Flood Awareness Month – PODCAST 4: Forecasting and Preparedness
RUN TIME: 1 MIN 57 SECONDS

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JEFF JOHNSON: Let's maybe switch gears. Instead of the spring flood season, let's go on to the summer time where we get the more typical flash flooding and then resulting in river flooding. And how does that work, you know, in the sense of, for example, 2008 – the Cedar basin – and all the record flooding we had there? Which of course, that occurred in June. And although – a little bit of a history for this – going into that, it had been wet. But certainly this was not a snow melt flood, this was a heavy rain-induced flood, because it occurred well after the snow pack was long gone. And, how does that work with the National Weather Service and making the forecast from an event like that with perspective to one river?

JEFF ZOGG: Sure, Jeff. There's a lot of factors we consider when we're forecasting rivers, just like when we're looking for the potential for spring flooding. Of course, the observed and forecast rainfall in Iowa is the biggest driver of river forecasts – not just during the winter but even during the summer season. And again, as you alluded to back in 2008, the rainfall was what really made things so serious along the – especially the Cedar and Iowa River in northern and eastern Iowa. But in addition to precipitation, we'll look at soil moisture again – the ability of the soil to absorb moisture. We will look at land use. And by land use I mean, is it urbanized? Is it agricultural? Because if it's an urbanized area, you're going to have water running off a lot faster than if it's in an agricultural area. We'll look at topography. If the ground is relatively flat, the water will not drain as rapidly as if there's a lot of terrain. For example, in southern Iowa, there tends to be more terrain, more hilly than in northern and even portions of eastern Iowa, so the water's able to run off more rapidly into the streams. But in 2008, it was just a sheer volume of rainfall that fell, fell in a relatively short time period, obviously much more than the rivers could handle. And the ground was basically saturated at that point; it was almost total runoff into the rivers in northern and eastern Iowa. So, the rainfall by far was the biggest factor back in 2008. Again, as it typically is any time of year, you really have to pay attention to the observed and forecast rainfall to give you a good clue as to what's going to happen on the river.