicals, and biohazards, and should be avoided at all costs.