Comparison Between Two Flash Flood Events in Des Moines

Kenny Podrazi, Meteorologist

Those that live in the Des Moines Metro area, June 30, 2018 still lives fresh in their memory. It was a day of record rainfall and historic flash flooding. Rainfall amounts ranged from 4 to 8 inches across Polk County with even reports of up to 10 inches in portions of Ankeny, Iowa! Any small creek or stream were flooded and the major creeks like the Walnut Creek and Fourmile Creek hit record flood stage (See table below). Emergency personnel had numerous high water rescues and unfortunately there was one fatality from the flash flooding. Here, you can find a summary of the event.

Now, another heavy rain event occurred this summer on June 22, 2019 in the Des Moines Metro. We received several inquiries how this event compared to the 2018 event. There were several differences between the two events but the main difference was duration. The rain on June 30, 2018 lasted for several hours while June 22, 2019 was less than two. In the figure below, check out the daily rainfall comparison between the two events. It's a huge difference. Plus, the impacts were much greater and more widespread in 2018 as many homes and businesses were flooded. This year’s event, while there were no reports of any structures being impacted by water, there still were a few stranded cars. However, this was nothing compared to the epic flash flooding on June 30, 2018 and we hope that event never repeats it.

**Forecast Point**

<table>
<thead>
<tr>
<th>Forecast Point</th>
<th>Flood Stage (ft)</th>
<th>Crest (ft)</th>
<th>Previous Record (ft)</th>
<th>Crest Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walnut Creek at Des Moines 63rd St (DOSI4)</td>
<td>14.0</td>
<td>19.09</td>
<td>18.69 (2015)</td>
<td>1</td>
</tr>
<tr>
<td>Fourmile Creek At Des Moines Eastern BLVD (DFMI4)</td>
<td>12.5</td>
<td>17.47</td>
<td>16.14 (2010)</td>
<td>1</td>
</tr>
</tbody>
</table>

Major flash flooding in Urbandale, Iowa on June 30, 2018. Photo courtesy Stephanie Boutard.
When Thunder Roars, Go Indoors!
Brooke Hagenhoff, Meteorologist

It’s a familiar story: you’re at the pool when the lifeguard blows their whistle and yells, “Everybody out!” They’ve spotted lightning and now you’re stuck wrapped in a towel for 30 minutes waiting it out. Soccer games and t-ball are a similar story. And while these delays can feel like an annoyance, especially if it never ends up raining, they could just save your life.

Each year hundreds of people are struck by lightning, and of those nearly 50 will be killed. And it is important to remember, lightning can strike 10-15 miles from a storm, meaning that it doesn’t have to be raining for you to be in danger.

A sturdy building or car are your best options when seeking shelter from lightning—nowhere outdoors is safe. If you absolutely can’t get inside you may slightly reduce your risk by: avoiding open fields, the top of a hill or a ridge top; staying away from tall, isolated trees or other tall objects; staying away from water. Water and metal do not attract lightning but they are excellent conductors of electricity. The current from a lightning strike will easily travel for long distances through the metal or water.

Lightning Quick Facts:

- Lightning is hotter than the surface of the sun and can reach temperatures of 50,000 °F.
- Lightning CAN, and often does, strike the same place twice.
- Lightning kills 47 people per year, with hundreds more severely injured.
- Lightning can strike 10-15 miles from the storm—don’t wait for it to start raining before seeking shelter!